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GRADE
SUPPLY COMPANY.
TRADE MARK
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Alan O'Bright

GENERAL CATALOGUE NUMBER 18

COMMERCIAL ELECTRICAL SUPPLY COMPANY



Electrical Merchandise

ST. LOUIS, MO.

SERVICE

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R. R. DONNELLEY & SONS CO.

TO OUR CUSTOMERS:

YOU will, we believe, find this, the 18th edition of our Electrical Supply Catalogue, the most conveniently arranged and helpful book of reference we have ever issued.

¶ In compiling this catalogue we have made every effort not only to show a representative listing of all standard, modern electrical goods, but also to include new material of practical value. And we shall further issue, from time to time, bulletins describing new specialties as they become standard.

¶ Consult this catalogue freely. The goods listed in it will uphold our reputation as leading jobbers of electrical material that is strictly high grade, while our guarantee, as well as that of the manufacturer, stands back of goods which bear our trade mark—"Highest Grade."

COMMERCIAL ELECTRICAL SUPPLY CO.

TELEGRAPH CODE

WE HAVE ASSIGNED TO EACH ARTICLE LISTED A TRADE NUMBER WHICH SHOULD ALWAYS BE USED IN ORDERING OR ASKING FOR QUOTATIONS

Owing to the increasing use of the Night Lettergram and Day Lettergram which do not permit the use of Code Words, we have considered it unnecessary to give each separate article a Code Word.

We would suggest using the long distance telephone in placing rush orders, as this is the cheapest, everything considered, unless the distance is too great.

We give on the following pages Code Words which may be used for phrasing to reduce the length of a telegram.

The following system may be used for coding numerals in sending telegrams for figures that would otherwise require more than one word.

1	2	3	4	5	6	7	8	9	0	repeat
M	U	L	T	I	P	H	A	S	E	Y

Example, to order the following:

Ship by express 125 No. 042987 Insulators.

Sauterne MUI ETUSAH Insulators.

This code can also be used in giving voltage of lamps, dimensions, etc.

The Trade Number should always be used instead of the Manufacturer's Number. Many manufacturers assign the same series of numbers to their specialties, resulting in a duplication of numbers when the articles are all listed together in a Jobber's Catalogue.

TELEGRAPH CODE

CODE WORDS FOR ORDERS

Add to our order of.....Saturable
Cancel our order of.....Saturate
Change our order of.....Saturation
Do not understand order, please give full details.....Saturine
Duplicate order of.....Saturn
Have entered order and will ship.....Saturnalia
Have none in stock.....Saturnian
Have you in stock.....Satyr
Have you in stock? If not, how soon can you ship.....Satyric
Hold for instructions our order of.....Savoury
Hurry forward goods on our order of.....Savoy
Too late to cancel order.....Sawdust
We cannot accept your order at the price.....Saxafrage
We have completed your order.....Saxatile
We have entered your order...Saxon
We will accept your order.....Saxonism
We will accept your order and make immediate shipment...Scab
We will complete your order by.....Scabbard

CODE WORDS FOR SHIPMENTS

Answer by wire when you will ship. Urgent.....Scansorial
Can you ship?.....Scantily
Can you ship in———days?.Scanty
Can you ship immediately?....Scapegrace
Can you ship at once upon receipt of order?.....Scapement
Can ship in.....Scaphoid
Can ship upon receipt of order.....Scapular
Can ship in two days.....Scarabeus
Can ship in three days.....Scaramunch
Can ship in four days.....Scarcely
Can ship in five days.....Scarcity
Can ship in six days.....Scarecrow
Can ship in one week from receipt of order if advised at once.....Scarf
Can ship in two weeks from receipt of order if advised at once.....Scarfing
Can begin shipping at once and complete in——days..Scammony
Can you ship from stock if advised immediately.....Scamp
Enter our order if can ship at once.....Scan
Enter our order if can ship in ——days.....Scandal
First shipment will be made ..Scandalize
Have you shipped goods on our order? If not, when will you ship?.....Scandalous
Have you sent tracer as requested.....Scandalously
How soon can you ship?.....Scandalousness
How soon can you make first shipment, and how fast remainder.....Scanning
We ship you today.....Scansion
We will ship.....Scansores

CODE WORDS FOR SHIPPING INSTRUCTIONS

Hold order of——subject to further shipping instructions.....Scarification
Hold subject to order.....Scarifier
Hold subject to our order.....Scarify
If you cannot fill order in full, ship all you can, and let balance follow as soon as possibleScarlatina
If you cannot ship in time named, advise by telegraph..Scarlet
Impossible to make complete shipment of your order. Shall we make partial shipment, balance to follow?....Scarry
Instructions by mail.....Scath
Prepay freight.....Scathless
Send by freight. Draft attached to bill of lading through ——Bank.....Scatter
Send by express C. O. D.....Scattering
Send tracer immediately after shipment of the.....Scavenger
Shall we ship by express C. O. D.?.....Scene
Shall we ship by freight; draft attached to bill lading? If any bank preferred, advise immediately.....Sanskrit
Ship by Parcel Post.....Santa
Ship by Adams Express.....Sauce
Ship by American Express....Saucer
Ship by National Express.....Saunter
Ship by U. S. Express.....Sauntering
Ship by Wells Fargo Express .Saurian
Ship by boat.....Sausage
Ship by express.....Sauterne
Ship by freight.....Savage
Shipping instructions will be sent you.....Savageness
Shipped by express on the....Savanna
Shipped by freight on the.....Savant
Telegraph shipping instructions for your order of.....Saving
Wait receipt of letter before proceeding with order.....Saviour
Will ship by express C. O. D...Savourily
Will ship by freight D. B. L...Savourty
We await your instructions ...Savouriness
We are holding for shipping instructions.....Savourless

TELEGRAPH CODE

CODE WORDS FOR QUOTATIONS

At what price can you furnish?. Satchee
Cannot make better price..... Satellite
In response to your inquiry we quote in the order noted in your letter or telegram as follows ..... Satiable
Quote us by return mail..... Satiate
Quote us by return mail, stating how soon you can ship..... Satiety
Quote us by telegraph ..... Satinet
Quotations withdrawn; see revised prices to-day's letter... Satire
Referring to your order received to-day, dated ——— item of ——— should be priced at ——— Cannot do better. Shall we ship at the price?... Satirical
See our quotation of the ——— price on ———. Can now quote..... Sardonic
Telegraph lowest price and how soon you can ship..... Sardony
We cannot accept at the price.. Sarking
We quote..... Sarment
We quote for shipment from factory ..... Sarsaparilla
We quote for shipment from stock ..... Sartorious
We quote subject to immediate acceptance ..... Sasine
We will equalize freight with .. Sash

CODE WORDS FOR TERMS

As we have no knowledge of your financial responsibility, we will ship express C. O. D. (or freight D. B. L.)..... Satirist
Cannot accept at the terms you make ..... Satirize
Cash on delivery ..... Satisfaction
Express to be paid by..... Satisfy
Freight to be paid by..... Satrap
Net cash in 30 days..... Sassafras
Our terms are: Cash in full on the 15th of the month following date of purchase..... Satan
Please honor our draft for..... Satanic
Unless advised to the contrary, we will make sight draft on you for ..... Satanically

CODE WORDS FOR LETTERS AND TELEGRAMS

Advise freight rate here per 100 pounds on ..... Sapidness
Answer by mail ..... Sapient
Answer by telegraph..... Sapless
Instructions by mail..... Sapling
Please give quantity desired. See yours of ..... Saponaceous
Please specify quantity desired and trade word. See yours of ..... Saponification
Our representative will call upon you about the..... Saponify
Referring to our letter of..... Sapor
Referring to your letter of..... Saporifice
Referring to our telegram of..... Sapper
Referring to your telegram of ..... Sapphic
See catalogue page ..... Sapphire
Send your representative here at once. Will buy on the ..... Sappiness
Telegraph night message ..... Sappy
Telegraph immediately ..... Saraband
Telegraph reply as soon as possible..... Saracen
We are mailing you quotations to-day ..... Sarcasm
We have no letter from you..... Sarcastic
We have no telegram from you..... Sarcenet
We mailed you full quotation on the ..... Sarcocaro
We write you fully to-day..... Sarcophagus
What can you substitute in place of?..... Sarcology
Why do you not telegraph? ..... Sarcoses
Why do you not telegraph answer to inquiry of? ..... Sardine
Will write you fully in a day or two..... Sardinian

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WAGNER SINGLE-PHASE MOTORS



Type CA. Type BA. Type BB.

The three types of Wagner Single-Phase Motors which recommend them to users of electrical power are:

First: Ideal starting characteristics.

Second: Simplicity of control; minimum cost of attendance.

Third: Liberality in design and construction, giving reliability and minimum cost of maintenance.

Central stations frequently find themselves confronted with the necessity of either installing a polyphase lighting circuit or losing a customer altogether, particularly so if such customer should be a considerable distance from the nearest power feeder.

Polyphase generation with single phase distribution is now recognized as good practice. From 20 to 30 per cent can be saved on the transformer installation by using single-phase instead of polyphase, as it usually costs less to buy and erect the one transformer required for a single-phase motor than the two or three transformers required for polyphase motors. In addition there is a saving of from 15 to 25 per cent in copper losses, with a corresponding increase in available station capacity. The investment in line construction is also considerably less.

The greatest difficulty in the use of polyphase motors arises in the disturbance produced on lighting circuits by the inrush of starting current. Wagner Single-Phase Motors do not take this current from which the entire power is taken, but the load polyphase motors. Actually the entire power is taken from the single phase of the polyphase system without causing serious unbalancing of current.

A Wagner Single-Phase Motor can be operated without any controlling device other than a double-pole switch (which may be located at any point in the line at a distance several miles from the motor). No starting box is necessary. Under these conditions the current and torque at the instant of starting will be approximately two and one half times the normal full load value, the torque at starting is approximately proportional to the starting current. Employing a starting box any value of starting torque and current can be obtained up to two and one-half times normal, depending on the conditions.

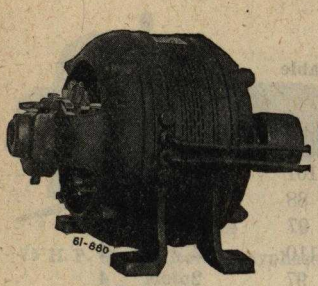
If the power supply should fail for any reason, the motor returns to the starting condition, and when the power comes on again, without the assistance or attention of the operator, thereby saving the cost of attendance. Further, it is impossible to injure the motor by stopping or starting the line switch at any speed or point of its operation from rest to full normal speed irrespective of the load conditions.

Wagner Single-Phase Motors are furnished for all frequencies from 25 to 133 cycles and for voltages from 100 to 250 above power capacity. Hundreds of central stations are using Wagner Single-Phase Motors successfully.

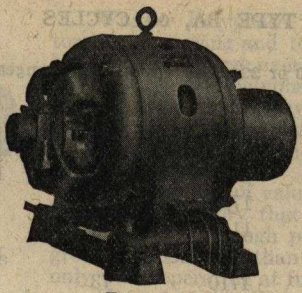
Type CA motor is similar in physical appearance and construction to the Wagner Standard Type BA Single-Phase Motor. It possesses all the advantages of the Type BA motor, together with a compensating power factor. The motor is supplied with double rotor and stator windings, one of which is short circuited on itself. The other winding receives the power from the line. The motor thereby secures at full load a power factor of 100 per cent. At no load the motor has a leading power factor. The same rugged construction and large bearings which distinguish all Wagner Motors are employed in the Type BA motor.

X
Y
Z

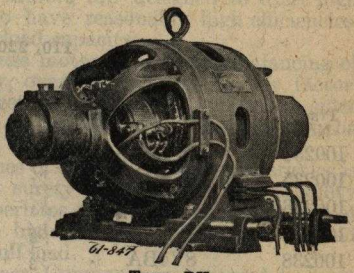
WAGNER SINGLE-PHASE MOTORS



Type SA



Type BA



Type BK

The chief features of Wagner Single-Phase Motors which recommend them to users of electrical power are:

First. Ideal starting characteristics.

Second. Simplicity of control; minimum cost of attendance.

Third. Liberality in design and construction, giving reliability and minimum cost of maintenance.

Central stations frequently find themselves confronted with the necessity of either installing a motor upon the lighting circuit or losing a customer altogether; particularly so if such customer should be a considerable distance from the nearest power feeder.

Polyphase generation with single-phase distribution is now recognized as good practice. From 15 to 35 per cent can be saved on the transformer installation by using single-phase instead of polyphase, as it manifestly costs less to buy and erect the one transformer required for a single-phase motor than the two or three transformers required for polyphase motors. In addition there is a saving of from 15 to 35 per cent in transformer losses, with a corresponding increase in available station capacity. The investment in line construction is also considerably less.

The greatest difficulty in the use of motors upon lighting circuits is in the disturbance produced, particularly at the moment of starting. For a given torque or starting effort, Wagner Single-Phase Motors disturb the one phase from which the entire power is taken, less than the usual polyphase motor disturbs every phase. Wagner Single-Phase Motors can be operated on one phase of a polyphase system without causing serious unbalancing at starting.

A Wagner Single-Phase Motor can be operated without any controlling device other than a double-pole switch (which may be located at any point in the line at a distance—several miles—from the motor). No starting box is necessary. Under these conditions the current and torque at the instant of starting will be approximately two and one half times the normal full load value. The torque at starting is approximately proportional to the starting current. Employing a starting box, any value of starting torque and current can be obtained up to two and one-half times normal, depending on the resistance.

If the power service should fail for any reason, the motor returns to the starting condition, and picks up its load when the power comes on again, without the assistance or attention of the operator; result, minimum cost of attendance. Further, it is impossible to injure the motor by closing or opening the line switch at any speed or cycle of its operation, from rest to full normal speed irrespective of the load conditions.

Wagner Single-Phase Motors are furnished for all frequencies from 25 to 140 cycles and in various sizes from ¼ to 50 horse power capacity. Hundreds of central stations are using Wagner High Frequency Motors successfully.

Type BK motor is similar in physical appearance and construction to the Wagner Standard or Type BA Single-Phase Motor. It possesses all the advantages of the Type BA motor, together with a very high power factor. The motor is supplied with double rotor and stator windings, which compensate the motor, thereby securing, at full load, a power factor of 100 per cent. At light loads the motor has a leading power factor. The same rugged construction and large bearings, characteristic of Wagner Motors, are contained in the Type BK motor.

WAGNER SINGLE-PHASE MOTORS

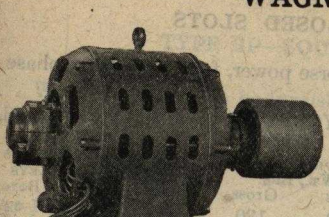
TYPE BA, 60 CYCLES

110, 220 or 220, 440 Volts, Interchangeable

Trade No.	Frame No.	H. P.	Full Load Speed R. P. M.	Approx. Wt., Lbs. Net	Approx. Wt., Lbs. Shipping	Dimensions, Inches Standard Pulleys Diam.	Face	Bore
100234	8VL3BA	1/4	3420	76	101	2	4	..
100235	8V3BA	1/4	1710	66	88	2	4	..
100236	8V4BA	1/4	1140	73	97	2	4	..
100237	8VL4BA	1/3	3420	83	110	2	4	..
100238	8V4BA	1/3	1710	73	97	2	4	..
100239	8W5BA	1/3	1140	81	108	2	4	..
100240	8WI5BA	1/2	3420	91	121	2	4	..
100241	8W5BA	1/2	1710	81	108	2	4	..
100242	8Y7BA	1/2	1140	96	128	2	4	..
100243	8XLBA	3/4	3420	98	130	2	4	..
100244	8X6BA	3/4	1710	88	117	2	4	..
116324	9WLBA	3/4	1140	115	145	2	4	..
109064	8YLBA	1	3420	106	140	2	4	..
109065	8Y7BA	1	1710	96	128	2	4	..
116328	11TBA	1	1140	190	260	2	5	..
116329	9WLBA	1 1/2	1710	115	145	3	3	3/4
100196	9WLBA	2	3420	115	145	3	3	3/4
100197	11TBA	2	1730	190	260	3 1/2	3	1 1/16
100198	11VBA	2	1150	200	260	3 1/2	3	1 1/16
100200	11TLBA	3	3450	200	270	3	3	3/4
100201	11TBA	3	1730	190	260	3 1/2	3	1 1/16
100202	14TBA	3	1165	360	450	4	4	1 9/16
100206	14TLBA	5	3500	380	480	3 1/2	3	1 1/16
100207	14TBA	5	1750	360	450	4	4	1 9/16
100208	17TBA	5	1165	575	700	5	4 1/2	1 13/16
100209	19TBA	5	870	795	960	6	5	1 13/16
100210	14VLBA	7 1/2	3500	420	520	4	4	1 1/16
100211	14VBA	7 1/2	1750	400	500	5	4 1/2	1 9/16
100212	17TBA	7 1/2	1165	575	700	6	5	1 13/16
100213	19TBA	7 1/2	870	795	960	7	6	1 13/16
100214	17TBA	10	1750	575	700	6	5	1 13/16
100215	19TBA	10	1165	795	960	7	6	1 13/16
100216	19TBA	10	870	795	960	8	6	1 13/16
100217	19TBA	15	1750	795	960	7	6	1 13/16
100218	19TBA	15	1165	795	960	8	6	1 13/16
100219	22TBA	15	870	1580	1780	9	8	2 7/16
100220	19TBA	20	1750	795	960	8	6	1 13/16
100221	22TBA	20	1165	1580	1780	9	8	2 7/16
100222	22VBA	20	870	1630	1860	9	8	2 7/16
100223	22TBA	25	1750	1580	1780	9	8	2 7/16
100224	22VBA	25	1165	1630	1860	9	8	2 7/16
100225	22WBA	25	870	1700	2000	10	8	2 7/16
100226	22TBA	30	1750	1580	1780	9	8	2 7/16
100227	22VBA	30	1165	1630	1860	9	8	2 7/16
100228	22WBA	30	870	1700	2000	10	8	2 7/16
100231	22VBA	40	1750	1630	1860	9	8	2 7/16
100232	22WBA	40	1165	1700	2000	10	8	2 7/16
100233	22WBA	50	1750	1700	2000	10	8	2 7/16

Write for prices and bulletins giving complete description.

WAGNER POLYPHASE MOTORS



75 H. P. Wound Rotor Polyphase Motor

Wagner Polyphase Motors are designed to exert high torque at starting and to have reasonably high efficiencies, but, above all, large overload capacity.

In designing polyphase motors, the proper balancing of starting torque, efficiency, overload capacity, power factor, and slip is largely a question of judgment and policy, since special merit in any one feature can be obtained only at the expense of the others.

The selection of values of each of these characteristics is based on the theory that surety of start and dependability under extreme, though perhaps temporary, overload are of greater importance than high theoretical efficiency, reached only when operating at full load.

However, the Wagner Company is prepared to meet special requirements in performance characteristics, departing from its standard policy, when assured that such motors will fulfill the conditions under which they are intended to operate.

Wagner guarantees as to overload are always given in horse power and not in torque. A high overload in torque does not necessarily mean high overload power capacity, since power is the product of torque and speed and the slip at overload may be large.

RATINGS AND GUARANTEES

The desire to attain absolute reliability has led the Wagner Company to be conservative in its ratings, assuming that a motor whose overload capacity is considerably above its rating will be a more satisfactory machine in the end. A Wagner Motor will carry a 50 per cent overload for short periods and a momentary overload of from 200 to 250 per cent.

The limiting temperature rises adopted in Wagner designs are those recommended by the American Institute of Electrical Engineers.

TYPES, SIZES AND DIMENSIONS

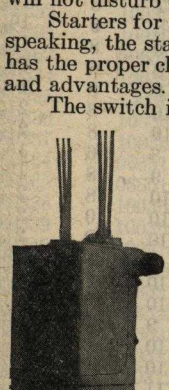
The Wagner line includes both the squirrel cage and wound rotor types. The latter are recommended in all cases where the starting load is heavy and in large sizes to avoid line disturbance, resulting from heavy current at starting. The former type is recommended because of its simplicity in the smaller sizes where the starting current is relatively small.

Wagner Polyphase Motors are built for standard frequencies and voltages in all sizes. Motors for special voltages and frequencies or machines with special performance characteristics can be built when required.

WAGNER STANDARD ONE WAY AUTO-STARTERS, TYPE D

With motors of more than 5 horse power capacity it is usual to employ some form of starter consisting of a switch device in connection with an auto transformer and provided with such voltage taps as are necessary. This is commonly known as an auto starter or compensator. The purpose of this device is to reduce the starting current to such a point that it will not disturb other apparatus on the same circuit.

Starters for squirrel cage motors are quite an important part of the equipment as generally speaking, the starting characteristics depend on the starter, provided, of course, the motor itself has the proper characteristic. The Wagner Type D Auto Starter has the following characteristics and advantages.



Type D Auto Starter

The switch is oil immersed reducing destructive effect of disrupted arc. The oil tank is provided with an over-flow drain and the fingers are easily accessible and renewable.

Low voltage release operates at from 70 to 80 per cent normal voltage and the over load release is adjustable to meet starting and peaks in running low conditions.

One of the chief advantages is the one way starting cycle. This does not require a push for starting and a pull for running as the motion is all in one direction. The transformer is adjustable for .6, .7, .8 or .9 normal full line voltage for starting. The changes in these connections can be easily made.

The compensators can be furnished ready for conduit wiring and with either fuse protection or over load relay. This is all adaptable to the same case with simple minor changes, easily made by any one in a short time.

The lugs on the case make it suitable for wall, post or frame work mounting. At the off position all potential is removed from the motor.

The Wagner Type D One Way Auto Starter protects against excessive input, failure of one phase, high voltage and ignorant or careless workmen.

STARTING BOXES

Starting boxes for wound rotor type are materially the same as in direct current practice, except that multiple circuits are provided. In the Wagner type the resistance is always external to the machine, so that a burn-out in the resistance will not result in the disabling of the motor.

WAGNER POLYPHASE MOTORS

TYPE BR—WOUND ROTOR, SEMI-ENCLOSED SLOTS

For Continuous Duty

Wagner Motors can be furnished in capacities up to 400 horse power, for two or three-phase circuits, 25, 50 or 60 cycles, in voltages from 220 to 2200.

TWO OR THREE-PHASE, 60 CYCLES

110, 220, 440 or 550 Volts

Two-Phase Trade No.	Three-Phase Trade No.	Frame No.	H. P.	Full Load Speed R. P. M.	Approx. Ship. Wt., Lbs. Net	Gross	Dimensions, Inches Standard Pulleys Diam.	Face	Bore
100246	100275	9WLBR	¼	1680	110	130	3	3	¾
100247	100276	9WLBR	¼	1100	110	130	3	3	¾
100248	100277	9WLBR	¼	830	110	130	3	3	¾
100249	100278	9WLBR	½	1680	110	130	3	3	¾
100250	100279	9WLBR	½	1100	110	130	3	3	¾
066554	066614	11TBR	½	830	170	200	3½	3	1 1/16
100251	100280	9WLBR	¾	1680	110	130	3	3	¾
100252	100281	9WLBR	¾	1100	110	130	3	3	¾
100253	100282	11TBR	¾	830	170	200	3½	3	1 1/16
100254	100283	9WLBR	1	1680	110	130	3	3	¾
066556	066616	11TBR	1	1100	170	200	3½	3	1 1/16
066557	066617	11VBR	1	830	200	265	3½	3	1 1/16
100255	100284	11TBR	1½	1690	170	200	3½	3	1 1/16
100256	100285	11VBR	1½	1110	200	265	3½	3	1 1/16
100257	100286	13TBR	1½	840	330	410	4	4	1 5/16
066558	066618	11TBR	2	1690	170	200	3½	3	1 1/16
066559	066619	11VBR	2	1120	200	265	3½	3	1 1/16
066560	066620	13TBR	2	840	330	410	4	4	1 5/16
066561	066621	11VBR	3	1700	200	265	3½	3	1 1/16
100258	100287	13TBR	3	1120	330	410	4	4	1 5/16
066563	066623	14VBR	3	840	390	490	5	4½	1 9/16
100259	100288	13TBR	5	1700	330	410	4	4	1 5/16
066565	066625	14VBR	5	1130	390	490	5	4½	1 9/16
066566	066626	17TBR	5	840	590	720	6	5	1 13/16
066567	066627	14VBR	7½	1710	390	490	5	4½	1 9/16
066568	066628	17TBR	7½	1130	590	720	6	5	1 13/16
066569	066629	17TBR	7½	850	590	720	7	6	1 13/16
100260	100289	19TBR	7½	690	740	900	8	6	1 13/16
100261	100290	19TBR	7½	570	740	900	8	6	1 13/16
066570	066630	17TBR	10	1720	590	720	6	5	1 13/16
066571	066631	17TBR	10	1130	590	720	7	6	1 13/16
066572	066632	19TBR	10	850	740	900	8	6	1 13/16
066573	066633	19TBR	10	690	740	900	8	6	1 13/16
066574	066634	17TBR	15	1720	590	720	7	6	1 13/16
066575	066635	19TBR	15	1140	740	900	8	6	1 13/16
066576	066636	19TBR	15	850	740	900	9	8	1 13/16
100262	100291	19TBR	20	1720	740	900	8	6	1 13/16
066579	066639	19TBR	20	1140	740	900	9	8	1 13/16
066580	066640	22TBR	20	690	1180	1370	10	8	2 7/16
100263	100292	22VBR	20	570	1350	1600	10	8	2 7/16
066582	066642	19TBR	25	1720	740	900	8	6	1 13/16
100264	100293	19TBR	25	1140	740	900	9	8	1 13/16
066584	066644	22TBR	25	850	1180	1370	10	8	2 7/16
100265	100294	22VBR	25	690	1350	1600	10	10	2 7/16
100266	100295	22WBR	25	570	1500	1750	10	10	2 7/16
100267	100296	19TBR	30	1720	740	900	9	8	1 13/16
100268	100297	22TBR	30	850	1180	1370	10	8	2 7/16
066588	066648	22WBR	30	690	1500	1750	10	10	2 7/16
100269	100298	19TBR	35	1720	740	900	9	8	1 13/16
066589	066649	22TBR	35	1140	1180	1370	10	8	2 7/16
100270	100299	22VBR	35	850	1350	1600	10	10	2 7/16
066591	066651	22WBR	35	690	1500	1750	11	12	2 7/16
100271	100300	26V3BR	35	570	2100	2400	11	12	3 7/16
066592	066652	22TBR	40	1730	1180	1370	9	8	2 7/16
100272	100301	22TBR	40	1140	1180	1370	10	8	2 7/16
066594	066654	22WBR	40	850	1500	1750	11	12	2 7/16
100273	100302	26V3BR	40	690	2100	2400	11	12	3 7/16
100274	100303	26V4BR	40	580	2200	2500	11	12	3 7/16

Write for prices and bulletins giving complete description.

Slide rails and pulley are furnished with each motor, but they may be omitted and an allowance made.

WAGNER POLYPHASE MOTORS

TYPE BP—SQUIRREL CAGE, SEMI-ENCLOSED SLOTS

Wagner Motors can be furnished in capacities up to 400 horse power, for two or three-phase circuits, 25, 50 or 60 cycles, in voltages from 220 to 2200.

TWO OR THREE-PHASE, 60 CYCLES

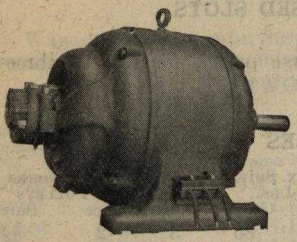
Two-Phase Trade No.	Three-Phase Trade No.	Frame No.	H. P.	Full Load Speed R. P. M.	Approx. Ship. Wt., Lbs. Net	Gross	Dimensions, Inches Standard Pulleys Diam.	Face	Bore
100314	100344	8TLSM	1/4	3400	75	85	3	2	3/4
066444	066498	8TSM	1/4	1720	64	75	3	2	3/4
066445	066499	8VSM	1/4	1140	85	100	3	2	3/4
100315	100345	8WSM	1/4	850	85	100	3	2	3/4
100316	100346	8VLSM	1/2	3400	95	110	3	2	3/4
066446	066500	8VSM	1/2	1720	85	100	3	2	3/4
066447	066501	8WSM	1/2	1140	85	100	3	2	3/4
100317	100347	8XSM	1/2	850	106	125	3	3	3/4
066448	066502	8WLSM	3/4	3400	95	110	3	3	3/4
100318	100348	8WSM	3/4	1720	85	100	3	3	3/4
100319	100349	8XSM	3/4	1140	106	125	3	3	3/4
100320	100350	9WLBP	3/4	850	130	150	3	3	3/4
100321	100351	8WLSM	1	3400	95	110	3	3	3/4
066450	066504	8XSM	1	1720	106	125	3	3	3/4
066451	066505	9WLBP	1	1140	130	150	3	3	3/4
066452	066506	11TBP	1	850	170	200	3 1/2	3	1 1/16
100322	100352	8XLSM	1 1/2	3400	116	135	3	3	3/4
100323	100353	9WLBP	1 1/2	1720	130	150	3	3	3/4
100324	100354	11TBP	1 1/2	1140	170	200	3 1/2	3	1 1/16
066453	066507	11VBP	1 1/2	850	200	265	3 1/2	3	1 1/16
100325	100355	9WLBP	2	3400	130	150	3	3	3/4
066454	066508	9WLBP	2	1720	130	150	3	3	3/4
066455	066509	11VBP	2	1140	200	265	3 1/2	3	1 1/16
066456	066510	13TBP	2	850	330	420	4	4	1 5/16
100326	100356	14TBP	2	700	360	440	4	4	1 9/16
100327	100357	11TLBP	3	3400	190	220	3	3	3/4
100328	100358	11TBP	3	1720	170	200	3 1/2	3	1 1/16
100329	100359	13TBP	3	1140	330	420	4	4	1 5/16
066459	066513	13TBP	3	850	330	420	4	4	1 5/16
100330	100360	14VBP	3	700	390	490	5	4 1/2	1 9/16
100331	100361	11VLBP	5	3400	220	285	3	3	3/4
100332	100362	13TBP	5	1720	330	420	4	4	1 5/16
100333	100363	13TBP	5	1140	330	420	5	4 1/2	1 5/16
066462	066516	14VBP	5	850	390	490	6	5	1 9/16
100334	100364	17TBP	5	700	590	720	6	5	1 13/16
100335	100365	17TBP	5	580	590	720	7	6	1 13/16
100336	100366	14TLBP	7 1/2	3400	400	480	4	4	1 1/16
100337	100367	13TBP	7 1/2	1730	330	420	5	4 1/2	1 5/16
066464	066518	14VBP	7 1/2	1140	390	490	6	5	1 9/16
066465	066519	17TBP	7 1/2	850	590	720	7	6	1 13/16
100338	100368	19TBP	7 1/2	700	740	900	8	6	1 13/16
100339	100369	19TBP	7 1/2	580	740	900	8	6	1 13/16
100340	100370	14TLBP	10	3400	400	480	4	4	1 1/16
066466	066520	14VBP	10	1730	390	490	6	5	1 9/16
066467	066521	17TBP	10	1140	590	720	7	6	1 13/16
066468	066522	17TBP	10	850	590	720	8	6	1 13/16
066469	066523	19TBP	10	700	740	900	8	6	1 13/16
100341	100371	19TBP	10	580	740	900	8	6	1 13/16
100342	100372	14VLBP	15	3400	430	520	5	4 1/2	1 1/16
066470	066524	17TBP	15	1730	590	720	7	6	1 13/16
066471	066525	17TBP	15	1140	590	720	8	6	1 13/16
066472	066526	19TBP	15	850	740	900	9	8	1 13/16
066473	066527	19TBP	15	700	740	900	9	8	1 13/16
100343	100373	22TBP	15	580	1180	1370	9	8	2 7/16

Write for prices and bulletins giving complete description.

Slide rails and pulley are furnished with each motor, but they may be omitted and an allowance made.

WAGNER POLYPHASE MOTORS

TYPE BW



Type BW Polyphase Motor

The BW motor is an application to polyphase uses of the mechanical features of the Wagner Single-Phase Type, thereby securing the desirable starting and operating performance of the latter. In brief, the BW motor, like the Wagner Single-Phase Motor, embodies:

1. High torque with low current at starting.
2. The ideal operating features of the squirrel cage induction motor.
3. Extreme simplicity of external or manual control, together with the automatic features heretofore obtainable only in the Wagner type of single-phase motor.

The BW Motor is controlled entirely by a three-pole single-throw switch. It is necessary to issue but two instructions as to its operation:

1. Keep oil in the bearings.
2. Close or open the switch as desired.

The BW motor at the first instant of starting draws three times normal current, exerting a torque of two and three quarters times normal. Squirrel cage motors. if limited to three times normal current at starting, usually will not exert as great torque as the BW motor.

Applications: Wagner BW Motors are suitable for practically all installations in which squirrel cage motors can be used. They will also give entirely satisfactory service in place of the wound rotor type for any purpose not requiring speed variations.

In classes of service where motors are handled by unskilled operatives, the BW type will prove invaluable.

TWO AND THREE-PHASE, 60 CYCLES

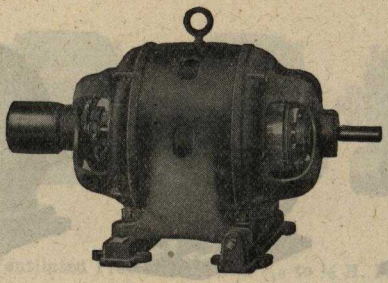
Automatically combining characteristics of slip-ring type for starting, with squirrel cage for operating. A three-pole primary switch is the only accessory required.

Trade No.	Frame	H. P.	Full Load Speed	Approximate Weights Pounds Net	Shipping
083831	11TBW	3	1720	225	265
083832	14TBW	3	1140	415	475
083833	14TBW	3	850	415	475
083834	14TBW	5	1720	415	475
083835	14TBW	5	1140	415	475
083836	14VBW	5	850	440	500
083837	14TBW	7.5	1730	415	475
083838	14VBW	7.5	1140	440	500
083839	17TBW	7.5	850	655	715
083840	14VBW	10	1730	440	500
083841	17TBW	10	1140	655	715
083842	17TBW	10	850	655	715
083843	17TBW	15	1730	655	715
083844	17TBW	15	1140	655	715
083845	19TBW	15	850	890	965
083846	17TBW	20	1730	655	715
083847	19TBW	20	1140	890	965
083848	19TBW	20	850	890	965
083849	19TBW	25	1730	890	965
083850	19TBW	25	1140	890	965
083851	19TBW	30	1730	890	965
083852	19TBW	30	1140	890	965
083853	22VBW	30	850	1800	1950
083854	19TBW	35	1730	890	965
083855	22TBW	35	1140	1750	1900
083856	22VBW	35	850	1800	1950
083857	19TBW	40	1730	890	965
083858	22TBW	40	1140	1750	1900
083859	22WBW	40	850	1850	2000
083860	22TBW	50	1730	1750	1900
083861	22VBW	50	1140	1800	1950

Prices on application.

WAGNER SINGLE-PHASE CONVERTERS

*60 CYCLES



Designed for the same purpose as the Wagner Rectifier, namely, changing alternating to direct current, but effects this end by different means and on a much larger scale. Intended especially for the charging of electric vehicle batteries, but is also used for moving picture and theatrical work, X-ray and similar work, charging telephone batteries, energizing telegraph systems, railway signal work, and miscellaneous industrial uses.

The converter proper is very similar to the single-phase motor in physical construction. The alternating current is supplied through slip rings, and forms the motive power. The direct current is commutated from the rotor of the same machine. The converter is supplied with switchboard with the necessary apparatus for controlling the current. The converter may be operated as a motor, when not used as a converter, to drive washing machines, tire pumps, vacuum cleaners, and for other domestic power purposes.

Apparatus is furnished in the following equipments:

Equipment DU, without instruments, is intended for cars equipped with ammeter and voltmeter on the dash.

Equipment DUC is furnished with one instrument, having a switch, permitting either voltage or current readings. Type D instrument furnished with equipment DUC has a switch. With switch to the left, instrument reads amperes; with switch to the right, instrument reads volts. Upon starting a charge always have instrument read amperes.

Equipment DUAV is furnished with two separate instruments, one ammeter and one voltmeter. The instruments are Type D and are permanently connected in circuit, giving continuous indications.

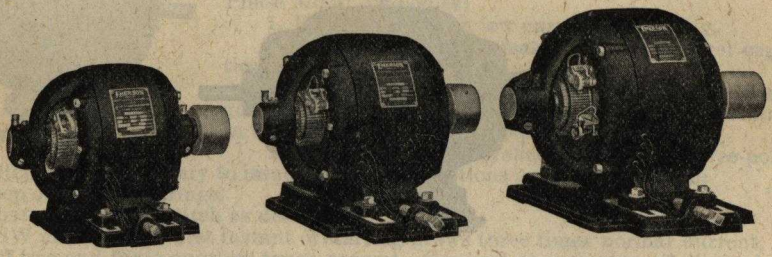
Trade No.	Frame No.	D. C. Amperes	Will Charge No. of Cells Lead	Edison	D. C. Fuses	Instrument Scales Ammeter	Voltmeter	Approx. Ship. Wt. Complete Pounds
085626	11T	25	10–14	16–20	35	0– 50	0– 60	880
085623	11T	25	20–30	30–40	35	0– 50	0–150	880
085624	11V	25	32–36	48–52	35	0– 50	0–150	915
085625	14T	25	38–48	56–72	35	0– 50	0–150	1090
085627	11T	35	10–14	16–20	45	0– 50	0– 60	880
085628	11T	35	15–17	22–26	45	0– 50	0– 60	880
085636	11V	35	18–26	26–38	45	0– 50	0–150	915
085637	14T	35	28–34	42–50	45	0– 50	0–150	1090
085638	14T	35	36–44	52–64	45	0– 50	0–150	1090
085639	14T	50	18–30	26–44	60	0–100	0–150	1090
085641	14V	50	32–44	48–62	60	0–100	0–150	1170
085642	17T	50	40–50	60–74	65	0–100	0–150	1440
085643	17T	70	22–32	32–48	90	0–100	0–150	1440
085644	17T	70	38–50	56–74	90	0–100	0–150	1440
085645	17T	90	38–44	56–64	110	0–150	0–150	1440
085646	17T	100	30–40	44–60	125	0–150	0–150	1440

*Stock sets will be built for 220 volts primary; they will also be built, specially, for any other voltage up to 550 volts.

Prices and complete description furnished on application.

EMERSON SINGLE-PHASE INDUCTION MOTORS

REPULSION START TYPES, ¼ TO 2 H. P.



Trade No.	Mfrs. No.	Cycles	Voltage	H. P.	Approx. R. P. M.	Approx. Watts No Load	Approx. Watts Full Load	Wt., Lbs. Net	Wt., Lbs. Packed	Price Each
127089	IR66420AG	60	110	¼	1750	85	300	33	43	$38.50
127090	IR76425AG	60	110 or 220	½	1750	125	570	67	90	58.50
127091	IR83425AG	60	110 or 220	¾	1750	130	800	95	140	72.00
127092	IR83430AG	60	110 or 220	1	1750	145	1060	100	145	79.00
127093	IR94640BA	60	110 or 220	1½	1150	210	1480	160	220	112.50
127094	IR94430BA	60	110 or 220	1½	1750	180	1470	150	210	93.00
127095	IR94440BA	60	110 or 220	2	1750	210	1930	160	220	110.00

Motors ½ h. p. and larger have interchangeable connections for 110 or 220 volts.

Pulleys Furnished

Type IR66420AG, flangeless crowning face steel pulley, 2 inches in diameter, 1½-inch face.

Type IR76425AG, flangeless crowning face paper pulley, 3 inches in diameter, 2-inch face.

Types IR83425AG, IR83430AG, crowning face paper pulley, 3 inches in diameter, 3-inch face.

Types IR94430BA, IR94440BA, IR94640BA, crowning face paper pulley, 4 inches in diameter, 3-inch face.

EMERSON FAMILY WASHING MACHINE MOTORS

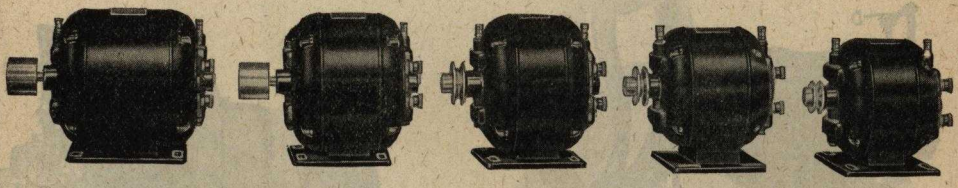
⅛ and ⅙ H. P. For Direct Current

Trade No.	Type No.	Voltage	H. P.	Approx. R. P. M.	Approx. Watts No Load	Approx. Watts Full Load	Approx. Wt., Lbs. Net	Approx. Wt., Lbs. Ship.	Diam. of Pulley Inches	Price Each
100403	412GJ	32	⅛	1750	55	165	22	29	1 3/16	$22.00
100399	412GJ	110	⅛	1750	55	165	22	29	1 3/16	21.00
100400	412GJ	220	⅛	1750	55	165	22	29	1 3/16	23.00
100404	402EL	32	⅙	1750	65	200	27	37	2	24.00
100401	402EL	110	⅙	1750	65	200	27	37	2	23.00
100402	402EL	220	⅙	1750	65	200	27	37	2	25.00

For washing machine motors for alternating current, select ventilated-protected types listed on another page, which are especially well suited for washing machine service.

EMERSON SPLIT-PHASE INDUCTION MOTORS

CLUTCHLESS AND CLUTCH TYPES, 1/30 TO 1/2 H. P.



Ventilated Protected Types, 1/10 to 1/3 H. P.

FOR 110 VOLTS, 60 CYCLES, SINGLE-PHASE

Trade No.	Mfrs. No.	H.P.	Approx. R.P.M.	Type	Approx. Watts No Load	Approx. Watts Full Load	Approx. Wt., Lbs. Net	Approx. Wt., Lbs. Packed	Price Each
145260	43412CA	1/30	1750	Clutchless	35	70	10	16	$19.00
145261	51410GA	1/15	1750	Clutchless	75	130	18	24	23.50
145262	51415GA	1/10	1750	Clutchless	65	145	19	25	26.00
145263	67615HA	1/8	1150	Clutchless	100	205	27	34	32.50
145264	51420AH	1/8	1750	Clutchless	80	180	23	30	27.50
145265	67620JL	1/6	1150	Clutchless	90	230	31	44	36.50
145266	66415HA	1/6	1750	Clutchless	85	225	27	34	32.50
145267	67620DA	1/4	1150	Clutch	120	340	37	50	47.50
145268	66420JL	1/4	1750	Clutchless	90	300	31	44	39.00
145269	66415DA	1/4	1750	Clutch	85	225	34	47	44.50
145270	66420DA	1/3	1750	Clutch	90	380	37	50	50.50
145271	8162AA	1/2	1150	Clutch	150	580	70	110	78.50
145272	7340JA	1/2	1750	Clutch	100	560	54	75	63.00

FOR 220 VOLTS, 60 CYCLES, SINGLE-PHASE

145278	66415HA	1/6	1750	Clutchless	85	225	27	34	32.50
145273	67620DA	1/4	1150	Clutch	120	340	37	50	47.50
145274	66420JL	1/4	1750	Clutchless	90	300	31	44	39.00
145275	66420DA	1/3	1750	Clutch	90	380	37	50	50.50
145276	8162AA	1/2	1150	Clutch	150	580	70	110	78.50
145277	7340JA	1/2	1750	Clutch	100	560	54	75	63.00

PULLEYS FURNISHED

Types 43412CA, 51410GA, single-groove pulley, 1½ inches in diameter, for ¼-inch belt.

Type 51415GA, single-groove pulley, 1½ inches in diameter, for 5/16-inch belt.

Type 51420AH, single-groove pulley, 1¾ inches in diameter, for 5/16-inch belt.

Types 66415HA, 67615HA, single-groove pulley, 2 inches in diameter, for 5/16-inch belt.

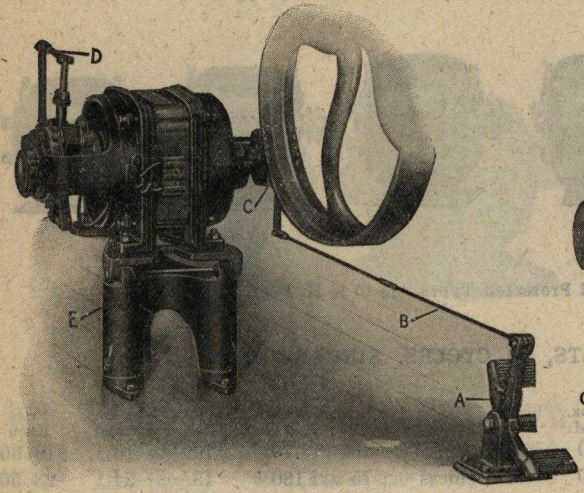
Types 66415DA, 66420DA, 67620DA, 66420JL, 67620JL, machine steel pulley, 2 inches in diameter, 1½-inch crowning face.

Type 7340JA, single-flange crowning face paper pulley, 2½ inches in diameter, 2-inch face.

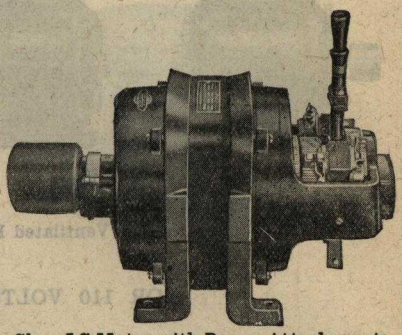
Type 8162AA, single-flange crowning face paper pulley, 3 inches in diameter, 2½-inch face.

KIMBLE VARIABLE SPEED MOTORS

SINGLE PHASE, ALTERNATING CURRENT



Class LC Motor with Friction Drive Job Press Attachments



Class LC Motor with Power Attachments

CLASS LC MOTORS, WITH FRICTION DRIVE

These motors are especially adapted for driving printing presses and no pains have been spared in fitting them to this work. No other motor equals them for this purpose because in no other can such fine graduations of speed be obtained; in no other is the control so simple and easy.

Connected to the lever of the motor is a steel rod, which has attached at the other end a foot pedal. This permits the operator to control the speed of the press as well as the starting and stopping by the foot, leaving the hands free for work on the press.

Motors in sizes up to and including ½ horse power are furnished with friction pulleys and spring bases, while motors larger than this are supplied with belt drive attachments.

Job Press Motors, with Foot Controllers, Spring Base and Friction Pulley

H. P.	Cycles	R. P. M.	Pulley, Inches Diam.	Face	110 Volts Trade No.	110 Volts Price Each	220 Volts Trade No.	220 Volts Price Each
1/6	60	500–2000	2¾	2	060330	$65.00	091510	$65.00
1/4	60	500–2000	2¾	2	060331	70.00	091511	70.00
1/3	60	500–2000	4	2	060332	77.00	091512	77.00
½	60	500–2000	4	2	091509	93.50	091513	93.50
Job Press Motors, with Foot Controllers, Slide Rails and Paper Pulley								
¾	60	500–2000	3	3	060327	118.50	091514	118.50
1	60	500–2000	3½	3	060328	127.50	089457	127.50
1½	60	500–2000	3½	3	060329	140.80	089458	140.80

CLASS LC MOTORS, WITH POWER ATTACHMENTS

These motors are especially adapted for the operation of machines having a constant load, where speed variation is required, such as motion picture machines, ventilating fans, cream separators, etc.

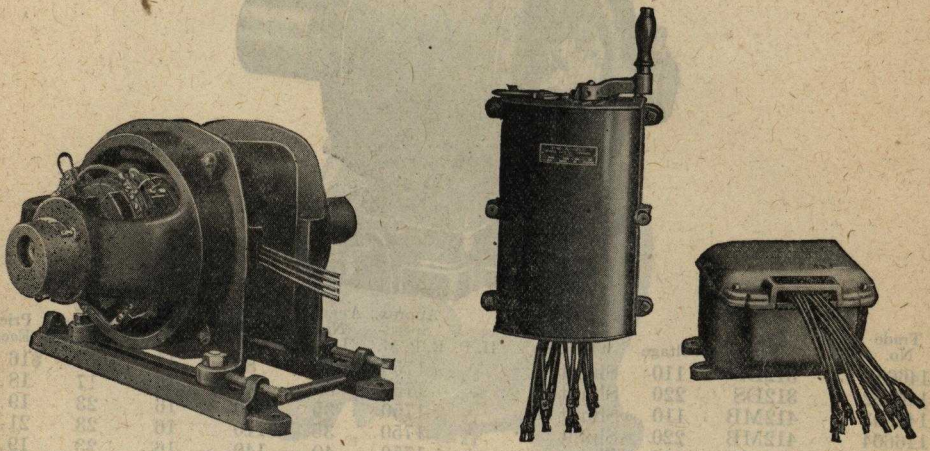
Trade No.	H. P.	Cycles	R. P. M.	Pulley, Inches Diam.	Face	Price* Each
091501	1/8	60	500–2400	Grooved		$45.00
091502	1/6	60	500–2400	Grooved		59.50
091503	1/4	60	500–2000	2	2	64.50
091504	1/3	60	500–2000	2	2½	71.50
091505	½	60	500–2000	2	2½	88.00
091506	¾	60	500–2000	2½	3	115.00
091507	1	60	500–2000	3	3	124.50
091508	1½	60	500–2000	3½	3	137.50

*Prices are the same for either 110 or 220 volts, but voltage must be specified when ordering.

KIMBLE VARIABLE SPEED MOTORS

SINGLE-PHASE ALTERNATING CURRENT

UNIT No: A-10



Class AD Motor with Form C-1 Controller and Form T-4 Transformer

Unit No. A-10 was developed for the operation of cylinder printing presses. These motors have a number of advantages over any other type of alternating current motor for this kind of work.

They afford a wide range of speed, accompanied by a very flexible system of control, which enables the operator to obtain the exact speed best suited for the particular job on the press. The waste material due to faulty feeding or lost time due to excessive use of the trip, is reduced to the minimum.

These motors are also extremely economical in the use of power. This is accomplished with an auto transformer, which controls the amount of current supplied to the motor. In resistance-controlled motors, the current is impeded by flowing through high resistance wire or grids, before it reaches the motor, causing excessive losses avoided only by using the transformer control system.

The prices given below apply to all cycles from 25 to 60, inclusive, and to any voltages from 100 to 250, inclusive. Exact voltage and cycles must be specified in ordering.

Motors for voltages higher than 250 can be furnished. Prices quoted on application.

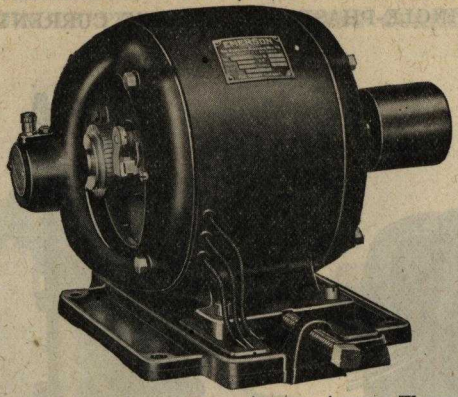
Trade No.	H. P.	Speed R. P. M.	Price Each	Trade No.	H. P.	Speed R. P. M.	Price Each
105940	1	1800	$210.00	105951	2	1200	$250.00
105941	1½	1800	220.00	105952	2½	1200	265.00
105942	2	1800	235.00	105953	3	1200	290.00
105943	2½	1800	250.00	105954	4	1200	320.00
105944	3	1800	260.00	105956	1	900	250.00
105945	4	1800	275.00	105957	1½	900	260.00
105946	5	1800	300.00	105958	2	900	275.00
105949	1	1200	220.00	105959	2½	900	300.00
105950	1½	1200	235.00	105960	3	900	325.00

Above prices include motor, rails, pulley, controller and transformer.

Motors smaller than 2 horse power may be supplied with dial type controller with internal transformer. Fifteen forward speeds only.

EMERSON DIRECT CURRENT MOTORS

VENTILATED TYPES, 1/20 TO 2 H. P.



Trade No.	Type No.	Voltage	Winding	H. P.	Approx. Speed R. P. M.	Approx. Watts No. Load	Watts Full Load	Approximate Weight, Pounds Net	Approximate Weight, Pounds Packed	Price Each
146601	312DS	110	Shunt	1/20	1750	35	80	12	17	$16.50
146602	312DS	220	Shunt	1/20	1750	35	80	12	17	18.50
146603	412MB	110	Shunt	1/15	1750	35	110	16	23	19.00
146604	412MB	220	Shunt	1/15	1750	35	110	16	23	21.00
146605	412MB	110	Shunt	1/10	1750	40	140	16	23	19.50
146606	412MB	220	Shunt	1/10	1750	40	140	16	23	21.50
146607	402DV	110	Shunt	1/8	1150	55	165	23	32	22.50
146608	402DV	220	Shunt	1/8	1150	55	165	23	32	24.50
146609	412ME	32	Shunt	1/8	1750	55	170	16	25	21.50
146610	412ME	110	Shunt	1/8	1750	55	170	16	25	20.50
146611	412ME	220	Shunt	1/8	1750	55	170	16	25	22 50
146612	422JM	110	Compound	1/6	1150	65	195	28	38	24.50
146613	422JM	220	Compound	1/6	1150	65	195	28	38	26.50
146614	422HK	32	Compound	1/6	1750	75	205	25	33	25.50
146615	422HK	110	Compound	1/6	1750	75	205	25	33	24.50
146616	422HK	220	Compound	1/6	1750	75	205	25	33	26.50
146617	D–71218AA	32	Compound	1/4	1750	70	280	32	43	37.50
146618	D–71218AA	110	Compound	1/4	1750	70	280	32	43	35.50
146619	D–71218AA	220	Compound	1/4	1750	70	280	32	43	35.50
146620	522DA	110	Compound	1/4	1150	55	260	48	70	39.00
146621	522DA	220	Compound	1/4	1150	55	260	48	70	39.00
146622	522DA	110	Compound	1/4	1750	60	260	48	70	39.00
146623	522DA	220	Compound	1/4	1750	60	260	48	70	39.00
146624	732DM	110	Compound	1/2	1150	90	480	110	160	64.00
146625	732DM	220	Compound	1/2	1150	90	480	110	160	64.00
146626	632DL	32	Compound	1/2	1750	90	525	75	105	52.50
146627	632DL	110	Compound	1/2	1750	90	525	75	105	50.00
146628	632DL	220	Compound	1/2	1750	90	525	75	105	50.00
146629	732DM	110	Compound	3/4	1750	105	700	110	160	64.00
146630	732DM	220	Compound	3/4	1750	105	700	110	160	64.00
146631	1034DK	110	Compound	1	1150	135	950	155	210	88.00
146632	1034DK	220	Compound	1	1150	135	950	155	210	88.00
146633	732DM	110	Compound	1	1750	105	900	110	160	68.00
146634	732DM	220	Compound	1	1750	105	900	110	160	68.00
146635	1034DK	110	Compound	2	1750	200	1775	155	210	96.00
146636	1034DK	220	Compound	2	1750	200	1775	155	210	96.00

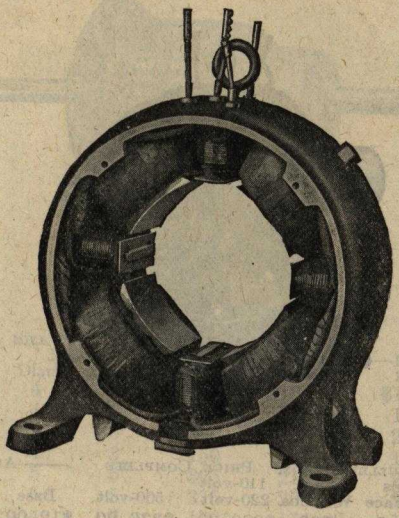
Prices include pulley. Price of ¼ horse power motor Type 522DA and all larger motors includes auto-release starting box. No rheostats required or furnished with others listed. Motors ½ horse power and larger equipped with sliding base.

PULLEYS FURNISHED

Type 312DS, single-groove iron pulley, 1½ inches diameter, for ¼-inch belt.
Type 412MB, single-groove iron pulley, 1½ inches diameter, for 5/16-inch belt.
Type 402DV, single-groove iron pulley, 2 inches diameter, for 5/16-inch belt.
Type 412ME, single-goove iron pulley, 1¾ inches diameter, for 5/16-inch belt.
Types 422JM and 422HK, single-groove iron pulley, 2 inches diameter, for 5/16-inch belt.
Types D–71218AA and 522DA, crowning face iron pulley, 2 inches diameter, 1½-inch face.
Types 732DM and 632DL, crowning face paper pulley, 3 inches diameter, 2-inch face.
Type 1034DK, crowning face paper pulley, 4 inches diameter, 3-inch face.

IMPERIAL INTERPOLE MOTORS

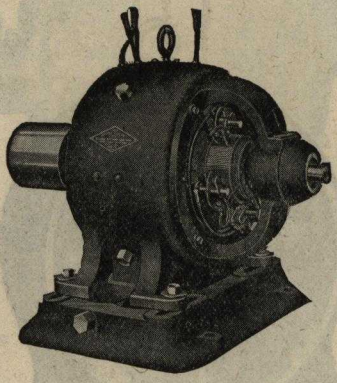
CONSTANT DUTY—DIRECT CURRENT



H. P.	R. P. M. 110 Volts 220 Volts	R. P. M. 500 Volts	Size of Pulley Inches Diam.	Face	Approx. Ship. Wt., Lbs.	Price, Complete 110-volts 220-volts	500-volts	Allowance for Omission of Base	Pulley	Starter	Add for Compounding
½	1100	1200	3	2	125	$102.00	$106.00	$4.00	$1.40	$8.00	$6.00
½	850	935	4	3	135	114.00	120.00	4.00	1.80	8.00	6.00
¾	1700	1875	3	2	125	102.00	106.00	4.00	1.40	8.00	6.00
¾	1100	1200	4	3	135	114.00	120.00	4.00	1.80	8.00	6.00
¾	900	1000	4	3	150	132.00	132.00	4.00	1.80	8.00	6.00
1	1700	1875	4	3	135	114.00	120.00	4.00	1.80	8.00	6.00
1	1200	1325	4	3	150	132.00	132.00	4.00	1.80	8.00	6.00
1½	1800	1975	4	3	150	132.00	132.00	4.00	1.80	8.00	6.00
1½	1500	1650	4	3	150	138.00	144.00	4.00	1.80	8.00	6.00
2	1800	1975	4	3	150	146.00	144.00	4.00	1.80	8.00	6.00
2	1100	1200	5	5	325	188.00	196.00	8.00	2.20	8.00	6.00
2	800	875	5	5	375	220.00	230.00	10.00	2.50	8.00	6.00
2	450	500	6	6	450	290.00	304.00	12.00	3.50	8.00	8.00
2½	1400	1550	5	5	325	188.00	196.00	8.00	2.20	9.00	6.00
2½	900	1000	5	5	375	228.00	240.00	10.00	2.50	9.00	6.00
2½	475	525	6	6	500	320.00	236.00	12.00	3.50	9.00	8.00
3	1700	1875	5	5	325	188.00	196.00	8.00	2.20	9.00	6.00
3	1100	1200	5	5	375	228.00	240.00	10.00	2.50	9.00	6.00
3	700	775	6	6	450	290.00	304.00	12.00	3.50	9.00	8.00
4	1500	1650	5	5	375	228.00	240.00	10.00	2.50	12.00	6.00
4	850	925	6	6	450	290.00	304.00	12.00	3.50	12.00	8.00
4	750	825	6	6	500	320.00	376.00	12.00	3.50	12.00	8.00
5	1700	1875	5	5	375	234.00	246.00	10.00	2.50	12.00	6.00
5	1100	1200	6	6	450	290.00	304.00	12.00	3.50	12.00	8.00
5	850	925	6	6	500	332.00	348.00	12.00	3.50	12.00	8.00
5	600	650	8	6	775	408.00	428.00	14.00	5.00	12.00	10.00
5	475	525	8	7	850	460.00	484.00	14.00	5.00	12.00	12.00
6	1350	1475	6	6	450	290.00	304.00	12.00	3.50	17.00	8.00
6	1000	1100	6	6	500	320.00	336.00	12.00	3.50	17.00	8.00
6	725	800	8	6	775	408.00	428.00	14.00	5.00	17.00	10.00
6	600	650	8	7	850	460.00	484.00	14.00	5.00	17.00	12.00
7½	1700	1875	6	6	450	290.00	304.00	12.00	3.50	17.00	8.00
7½	1200	1325	6	6	500	340.00	356.00	12.00	3.50	17.00	8.00
7½	850	935	8	6	775	408.00	428.00	14.00	5.00	17.00	10.00
7½	650	700	8	7	850	460.00	484.00	14.00	5.00	17.00	12.00
7½	450	500	10	8	1300	580.00	608.00	18.00	7.00	17.00	18.00

IMPERIAL INTERPOLE MOTORS

CONSTANT DUTY—DIRECT CURRENT

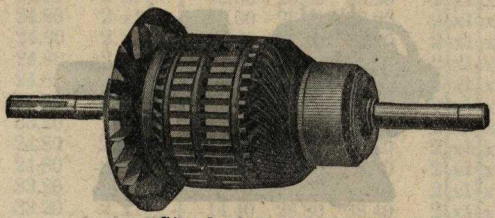


H.P.	R. P. M. 110 Volts 220 Volts	R. P. M. 500 Volts	Size of Pulley Inches Diam.	Face	Approx. Ship. Wt., Lbs.	Price, Complete 110-volt 220-volt	500-volt	Allowance for Omission of Base	Pulley	Starting	Add for Compounding
10	1700	1875	6	6	500	$320.00	$336.00	$12.00	$3.50	$18.50	$ 8.00
10	1100	1200	8	6	775	420.00	440.00	14.00	5.00	18.50	10.00
10	900	1000	8	7	850	460.00	484.00	14.00	5.00	18.50	12.00
10	600	650	10	8	1300	540.00	566.00	18.00	7.00	18.50	18.00
12½	1400	1550	8	6	775	416.00	436.00	14.00	5.00	25.20	10.00
12½	1100	1200	8	7	850	460.00	484.00	14.00	5.00	25.20	12.00
12½	850	935	8	7	1150	524.00	550.00	18.00	5.00	25.20	14.00
15	1700	1875	8	6	775	408.00	428.00	14.00	5.00	25.20	10.00
15	1200	1325	8	7	850	480.00	504.00	14.00	5.00	25.20	12.00
15	950	1050	8	7	1150	500.00	524.00	18.00	5.00	25.20	14.00
15	875	950	10	8	1300	540.00	566.00	18.00	7.00	25.20	18.00
15	600	650	11	10	1700	720.00	756.00	20.00	9.00	25.20	22.00
15	450	500	12	11	2100	880.00	924.00	22.00	10.00	25.20	26.00
17½	1500*	....	8	7	850	480.00	504.00	14.00	5.00	25.20	12.00
17½	1100	1200	8	7	1150	520.00	546.00	18.00	5.00	25.20	14.00
17½	950	1050	10	8	1300	560.00	588.00	18.00	7.00	25.20	18.00
20	1700*	1875	8	7	850	480.00	504.00	14.00	5.00	35.00	12.00
20	1250	1375	8	7	1150	540.00	566.00	18.00	5.00	35.00	14.00
20	1100	1200	10	8	1300	580.00	608.00	18.00	7.00	35.00	18.00
20	800	875	11	10	1700	756.00	794.00	20.00	9.00	35.00	22.00
20	600	650	12	11	2100	900.00	944.00	22.00	10.00	35.00	26.00
25	1700*	....	8	7	1150	520.00	546.00	18.00	5.00	35.00	14.00
25	1350	1450	10	8	1300	600.00	630.00	18.00	7.00	35.00	18.00
25	1100	1200	11	10	1700	720.00	758.00	20.00	9.00	35.00	22.00
25	800	875	12	11	2100	860.00	902.00	22.00	10.00	35.00	26.00
25	450	500	13	12	2450	1220.00	1280.00	24.00	12.00	35.00	30.00
30	1100*	....	11	10	1700	756.00	794.00	20.00	9.00	46.00	22.00
30	900	1000	12	11	2100	880.00	924.00	22.00	10.00	46.00	26.00
30	500	550	13	12	2450	1220.00	1280.00	24.00	12.00	46.00	30.00
35	1000*	....	12	11	2100	880.00	924.00	22.00	10.00	48.00	26.00
35	600	650	13	12	2450	1220.00	1280.00	24.00	12.00	48.00	30.00
40	1100*	....	12	11	2100	900.00	944.00	22.00	10.00	72.00	26.00
40	650	700	13	12	2450	1220.00	1280.00	24.00	12.00	72.00	30.00
45	750	825	13	12	2450	1220.00	1280.00	24.00	12.00	72.00	30.00
50	900*	....	13	12	2450	1200.00	1260.00	24.00	12.00	78.00	30.00
60	1100*	....	13	12	2450	1200.00	1260.00	24.00	12.00	96.00	30.00
60	1000*	....	13	12	2450	1260.00	1322.00	24.00	12.00	96.00	30.00
65	1100*	....	13	12	2450	1220.00	1280.00	24.00	12.00	96.00	30.00
75	1200*	....	13	12	2450	1260.00	1322.00	24.00	12.00	96.00	30.00

*Supplied for 220 volts only.

IMPERIAL MULTI-POLAR GENERATORS

DIRECT CURRENT



Standard Armature

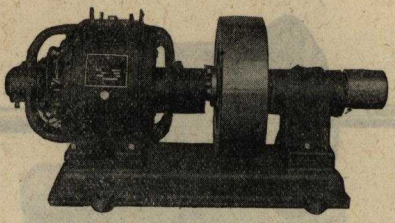
TWO BEARING TYPE

Kw.	No. of 25-watt, 20-C. P. Lamps	R.P.M.	Size of Pulley Inches Diam.	Face	Approx. Ship. Wt., Lbs.	Price, Complete 24-volt	32-volt	60-volt	125-volt
¾	30	1200	4	3	135	$132.00	$126.00	$126.00	$120.00
¾	30	1000	4	3	150	146.00	138.00	138.00	132.00
¾	30	475	5	5	325	216.00	208.00	208.00	198.00
1	40	1350	4	3	150	162.00	138.00	138.00	132.00
1	40	600	5	5	325	216.00	208.00	208.00	198.00
1	40	450	5	5	375	254.00	242.00	242.00	230.00
1½	60	1650	4	3	150	174.00	152.00	152.00	144.00
1½	60	950	5	5	325	236.00	208.00	208.00	198.00
1½	60	650	5	5	375	254.00	242.00	242.00	230.00
1½	60	400	6	6	450	334.00	320.00	320.00	304.00
2	80	2000	4	3	150	184.00	176.00	160.00	154.00
2	80	1200	5	5	325	236.00	228.00	208.00	198.00
2	80	900	5	5	375	278.00	242.00	242.00	230.00
2	80	425	6	6	500	368.00	352.00	352.00	236.00
2½	100	1550	5	5	325	236.00	228.00	208.00	198.00
2½	100	1000	5	5	375	286.00	266.00	250.00	240.00
2½	100	525	6	6	500	402.00	352.00	352.00	336.00
3	120	1800	5	5	325	286.00	228.00	208.00	198.00
3	120	1200	5	5	375	286.00	266.00	250.00	240.00
3	120	775	6	6	450	368.00	320.00	320.00	304.00
3	120	425	8	6	775	470.00	450.00	450.00	428.00
4	160	1650	5	5	375	286.00	266.00	250.00	240.00
4	160	950	6	6	450	368.00	354.00	320.00	304.00
4	160	550	8	6	775	510.00	450.00	450.00	428.00
4	160	450	8	7	850	530.00	506.00	506.00	484.00
5	200	1950	5	5	375	294.00	282.00	258.00	246.00
5	200	1200	6	6	450	368.00	354.00	320.00	304.00
5	200	425	8	7	1150	626.00	550.00	550.00	526.00
6	240	1500	6	6	450	368.00	354.00	320.00	304.00
6	240	1100	6	6	500	402.00	386.00	352.00	336.00
7½	300	1325	6	6	500	426.00	410.00	374.00	358.00
7½	300	950	8	6	775	510.00	490.00	450.00	428.00
7½	300	700	8	7	850	570.00	546.00	506.00	484.00
7½	300	500	10	8	1300	718.00	638.00	638.00	610.00
10	400	1200	8	6	775	524.00	502.00	462.00	440.00
10	400	1000	8	7	850	570.00	546.00	506.00	484.00
10	400	775	8	7	1150	626.00	600.00	550.00	526.00
10	400	325	12	11	2100	1092.00	970.00	970.00	924.00
12½	500	1400	8	7	850	.....	.....	.....	450.00
12½	500	1100	8	7	1150	.....	.....	.....	510.00
12½	500	1000	10	8	1300	.....	.....	.....	570.00
12½	500	700	11	10	1700	.....	.....	.....	740.00
12½	500	300	13	12	2450	.....	.....	.....	1180.00

Larger sizes are listed on the following page.
250-volt generators can be furnished at same price as 125-volt.
500-volt generators can be furnished at 5 per cent in advance of 125-volt prices.
Prices for other speeds than above listed supplied on application.

IMPERIAL MULTI-POLAR GENERATORS

DIRECT CURRENT



Three Bearing Type, with Flywheel

TWO BEARING TYPE—Continued

Kw.	No. of 25-watt, 20 C. P. Lamps	R. P. M.	Size of Pulley Inches Diam.	Face	Approx. Ship. Wt., Lbs.	Price, Complete 24-volt	32-volt	60-volt	125-volt
15	600	1400	8	7	1150	.....	.....	.....	$510.00
15.	600	1200	10	8	1300	.....	.....	.....	570.00
15	600	900	11	10	1700	.....	.....	.....	740.00
15	600	400	13	12	2450	.....	.....	.....	1180.00
20	800	1500	10	8	1300	.....	.....	.....	570.00
20	800	1200	11	10	1700	.....	.....	.....	740.00
20	800	900	12	11	2100	.....	.....	.....	870.00
20	800	450	13	12	2450	.....	.....	.....	1180.00
25	1000	1200	11	10	1700	.....	.....	.....	764.00
25	1000	1000	12	11	2100	.....	.....	.....	870.00
30	1200	1200	12	11	2100	.....	.....	.....	910.00
30	1200	700	13	12	2450	.....	.....	.....	1180.00
40	1600	1000	13	12	2450	.....	.....	.....	1160.00
40	1600	850	13	12	2450	.....	.....	.....	1220.00
50	2000	1100	13	12	2450	.....	.....	.....	1220.00

250-volt generators can be furnished at same price as 125-volt.

500-volt generators can be furnished at 5 per cent in advance of 125-volt prices.

Prices for other speeds than above listed supplied on application.

THREE BEARING TYPE, WITH FLYWHEEL

Kw.	No. of 25-watt, 20 C. P. Lamps	R. P. M.	Size of Pulley Inches Diam.	Face	Approx. Ship. Wt., Lbs.	Price, Complete 32-volt	115-volt
4	16	1800	3	3	300	$189.80	$171.00
5	20	1350	3½	3	325	212.46	186.00
6	24	1600	3½	3	325	212.46	186.00
8	32	2000	3½	3	325	212.46	186.00
6	24	1100	4	3	350	243.10	219.00
8	32	1450	4	3	350	243.10	219.00
1	40	1800	4	3	350	243.10	219.00
1	40	1350	4	3	425	279.72	252.00
1½	60	2000	4	3	425	279.72	252.00
1½	60	1650	4½	3	475	313.02	282.00
2	80	2000	4½	3	475	.....	282.00
2	80	1200	5	4	775	366.50	330.00
2½	100	1550	5	4	775	366.50	330.00
3	120	1800	5	4	775	366.50	330.00
3	120	1200	5	5	850	446.22	402.00
4	160	1650	5	5	850	.....	402.00
5	200	1950	5	5	850	.....	432.00
5	200	1200	6	5	1100	.....	495.00

60-volt generators can be furnished at 5 per cent in advance of 115-volt prices.

250-volt generators can be furnished at same price as 115-volt.

CARBON AND GRAPHITE BRUSHES

Size Inches	Price, per 100 Regular Carbon	Graphite & Long Life	B. B. Special
1 x 1/2 x 1/4	$9.30	$18.60	$24.80
1 x 1/2 x 3/8	9.30	18.60	24.80
1 x 1/2 x 1/2	9.30	18.60	24.80
1 x 3/4 x 1/4	9.30	18.60	24.80
1 x 3/4 x 3/8	9.30	18.60	24.80
1 x 3/4 x 1/2	9.30	18.60	24.80
1 x 3/4 x 5/8	9.30	18.60	24.80
1 x 3/4 x 3/4	12.50	25.00	33.20
1 x1 x 1/4	9.30	18.60	24.80
1 x1 x 3/8	9.30	18.60	24.80
1 x1 x 1/2	12.50	25.00	33.20
1 x1 x 5/8	12.50	25.00	33.20
1 x1 x 3/4	12.50	25.00	33.20
1 x1 x 7/8	12.50	25.00	33.20
1 x1 x1	12.50	25.00	33.20
1 1/2 x 1/2 x 1/4	9.30	18.60	24.80
1 1/2 x 1/2 x 3/8	9.30	18.60	24.80
1 1/2 x 1/2 x 1/2	9.30	18.60	24.80
1 1/2 x 3/4 x 1/4	9.30	18.60	24.80
1 1/2 x 3/4 x 3/8	12.50	25.00	33.20
1 1/2 x 3/4 x 1/2	12.50	25.00	33.20
1 1/2 x 3/4 x 5/8	12.50	25.00	33.20
1 1/2 x 3/4 x 3/4	12.50	25.00	33.20
1 1/2 x1 x 1/4	12.50	25.00	33.20
1 1/2 x1 x 3/8	12.50	25.00	33.20
1 1/2 x1 x 1/2	12.50	25.00	33.20
1 1/2 x1 x 5/8	12.50	25.00	33.20
1 1/2 x1 x 3/4	12.50	25.00	33.20
1 1/2 x1 x 7/8	12.50	25.00	33.20
1 1/2 x1 x1	12.50	25.00	33.20
1 1/2 x1 1/4 x1	12.50	25.00	33.20
1 1/2 x1 1/4 x1 1/8	13.00	26.00	34.20
1 1/2 x1 1/4 x1 1/4	14.00	28.00	37.20
1 1/2 x1 1/4 x1 3/8	15.00	30.00	40.00
1 1/2 x1 1/2 x1 1/2	16.20	32.40	43.20
2 x 1/2 x 1/4	9.30	18.60	24.80
2 x 1/2 x 3/8	9.30	18.60	24.80
2 x 1/2 x 1/2	12.50	25.00	33.20
2 x 3/4 x 1/4	12.50	25.00	33.20
2 x 3/4 x 3/8	12.50	25.00	33.20
2 x 3/4 x 1/2	12.50	25.00	33.20
2 x 3/4 x 5/8	12.50	25.00	33.20
2 x 3/4 x 3/4	12.50	25.00	33.20
2 x1 x 1/4	12.50	25.00	33.20
2 x1 x 3/8	12.50	25.00	33.20
2 x1 x 1/2	12.50	25.00	33.20
2 x1 x 5/8	12.50	25.00	33.20
2 x1 x 3/4	12.50	25.00	33.20
2 x1 x 7/8	12.50	25.00	33.20
2 x1 x1	12.50	25.00	33.20
2 x1 1/4 x 1/4	12.50	25.00	33.20
2 x1 1/4 x 3/8	12.50	25.00	33.20
2 x1 1/4 x 1/2	12.50	25.00	33.20
2 x1 1/4 x 5/8	13.40	26.80	35.80
2 x1 1/4 x 3/4	15.20	30.40	40.40
2 x1 1/4 x 7/8	16.80	33.60	44.80
2 x1 1/4 x1	18.50	37.00	49.20
2 x1 1/4 x1 1/8	20.20	40.40	53.80
2 x1 1/4 x1 1/4	21.80	43.60	58.20
2 x1 1/4 x1 3/8	23.50	47.00	62.80
2 x1 1/4 x1 1/2	25.20	50.40	67.20
2 x2 x 1/4	12.50	25.00	33.20
2 x2 x 3/8	12.50	25.00	33.20
2 x2 x 1/2	13.50	27.00	35.80
2 x2 x 5/8	15.40	30.80	41.00
2 x2 x 3/4	17.30	34.60	46.00
2 x2 x 7/8	19.20	38.40	51.20
2 x2 x1	21.20	42.40	56.40
2 x2 x1 1/8	23.00	46.00	61.40
2 x2 x1 1/4	25.00	50.00	66.60
2 x2 x1 3/8	26.80	53.60	71.60
2 x2 x1 1/2	28.80	57.60	76.80
2 1/2 x 1/2 x 1/4	9.30	18.60	24.80
2 1/2 x 1/2 x 3/8	12.50	25.00	33.20
2 1/2 x 1/2 x 1/2	12.50	25.00	33.20
2 1/2 x 3/4 x 1/4	12.50	25.00	33.20
2 1/2 x 3/4 x 3/8	12.50	25.00	33.20
2 1/2 x 3/4 x 1/2	12.50	25.00	33.20
2 1/2 x 3/4 x 5/8	12.50	25.00	33.20
2 1/2 x 3/4 x 3/4	12.50	25.00	33.20
2 1/2 x1 x 1/4	12.50	25.00	33.20
2 1/2 x1 x 3/8	12.50	25.00	33.20
2 1/2 x1 x 1/2	12.50	25.00	33.20
2 1/2 x1 x 5/8	12.50	25.00	33.20
2 1/2 x1 x 3/4	12.50	25.00	33.20
2 1/2 x1 x 7/8	12.50	25.00	33.20
2 1/2 x1 x1	13.20	26.40	35.20
2 1/2 x1 1/4 x 1/4	12.50	25.00	33.20
2 1/2 x1 1/4 x 3/8	12.50	25.00	33.20
2 1/2 x1 1/4 x 1/2	12.50	25.00	33.20
2 1/2 x1 1/4 x 5/8	12.50	25.00	33.20
2 1/2 x1 1/4 x 3/4	13.50	27.00	36.00
2 1/2 x1 1/4 x 7/8	15.00	30.00	40.00
2 1/2 x1 1/4 x1	16.50	33.00	44.00
2 1/2 x1 1/4 x1 1/8	18.00	36.00	48.00
2 1/2 x1 1/4 x1 1/4	19.50	39.00	52.00
2 1/2 x1 1/2 x 1/4	12.50	25.00	33.20
2 1/2 x1 1/2 x 3/8	12.50	25.00	33.20
2 1/2 x1 1/2 x 1/2	12.60	25.20	33.60
2 1/2 x1 1/2 x 5/8	14.10	28.20	37.60
2 1/2 x1 1/2 x 3/4	16.20	32.40	43.20
2 1/2 x1 1/2 x 7/8	$18.00	$36.00	$48.00
2 1/2 x1 1/2 x1	19.80	39.60	52.80
2 1/2 x1 1/2 x1 1/8	21.60	43.20	57.60
2 1/2 x1 1/2 x1 1/4	23.40	46.80	62.40
2 1/2 x1 1/2 x1 3/8	25.20	50.40	67.20
2 1/2 x1 1/2 x1 1/2	27.00	54.00	72.00
2 1/2 x1 3/4 x 1/4	12.50	25.00	33.20
2 1/2 x1 3/4 x 3/8	12.60	25.20	33.60
2 1/2 x1 3/4 x 1/2	14.70	29.40	39.20
2 1/2 x1 3/4 x 5/8	16.80	33.60	44.80
2 1/2 x1 3/4 x 3/4	18.90	37.80	50.40
2 1/2 x1 3/4 x 7/8	21.00	42.00	56.00
2 1/2 x1 3/4 x1	23.10	46.20	61.60
2 1/2 x1 3/4 x1 1/8	25.20	50.40	67.20
2 1/2 x1 3/4 x1 1/4	27.30	54.60	72.80
2 1/2 x1 3/4 x1 3/8	29.40	58.80	76.40
2 1/2 x1 3/4 x1 1/2	31.50	63.00	84.00
2 1/2 x2 x 1/4	12.50	25.00	33.20
2 1/2 x2 x 3/8	14.40	28.80	38.40
2 1/2 x2 x 1/2	16.80	33.60	44.80
2 1/2 x2 x 5/8	19.20	38.40	51.20
2 1/2 x2 x 3/4	21.60	43.20	57.60
2 1/2 x2 x 7/8	24.00	48.00	64.00
2 1/2 x2 x1	26.40	52.80	70.40
2 1/2 x2 x1 1/8	28.80	57.60	76.80
2 1/2 x2 x1 1/4	31.20	62.40	83.20
2 1/2 x2 x1 3/8	33.60	67.20	89.60
2 1/2 x2 x1 1/2	36.00	72.00	96.00
2 1/2 x2 1/4 x 1/4	13.50	27.00	36.00
2 1/2 x2 1/4 x 3/8	16.20	32.40	43.20
2 1/2 x2 1/4 x 1/2	18.90	37.80	50.40
2 1/2 x2 1/4 x 5/8	21.60	43.20	57.60
2 1/2 x2 1/4 x 3/4	24.30	48.60	64.80
2 1/2 x2 1/4 x 7/8	27.00	54.00	72.00
2 1/2 x2 1/4 x1	29.70	59.40	79.20
2 1/2 x2 1/4 x1 1/8	32.40	64.80	86.40
2 1/2 x2 1/4 x1 1/4	35.20	70.40	93.60
2 1/2 x2 1/4 x1 3/8	37.60	75.20	100.80
2 1/2 x2 1/4 x1 1/2	40.50	81.00	108.00
2 1/2 x2 1/2 x 1/4	15.00	30.00	40.00
2 1/2 x2 1/2 x 3/8	18.00	36.00	48.00
2 1/2 x2 1/2 x 1/2	21.00	42.00	56.00
2 1/2 x2 1/2 x 5/8	24.00	48.00	64.00
2 1/2 x2 1/2 x 3/4	27.00	54.00	72.00
2 1/2 x2 1/2 x 7/8	30.00	60.00	80.00
2 1/2 x2 1/2 x1	33 00	66.00	88.00
2 1/2 x2 1/2 x1 1/8	36.00	72.00	96.00
2 1/2 x2 1/2 x1 1/4	39.00	78.00	104.00
2 1/2 x2 1/2 x1 3/8	42.00	84.00	112.00
2 1/2 x2 1/2 x1 1/2	45.00	90.00	120.00
3 x1 x 1/4	12.50	25.00	33.20
3 x1 x 3/8	12.50	25.00	33.20
3 x1 x 1/2	12.50	25.00	33.20
3 x1 x 5/8	12.50	25.00	33.20
3 x1 x 3/4	13.00	26.00	34.60
3 x1 x 7/8	14.40	28.80	38.40
3 x1 x1	15.80	31.60	42.20
3 x1 1/4 x 1/4	12.50	25.00	33.20
3 x1 1/4 x 3/8	12.50	25.00	33.20
3 x1 1/4 x 1/2	12.60	25.20	33.60
3 x1 1/4 x 5/8	14.40	28.80	38.40
3 x1 1/4 x 3/4	16.20	32.40	43.20
3 x1 1/4 x 7/8	18.00	36.00	48.00
3 x1 1/4 x1	19.80	39.60	52.80
3 x1 1/4 x1 1/8	21.60	43.20	57.60
3 x1 1/4 x1 1/4	23.40	46.80	62.40
3 x1 1/2 x 1/4	12.50	25.00	33.20
3 x1 1/2 x 3/8	13.00	26.00	34.60

CARBON AND GRAPHITE BRUSHES

Size Inches	Price, per 100 Regular Carbon	Graphite & Long Life	B. B. Special
3 x1½x ½	$15.20	$30.40	$40.40
3 x1½x ⅝	17.30	34.60	46.00
3 x1½x ¾	19.50	39.00	52.00
3 x1½x ⅞	21.60	43.20	57.60
3 x1½x1	23.80	47.60	63.40
3 x1½x1⅛	26.00	52.00	69.20
3 x1½x1¼	28.00	56.00	74.80
3 x1½x1⅜	30.20	60.40	80.60
3 x1½x1½	32.40	64.80	86.40
3 x1¾x ¼	12.60	25.20	33.60
3 x1¾x ⅜	15.20	30.40	40.40
3 x1¾x ½	17.60	35.20	47.00
3 x1¾x ⅝	20.20	40.40	53.80
3 x1¾x ¾	22.60	45.20	60.40
3 x1¾x ⅞	25.20	50.40	67.20
3 x1¾x1	27.80	55.60	74.00
3 x1¾x1⅛	30.20	60.40	80.60
3 x1¾x1¼	32.80	65.60	87.40
3 x1¾x1⅜	35.20	70.40	94.00
3 x1¾x1½	37.80	75.60	100.80
3 x2 x ¼	14.40	28.80	38.40
3 x2 x ⅜	17.30	34.60	46.00
3 x2 x ½	20.20	40.40	53.80
3 x2 x ⅝	23.00	46.00	61.40
3 x2 x ¾	26.00	52.00	69.20
3 x2 x ⅞	28.80	57.60	76.80
3 x2 x1	31.60	63.20	84.40
3 x2 x1⅛	34.60	69.20	92.20
3 x2 x1¼	37.40	74.80	99.80
3 x2 x1⅜	40.40	80.80	107.40
3 x2 x1½	43.20	86.40	115.20
3 x2¼x ¼	16.20	32.40	43.20
3 x2¼x ⅜	19.40	38.80	51.80
3 x2¼x ½	22.60	45.20	60.40
3 x2¼x ⅝	26.00	52.00	69.20
3 x2¼x ¾	29.20	58.40	77.60
3 x2¼x ⅞	32.40	64.80	86.40
3 x2¼x1	35.60	71.20	95.00
3 x2¼x1⅛	38.80	77.60	103.60
3 x2¼x1¼	42.20	84.40	112.40
3 x2¼x1⅜	45.40	90.80	120.80
3 x2¼x1½	48.60	97.20	129.60
3 x2½x ¼	18.00	36.00	48.00
3 x2½x ⅜	21.60	43.20	57.60
3 x2½x ½	25.20	50.40	67.20
3 x2½x ⅝	28.80	57.60	76.80
3 x2½x ¾	32.40	64.80	86.40
3 x2½x ⅞	36.00	72.00	96.00
3 x2½x1	39.60	79.20	105.60
3 x2½x1⅛	43.20	86.40	115.20
3 x2½x1¼	46.80	93.60	124.80
3 x2½x1⅜	50.40	100.80	134.40
3 x2½x1½	54.00	108.00	144.00
3 x3 x ¼	21.60	43.20	57.60
3 x3 x ⅜	26.00	52.00	69.20
3 x3 x ½	30.20	60.40	80.60
3 x3 x ⅝	34.60	69.20	92.20
3 x3 x ¾	38.80	77.60	103.60
3 x3 x ⅞	43.20	86.40	115.20
3 x3 x1	47.60	95.20	126.80
3 x3 x1⅛	51.80	103.60	138.20
3 x3 x1¼	56.20	112.40	149.80
3 x3 x1⅜	60.40	120.80	161.20
3 x3 x1½	64.80	129.60	172.80
3½x1 x ¼	12.50	25.00	33.20
3½x1 x ⅜	12.50	25.00	33.20
3½x1 x ½	12.50	25.00	33.20
3½x1 x ⅝	13.40	26.80	35.80
3½x1 x ¾	15.20	30.40	40.40
3½x1 x ⅞	16.80	33.60	44.80
3½x1 x1	18.40	36.80	49.20
3½x1¼x ¼	12.50	25.00	33.20
3½x1¼x ⅜	12.60	25.20	33.60
3½x1¼x ½	14.70	29.40	39.20
3½x1¼x ⅝	16.80	33.60	44.80
3½x1¼x ¾	18.80	37.60	50.40
3½x1¼x ⅞	21.00	42.00	56.00
3½x1¼x1	23.20	46.40	61.60
3½x1¼x1⅛	25.20	50.40	67.20
3½x1¼x1¼	27.20	54.40	72.80
3½x1½x ¼	12.60	25.20	33.60
3½x1½x ⅜	15.20	30.40	40.40
3½x1½x ½	17.60	35.20	47.00
3½x1½x ⅝	20.20	40.40	53.80
3½x1½x ¾	22.60	45.20	60.40
3½x1½x ⅞	25.20	50.40	67.20
3½x1½x1	27.80	55.60	74.00
3½x1½x1⅛	30.20	60.40	80.60
3½x1½x1¼	32.80	65.60	87.40
3½x1½x1⅜	35.20	70.40	94.00
3½x1½x1½	37.80	75.60	100.80
3½x1¾x ¼	14.70	29.40	39.20
3½x1¾x ⅜	17.60	35.20	47.00
3½x1¾x ½	20.60	41.20	54.80
3½x1¾x ⅝	23.60	47.20	62.80
3½x1¾x ¾	26.40	52.80	70.60
3½x1¾x ⅞	29.40	58.80	78.40
3½x1¾x1	32.40	64.80	86.20
3½x1¾x1⅛	35.20	70.40	94.00
3½x1¾x1¼	38.20	76.40	102.00
3½x1¾x1⅜	41.00	82.00	109.60
3½x1¾x1½	44.00	88.00	117.60
3½x2 x ¼	16.80	33.60	44.80
3½x2 x ⅜	20.20	40.40	53.80
3½x2 x ½	23.60	47.20	62.80
3½x2 x ⅝	26.80	53.60	71.60
3½x2 x ¾	30.20	60.40	80.60
3½x2 x ⅞	33.60	67.20	89.60
3½x2 x1	37.00	74.00	98.60
3½x2 x1⅛	40.40	80.80	107.80
3½x2 x1¼	43.60	87.20	116.40
3½x2 x1⅜	47.00	94.00	125.40
3½x2 x1½	50.40	100.80	134.40
3½x2¼x ¼	19.00	38.00	50.40
3½x2¼x ⅜	22.60	45.20	60.40
3½x2¼x ½	26.40	52.80	70.60
3½x2¼x ⅝	30.20	60.40	80.60
3½x2¼x ¾	34.00	68.00	90.80
3½x2¼x ⅞	37.80	75.60	100.80
3½x2¼x1	41.60	83.20	110.80
3½x2¼x1⅛	45.40	90.80	121.00
3½x2¼x1¼	49.20	98.40	131.00
3½x2¼x1⅜	53.00	106.00	141.00
3½x2¼x1½	56.80	113.60	151.20
3½x2½x ¼	21.00	42.00	56.00
3½x2½x ½	25.20	50.40	67.20
3½x2½x ⅝	29.40	58.80	78.40
3½x2½x ¾	33.60	67.20	89.60
3½x2½x ⅞	37.80	75.60	100.80
3½x2½x1	42.00	84.00	112.00
3½x2½x1	46.20	92.40	123.20
3½x2½x1⅛	50.40	100.80	134.40
3½x2½x1¼	54.60	109.20	145.60
3½x2½x1⅜	58.80	117.60	156.80
3½x2½x1½	63.00	126.00	168.00
3½x3 x ¼	25.20	50.40	67.20
3½x3 x ⅜	$30.20	$60.40	$80.60
3½x3 x ½	35.20	70.40	94.00
3½x3 x ⅝	40.40	80.80	107.80
3½x3 x ¾	45.40	90.80	121.00
3½x3 x ⅞	50.40	100.80	134.40
3½x3 x1	55.40	110.80	146.00
3½x3 x1⅛	60.40	120.80	161.20
3½x3 x1¼	65.60	131.20	174.80
3½x3 x1⅜	70.60	141.20	188.00
3½x3 x1½	75.60	151.20	201.60
3½x3½x ¼	29.40	58.80	78.40
3½x3½x ⅜	35.20	70.40	94.00
3½x3½x ½	41.20	82.40	109.80
3½x3½x ⅝	47.00	94.00	125.40
3½x3½x ¾	53.00	106.00	141.20
3½x3½x ⅞	58.80	117.60	156.80
3½x3½x1	64.60	129.20	172.40
3½x3½x1⅛	70.60	141.20	188.00
3½x3½x1¼	76.40	152.80	204.00
3½x3½x1⅜	81.20	162.40	219.20
3½x3½x1½	88.20	176.40	235.20
4 x1 x ¼	12.50	25.00	33.20
4 x1 x ⅜	12.50	25.00	33.20
4 x1 x ½	13.40	26.80	36.00
4 x1 x ⅝	15.40	30.80	41.00
4 x1 x ¾	17.20	34.40	46.00
4 x1 x ⅞	19.20	38.40	51.20
4 x1 x1	21.20	42.40	56.40
4 x1¼x ¼	12.50	25.00	33.20
4 x1¼x ⅜	14.40	28.80	38.40
4 x1¼x ½	16.80	33.60	44.80
4 x1¼x ⅝	19.20	38.40	51.20
4 x1¼x ¾	21.60	43.20	57.60
4 x1¼x ⅞	24.00	48.00	64.00
4 x1¼x1	26.40	52.80	70.40
4 x1¼x1⅛	28.80	57.60	76.80
4 x1¼x1¼	31.20	62.40	83.20
4 x1½x ¼	14.40	28.80	38.40
4 x1½x ⅜	17.20	34.40	46.00
4 x1½x ½	20.20	40.40	53.80
4 x1½x ⅝	23.00	46.00	61.40
4 x1½x ¾	26.00	52.00	69.00
4 x1½x ⅞	28.80	57.60	76.80
4 x1½x1	31.60	63.20	84.40
4 x1½x1⅛	34.60	69.20	92.20
4 x1½x1¼	37.40	74.80	99.80
4 x1½x1⅜	40.40	80.80	107.40
4 x1½x1½	43.20	86.40	115.20
4 x1¾x ¼	16.80	33.60	44.80
4 x1¾x ⅜	20.20	40.40	53.80
4 x1¾x ½	23.60	47.20	61.40
4 x1¾x ⅝	26.80	53.60	71.60
4 x1¾x ¾	30.20	60.40	80.60
4 x1¾x ⅞	33.60	67.20	89.60
4 x1¾x1	37.00	74.00	98.60
4 x1¾x1⅛	40.40	80.80	107.80
4 x1¾x1¼	43.20	86.40	115.20
4 x1¾x1⅜	46.00	92.00	122.80
4 x1¾x1½	50.00	100.00	133.20
4 x2 x ¼	19.20	38.40	51.20
4 x2 x ⅜	23.00	46.00	61.40
4 x2 x ½	26.80	53.60	71.60
4 x2 x ⅝	30.80	61.60	82.00
4 x2 x ¾	34.60	69.20	92.20
4 x2 x ⅞	38.40	76.80	102.40
4 x2 x1	42.20	84.40	112.60
4 x2 x1⅛	46.00	92.00	122.80
4 x2 x1¼	50.00	100.00	133.20

CARBON AND GRAPHITE BRUSHES

Size Inches	Price, per 100 Regular Carbon	Graphite & Long Life	B. B. Special
4 x2 x1 3/8	$53.80	$107.60	$143.20
4 x2 x1 1/2	57.60	115.20	153.60
4 x2 1/4 x 1/4	21.60	53.20	57.60
4 x2 1/4 x 3/8	26.00	52.00	69.20
4 x2 1/4 x 1/2	30.20	60.40	80.60
4 x2 1/4 x 5/8	34.60	69.20	92.20
4 x2 1/4 x 3/4	38.40	76.80	103.60
4 x2 1/4 x 7/8	43.20	86.40	115.20
4 x2 1/4 x1	47.60	95.20	126.80
4 x2 1/4 x1 1/8	51.80	103.60	138.20
4 x2 1/4 x1 1/4	56.20	112.40	149.80
4 x2 1/4 x1 3/8	60.40	120.80	161.20
4 x2 1/4 x1 1/2	64.80	129.60	172.80
4 x2 1/2 x 1/4	24.00	48.00	64.00
4 x2 1/2 x 3/8	28.80	57.60	76.80
4 x2 1/2 x 1/2	33.60	67.20	89.60
4 x2 1/2 x 5/8	38.40	76.80	102.40
4 x2 1/2 x 3/4	43.20	86.40	115.20
4 x2 1/2 x 7/8	48.00	96.00	128.00
4 x2 1/2 x1	52.80	105.60	140.80
4 x2 1/2 x1 1/8	57.60	115.20	153.60
4 x2 1/2 x1 1/4	64.40	128.80	166.40
4 x2 1/2 x1 3/8	67.20	134.40	179.20
4 x2 1/2 x1 1/2	72.00	144.00	192.00
4 x3 x 1/4	28.80	57.60	76.80
4 x3 x 3/8	34.60	69.20	92.20
4 x3 x 1/2	40.40	80.80	107.60
4 x3 x 5/8	46.00	92.00	122.80
4 x3 x 3/4	51.80	103.60	138.20
4 x3 x 7/8	57.60	115.20	153.60
4 x3 x1	63.40	126.80	169.00
4 x3 x1 1/8	69.00	138.00	184.20
4 x3 x1 1/4	74.80	149.60	199.60
4 x3 x1 3/8	80.60	161.20	214.80
4 x3 x1 1/2	86.40	172.80	230.40
4 x3 1/2 x 1/4	33.60	67.20	89.60
4 x3 1/2 x 3/8	40.40	80.80	107.80
4 x3 1/2 x 1/2	47.00	94.00	121.40
4 x3 1/2 x 5/8	53.80	107.60	143.40
4 x3 1/2 x 3/4	60.40	120.80	161.20
4 x3 1/2 x 7/8	67.20	134.40	179.20
4 x3 1/2 x1	74.00	148.00	197.20
4 x3 1/2 x1 1/8	80.60	161.20	215.00
4 x3 1/2 x1 1/4	87.40	174.80	233.00
4 x3 1/2 x1 3/8	94.00	188.00	249.20
4 x3 1/2 x1 1/2	100.80	201.60	268.80
4 x4 x 1/4	38.40	76.80	102.40
4 x4 x 3/8	46.00	92.00	122.80
4 x4 x 1/2	53.80	107.60	143.40
4 x4 x 5/8	61.40	122.80	164.00
4 x4 x 3/4	89.20	178.40	184.40
4 x4 x 7/8	76.80	153.60	204.80
4 x4 x1	84.40	168.80	225.20
4 x4 x1 1/8	92.20	184.40	245.60
4 x4 x1 1/4	99.80	199.60	266.20
4 x4 x1 3/8	107.40	214.80	186.60
4 x4 x1 1/2	115.20	230.40	307.20
4 1/2 x1 x 1/4	12.50	25.00	33.20
4 1/2 x1 x 3/8	13.00	26.00	34.60
4 1/2 x1 x 1/2	15.20	30.40	40.40
4 1/2 x1 x 5/8	17.20	34.40	46.00
4 1/2 x1 x 3/4	19.40	38.80	51.80
4 1/2 x1 x 7/8	21.60	43.20	57.60
4 1/2 x1 x1	23.40	46.80	63.40
4 1/2 x1 1/2 x 1/4	16.20	32.40	43.20
4 1/2 x1 1/2 x 3/8	19.40	38.80	51.80
4 1/2 x1 1/2 x 1/2	22.60	45.20	60.40
4 1/2 x1 1/2 x 5/8	26.00	52.00	69.20

Size Inches	Price, per 100 Regular Carbon	Graphite & Long Life	B. B. Special
4 1/2 x1 1/2 x 3/4	$29.20	$58.40	$77.80
4 1/2 x1 1/2 x 7/8	32.40	64.80	86.40
4 1/2 x1 1/2 x1	35.60	71.20	95.00
4 1/2 x1 1/2 x1 1/8	38.80	77.60	103.60
4 1/2 x1 1/2 x1 1/4	42.20	84.40	112.40
4 1/2 x1 1/2 x1 3/8	45.20	90.40	120.80
4 1/2 x1 1/2 x1 1/2	48.60	97.20	129.60
4 1/2 x2 x 1/4	21.60	43.20	57.60
4 1/2 x2 x 3/8	26.00	52.00	69.20
4 1/2 x2 x 1/2	30.20	60.40	80.60
4 1/2 x2 x 5/8	34.60	69.20	92.20
4 1/2 x2 x 3/4	38.80	77.60	103.60
4 1/2 x2 x 7/8	43.60	87.20	115.20
4 1/2 x2 x1	47.60	95.20	126.80
4 1/2 x2 x1 1/8	51.80	103.60	138.20
4 1/2 x2 x1 1/4	56.20	112.40	149.80
4 1/2 x2 x1 3/8	60.40	120.80	161.20
4 1/2 x2 x1 1/2	64.80	129.60	172.80
4 1/2 x2 1/2 x 1/4	27.00	54.00	72.00
4 1/2 x2 1/2 x 3/8	32.40	64.80	86.40
4 1/2 x2 1/2 x 1/2	37.80	75.60	100.80
4 1/2 x2 1/2 x 5/8	43.20	86.40	115.20
4 1/2 x2 1/2 x 3/4	48.60	97.20	129.60
4 1/2 x2 1/2 x 7/8	54.00	108.00	144.00
4 1/2 x2 1/2 x1	59.40	118.80	158.40
4 1/2 x2 1/2 x1 1/8	64.80	129.60	172.80
4 1/2 x2 1/2 x1 1/4	70.20	140.40	187.20
4 1/2 x2 1/2 x1 3/8	75.60	151.20	201.40
4 1/2 x2 1/2 x1 1/2	81.00	162.00	216.00
4 1/2 x3 x 1/4	32.40	64.80	86.40
4 1/2 x3 x 3/8	38.80	77.60	103.60
4 1/2 x3 x 1/2	45.40	90.80	121.00
4 1/2 x3 x 5/8	51.80	103.60	138.20
4 1/2 x3 x 3/4	58.40	116.80	155.60
4 1/2 x3 x 7/8	64.80	129.60	172.80
4 1/2 x2 x1	71.20	142.40	190.00
4 1/2 x3 x1 1/8	77.80	155.60	207.20
4 1/2 x3 x1 1/4	84.20	168.40	224.60
4 1/2 x3 x1 3/8	90.60	181.20	241.80
4 1/2 x3 x1 1/2	97.20	194.40	259.20
4 1/2 x3 1/2 x 1/4	37.80	75.60	100.80
4 1/2 x3 1/2 x 3/8	45.40	90.80	121.00
4 1/2 x3 1/2 x 1/2	53.00	106.00	141.20
4 1/2 x3 1/2 x 5/8	60.40	120.80	161.20
4 1/2 x3 1/2 x 3/4	68.00	136.00	181.40
4 1/2 x3 1/2 x 7/8	75.60	151.20	201.60
4 1/2 x3 1/2 x1	83.20	166.40	221.80
4 1/2 x3 1/2 x1 1/8	90.80	181.60	241.80
4 1/2 x3 1/2 x1 1/4	98.20	196.40	262.00
4 1/2 x3 1/2 x1 3/8	105.80	211.60	282.00
4 1/2 x3 1/2 x1 1/2	115.40	230.80	302.40
4 1/2 x4 x 1/4	43.20	86.40	115.20
4 1/2 x4 x 3/8	51.80	103.60	138.20
4 1/2 x4 x 1/2	60.40	120.80	161.20
4 1/2 x4 x 5/8	69.20	138.40	184.40
4 1/2 x4 x 3/4	77.80	155.60	207.40
4 1/2 x4 x 7/8	86.40	172.80	230.40
4 1/2 x4 x1	95.00	190.00	253.40
4 1/2 x4 x1 1/8	103.60	207.20	276.40
4 1/2 x4 x1 1/4	112.40	224.80	299.60
4 1/2 x4 x1 3/8	120.80	241.60	322.00
4 1/2 x4 x1 1/2	129.60	259.20	385.60
5 x1 x 1/4	12.50	25.00	33.20
5 x1 x 3/8	14.40	28.80	38.40
5 x1 x 1/2	16.80	33.60	44.80
5 x1 x 5/8	19.20	38.40	51.20
5 x1 x 3/4	21.60	43.20	57.60
5 x1 x 7/8	24.00	48.00	64.00

Size Inches	Price, per 100 Regular Carbon	Graphite & Long Life	B. B. Special
5x1 x1	$26.40	$52.80	$70.40
5x1 1/2 x 1/4	18.00	36.00	48.00
5x1 1/2 x 3/8	21.60	43.20	57.60
5x1 1/2 x 1/2	25.20	50.40	67.20
5x1 1/2 x 5/8	28.80	57.60	76.80
5x1 1/2 x 3/4	32.40	64.80	86.40
5x1 1/2 x 7/8	36.00	72.00	96.00
5x1 1/2 x1	39.60	79.20	105.60
5x1 1/2 x1 1/8	43.20	86.40	115.20
5x1 1/2 x1 1/4	46.80	93.60	124.80
5x1 1/2 x1 3/8	50.40	100.80	134.40
5x1 1/2 x1 1/2	54.00	108.00	144.00
5x2 x 1/4	24.00	48.00	64.00
5x2 x 3/8	28.80	57.60	76.80
5x2 x 1/2	33.60	67.20	89.60
5x2 x 5/8	38.40	76.80	102.40
5x2 x 3/4	43.20	86.40	115.20
5x2 x 7/8	48.00	96.00	128.00
5x2 x1	52.80	105.60	140.80
5x2 x1 1/8	57.60	115.20	153.60
5x2 x1 1/4	62.40	124.80	166.40
5x2 x1 3/8	67.20	134.40	179.20
5x2 x1 1/2	72.00	144.00	192.00
5x2 1/2 x 1/4	30.00	60.00	80.00
5x2 1/2 x 3/8	36.00	72.00	96.00
5x2 1/2 x 1/2	42.00	84.00	112.00
5x2 1/2 x 5/8	48.00	96.00	128.00
5x2 1/2 x 3/4	54.00	108.00	144.00
5x2 1/2 x 7/8	60.00	120.00	160.00
5x2 1/2 x1	66.00	132.00	176.00
5x2 1/2 x1 1/8	72.00	144.00	192.00
5x2 1/2 x1 1/4	78.00	156.00	208.00
5x2 1/2 x1 3/8	84.00	168.00	224.00
5x2 1/2 x1 1/2	90.00	180.00	240.00
5x3 x 1/4	36.00	72.00	96.00
5x3 x 3/8	43.20	86.40	115.20
5x3 x 1/2	50.40	100.80	134.40
5x3 x 5/8	57.60	115.20	153.60
5x3 x 3/4	64.80	129.60	172.80
5x3 x 7/8	72.00	144.00	192.00
5x3 x1	79.20	158.40	211.20
5x3 x1 1/8	86.40	172.80	230.20
5x3 x1 1/4	93.60	187.20	249.60
5x3 x1 3/8	100.80	201.60	268.60
5x3 x1 1/2	108.00	216.00	288.00
5x3 1/2 x 1/4	42.00	84.00	112.00
5x3 1/2 x 3/8	50.40	100.80	134.40
5x3 1/2 x 1/2	58.80	117.60	156.80
5x3 1/2 x 5/8	67.20	134.40	179.20
5x3 1/2 x 3/4	75.60	151.20	201.60
5x3 1/2 x 7/8	84.00	168.00	224.00
5x3 1/2 x1	92.00	184.00	246.40
5x3 1/2 x1 1/8	100.80	201.60	268.60
5x3 1/2 x1 1/4	109.20	218.40	291.20
5x3 1/2 x1 3/8	117.60	235.20	313.40
5x3 1/2 x1 1/2	126.00	252.00	336.00
5x4 x 1/4	48.00	96.00	128.00
5x4 x 3/8	57.60	115.20	153.60
5x4 x 1/2	67.20	134.40	179.20
5x4 x 5/8	76.80	153.60	204.80
5x4 x 3/4	86.40	172.80	230.40
5x4 x 7/8	96.00	192.00	256.00
5x4 x1	105.60	211.20	281.60
5x4 x1 1/8	115.20	230.40	307.20
5x4 x1 1/4	124.80	249.60	332.80
5x4 x1 3/8	134.40	268.80	358.00
5x4 x1 1/2	144.00	288.00	384.00
.....	.....	.....	.....

CARBON AND GRAPHITE BRUSHES

Prices on the Different Grades of Carbon Brushes Described Below Quoted on Application

REGULAR GRADE CARBON BRUSHES

This is a very fine grain material which is self-lubricating and will not split or break.

LONG LIFE BRUSHES

A composite graphite brush in which the graphite is combined with other material in such a manner that perfect lubrication is obtained and strength and durability are added.

GRAPHITE

The graphite is manufactured for this brush of a specially fine grain, it being perfectly pure with no hard spots or grit, which eliminates all possible chance of cutting.

B. B. SPECIAL

This is one of the highest class treated brushes on the market; it is so blended and tempered that it has an extremely long life and the lubrication is positive through the life of the brush.

It requires no attention, as it eliminates the sparking and carries a very high polish on both the commutator and the brushes.

CARBON PLATES

Size Inches	Price, per 100 Regular Carbon	Graphite and Long Life	B. B. Special	Size Inches	Price, per 100 Regular Carbon	Graphite and Long Life	B. B. Special
1 2⅞x 8¼x ¼	$260.00	$520.00	$650.00	1 2⅞x 8¼x ⅞	$520.00	$1040.00	$1300.00
1 2⅞x 8¼x 5/16	286.00	572.00	714.00	1 1⅞x 6 1/16x 1	380.00	760.00	950.00
1 2⅞x 8¼x ⅜	312.00	624.00	780.00	1 1⅞x 6 1/16x 1⅛	414.00	828.00	1034.00
1 2⅞x 8¼x 7/16	336.00	672.00	840.00	1 1⅞x 6 1/16x 1¼	450.00	900.00	1124.00
1 2⅞x 8¼x ½	360.00	720.00	860.00	1 1⅞x 6 1/16x 1⅜	484.00	968.00	1210.00
1 2⅞x 8¼x ⅝	416.00	832.00	1040.00	1 1⅞x 6 1/16x 1½	520.00	1040.00	1300.00
1 2⅞x 8¼x ¾	468.00	936.00	1170.00	.....	.....	.....	.....

ROUND MOTOR BRUSHES

⅛x 6	18.00	36.00	48.00	½x12	18.00	36.00	48.00
¼x12	18.00	36.00	48.00	9/16x12	18.00	36.00	48.00
5/16x12	18.00	36.00	48.00	¾x12	22.50	45.00	60.00
⅜x12	18.00	36.00	48.00	1 x12	36.00	72.00	96.00
7/16x12	18.00	36.00	48.00	.....	.....	.....	.....

FAN MOTOR BRUSHES

All sizes up to and including ½-inch diameter by 1¼ or 1½ inches long list $3.00 per hundred. With milled ends or slots, list $6.00 per hundred. Prices on special brushes of carbon, graphite or combination gauze and graphite, will be rendered on receipt of samples or blue print.



No. 063573

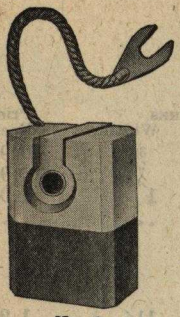
EARLY'S COMMUTATOR CEMENT

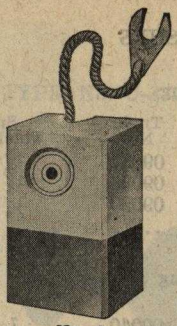
The cement is a strong adhesive and will hold any loose segments in place. It has high insulating qualities; it air dries; is not affected by heat nor will contraction and expansion cause it to lose its grip. Nothing better for holding in place resistance wire on coil, etc., and for insulating in places that cannot be reached with tape.

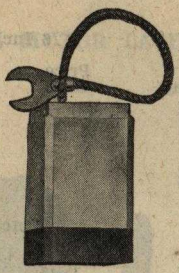
Trade No.	Size of Carton Inches	Weight Pounds	Price per Pkg.
063573	2½x 5¾	1	$2.00
90867	5 x10½	7	10.00

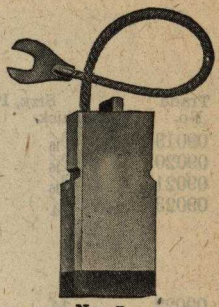
The large package contains eight times the quantity of the small size.

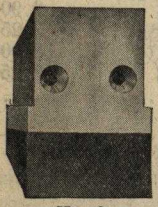
CARBON AND GRAPHITE BRUSHES

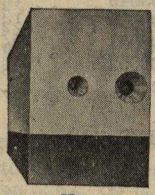

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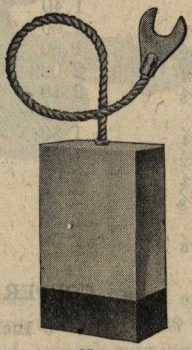

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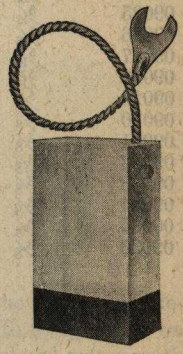

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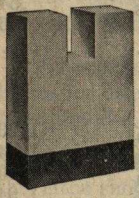

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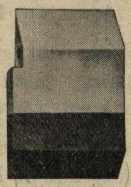

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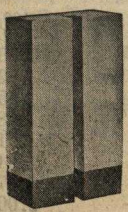

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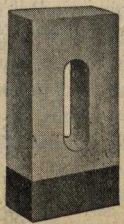

No. 10


No. 11


No. 12


No. 13


No. 14


No. 15

Prices on Special Work

Any special size not listed will have prompt attention as a stock of all sizes is carried at the factory.

In ordering, please state exact size, giving length first, width second and thickness third.

In ordering beveled brushes, please mention the bevel or bevels desired.

An extra charge is made for beveling, drilling, slotting and special work, as follows:

Description	Price per 100
Brushes milled on two sides for pigtail connections	$ 8.00
Slots	10.00
Holes	1.00
Single bevel	1.00
Double bevel	2.00
Four-corner bevel	1.00
Grooves	2.00
Saddle recesses	12.00
Countersinking holes after drilled	1.00
Single shoulder	4.00
Single slide recess	6.00

The minimum charge is 25 cents.

PIGTAILS

Extra Charge for Furnishing and Attaching

No. 2	.40
No. 3	.40
No. 4	.40
No. 5	.40
No. 8	.32
No. 9	.32

When brushes with pigtails, bevels, holes or slots are ordered, the same as any of the illustrations, give the number of the style wanted. This will avoid delays if a sample is not forwarded.

WOVEN WIRE BRUSHES

BRONZE BRUSHES

6 Inches Long

Trade No.	Size, Inches Thick	Size, Inches Width	Price Each
09019	3/16	1/2	$0.65
09020	3/16	3/4	.70
09021	3/16	1	.85
09023	1/4	1/2	.70

Trade No.	Size, Inches Thick	Size, Inches Width	Price Each
09037	1/4	3/4	$0.90
09038	1/4	7/8	.95
09039	1/4	1	1.00
.....	..	...	....

8 Inches Long

09022	1/4	1 1/4	1.45
09024	1/4	1 1/2	1.70
09025	5/16	1	1.40
09026	5/16	1 1/4	1.60
09027	5/16	1 1/2	1.80
09028	5/16	1 3/4	2.00
09029	5/16	1 7/8	2.10
09030	3/8	1	1.60
09031	3/8	1 1/4	1.80
09032	3/8	1 1/2	1.90
09033	3/8	1 3/4	2.00
09034	3/8	1 7/8	2.20
00035	3/8	2	2.35
09036	3/8	2 1/8	2.50

09040	7/16	1 1/4	1.90
09041	7/16	1 1/2	2.20
09042	7/16	1 3/4	2.40
09043	7/16	1 7/8	2.55
09044	7/16	2	2.70
09045	1/2	1 1/8	1.90
09046	1/2	1 5/16	2.30
09047	1/2	1 1/2	2.50
09048	1/2	1 3/4	2.70
09049	1/2	2	2.90
09050	1/2	2 1/4	3.25
09051	5/8	1 7/8	3.00
09052	5/8	2	3.25
.....	..	...	....

COPPER BRUSHES

6 Inches Long

044477	3/16	1/2	.40
044478	3/16	3/4	.50
044479	3/16	1	.60
044480	1/4	1/2	.52

044495	1/4	3/4	.58
044496	1/4	7/8	.64
044497	1/4	1	.66
.....	..	...	....

8 Inches Long

044481	1/4	1 1/4	.76
044482	1/4	1 1/2	.88
044483	5/16	1	.75
044484	5/16	1 1/4	.90
044485	5/16	1 1/2	1.08
044486	5/16	1 3/4	1.30
044487	5/16	1 7/8	1.38
044488	3/8	1	.88
044489	3/8	1 1/4	1.08
044490	3/8	1 1/2	1.32
044491	3/8	1 3/4	1.56
044492	3/8	1 7/8	1.65
044493	3/8	2	1.78
044494	3/8	2 1/8	1.98

044498	7/16	1 1/4	1.23
044499	7/16	1 1/2	1.44
044500	7/16	1 3/4	1.80
044501	7/16	1 7/8	1.94
044502	7/16	2	2.07
044503	1/2	1 1/8	1.44
044504	1/2	1 5/16	1.67
044505	1/2	1 1/2	1.80
044506	1/2	1 3/4	2.07
044507	1/2	2	2.35
044508	1/2	2 1/4	2.75
044509	5/8	1 7/8	2.76
044510	5/8	2	2.96
.....	..	...	....

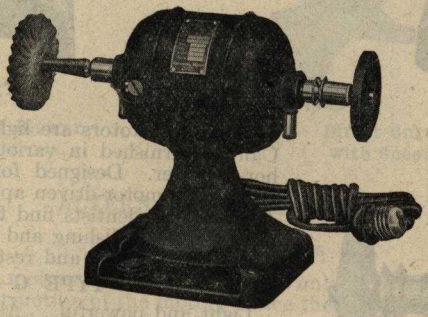
TEMPERED BRUSH COPPER

Trade No.	No. B. & S. Gauge	Price per Lb.
044511	20	$0.66
044512	21	.67
044513	22	.68
044514	23	.69
044515	24	.70
044516	25	.72
044517	26	.74
044518	27	.76
044519	28	.78

Trade No.	No. B. & S. Gauge	Price per Lb.
044520	29	$0.80
044521	30	.82
044522	31	.85
044523	32	.88
044524	33	.91
044525	34	.94
044526	35	.97
044527	36	1.00
.....	..	....

EMERSON MOTOR LATHES

TYPE No. U-37215-BA MOTOR LATHES



Type U-37215-BA grinding and polishing lathe is a universal motor of the series type, designed to operate satisfactorily on alternating current of 100 to 120 volts, 25 to 60 cycles, or on direct current of 100 to 120 volts. It is a compact, smooth-running, fully enclosed motor, with special bearings designed for this service. It weighs approximately 10 pounds net and is accordingly readily portable.

This lathe has three speeds, and is in that respect a decided improvement over the induction lathes for alternating current, which were constant speed types. A convenient switch in the base provides for starting and stopping the motor and obtaining the three speeds.

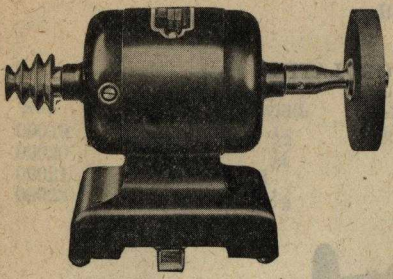
When operating under average loads applied to the buff or grinding wheels, the speeds of this lathe should be approximately 1200, 2400, and 3600 revolutions per minute on alternating current of 60 cycles, and 2000, 3000, and 4000 revolutions per minute on direct current. The maximum wattage consumption under average load on alternating current is approximately 70 watts and approximately 60 watts on direct current. The wattage is slightly reduced at slower speeds.

Actual running speeds will vary with the load imposed on the motor at each point of the switch, as the motor is of the series type, which operates at a higher speed under light load than under full load.

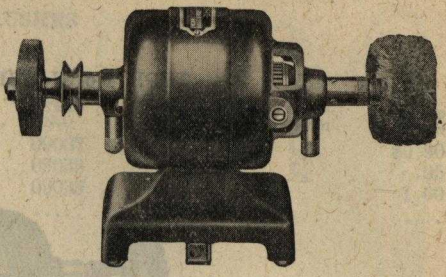
Each lathe is furnished complete with 8-foot cord and swivel plug ready for attachment to lamp socket. Base rubbers are provided to take up vibration. The over all dimensions are as follows: Length along shaft, 11 inches; height, 7½ inches; base, 5½ inches square, with screw holes. With each lathe is supplied one left-hand thread tapered mandrel for brush wheel and one ¼-inch grinding wheel chuck with sleeve for 5/16-inch bore grinding wheel; one 2¾-inch diameter brush; one carborundum grinding wheel, 2½-inch diameter with 5/16-inch face and a small pulley for round belt are also furnished. Although pulley is supplied with these lathes they are suitable for running only the very lightest machinery, such as window displays and similar work not exceeding the load of an ordinary family sewing machine.

Trade No.	Mfrs. No.	Net Wt., Lbs.	Ship. Wt., Lbs.	Price Each
089225	U-37215-BA	10	17	$27.00

DUMORE FRACTIONAL HORSE POWER MOTORS

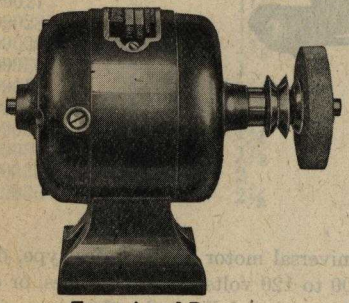


Type C



Type D

Dumore Motors are light, compact, yet powerful. Can be furnished in various sizes from 1–100 to ⅛ horse power. Designed for use in connection with high grade motor-driven appliances of different kinds. Jewelers and dentists find them especially serviceable for grinding, polishing and buffing. Very useful also in factories, hotels and restaurants.



Types A and B

TYPE C—1/16 H. P.

Light and powerful. Always ready for use and is as near trouble proof as it is possible to make a motor. Equipped regularly with a three-step pulley on one end of the motor shaft and a wheel arbor on the other, together with emery wheel. Just the motor for light polishing and buffing work. Furnished with 8-foot cord and attachment plug, Cutler-Hammer 3-speed rheostat.

Trade No.	H. P.	Speed R. P. M.	Ship. Wt., Lbs.	Price Each
146963	1/16	2000–8000	8	$18.00

Type C can be equipped the same as Type D, if so ordered.

TYPE D—⅛ H. P.

This is one of the most popular of stock sizes. Especially adapted for jewelers' and dentists' work. Equipped with 8-foot cord and attachment plug. Cutler-Hammer 3-speed rheostat in the base. Shaft ends are tapered. Ritter chucks and wheel arbors can be used on this motor.

146964	⅛	2000–6000–8000	13	28.00

TYPE A—1/25 H. P.

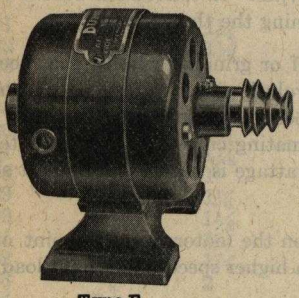
Built to meet the demand for a light, compact power unit. Finished in black enamel. Equipped with 3-foot cord and attachment plug, wheel arbor and emery wheel. Wheel arbor nickel-plated.

146965	1/25	2000 to 9000	6	11.00

TYPE B—1/25 H. P.

The Type B motor is the same as the Type A, illustrated, excepting that it is finished in all nickel-plate. Equipped with 3-foot cord and attachment plug.

146966	1/25	2000 to 9000	6	14.00

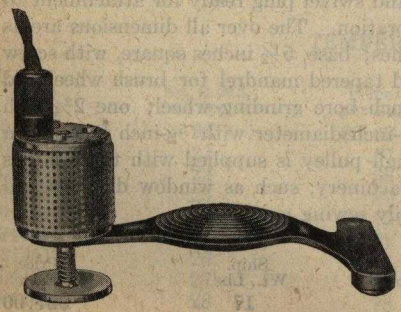


Type F

TYPE F—1/25 H. P.

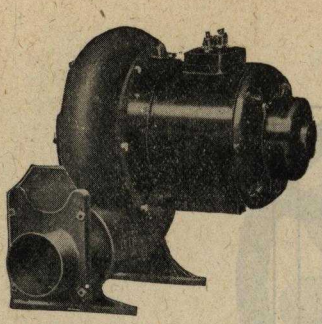
The Type F outfit is a combination of a Type A motor and a 6-speed foot controlled rheostat. The Type F motor is equipped with a three-step pulley, 11 feet of cord especially arranged so as to allow the rheostat to be set in position on the floor. This makes an ideal outfit for operating jewelers' lathes and also makes a highly efficient direct connected outfit for operating small winding machines for winding coil springs, etc. Six different speeds from a few hundred a minute to 8000 revolutions per minute.

146967	1/25	....	8	16.50

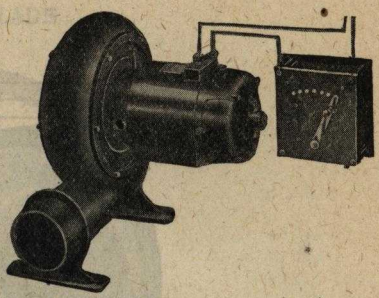


Rheostat

EMERSON FORGE BLOWERS



Alternating Current Blower with Blast Gate



Direct Current Blower with Speed Regulator

ALTERNATING CURRENT

104–115 Volts, 60 Cycles

Single-phase induction motors operate at one speed only, predetermined by the character of the current and the construction of the motor; hence these blowers must be installed with blast gates in every case, whether used for blowing one or more forges. When the blast gate is closed the motors require little current, even though operating the blower at full speed. For this reason the blast gate should be kept entirely or partially closed whenever the full blast is not needed. Attention to this practice will effect a material saving in current consumed.

Trade No.	Type No.	H. P.	Cubic Ft. Air per Minute	Pressure Ounces	No. Buffalo Pressure Blower	Approx. R. P. M.	Approx. Watts Open	Approx. Watts Closed	Approx. Wt., Lbs. Net	Approx. Wt., Lbs. Pkd.	Price Each
073357	6522PD	1/10	120	1½	1	3400	145	75	65	95	$42.00
073358	7522GG	⅛	220	2	2	3400	300	110	80	125	63.00
073359	7522GH	⅓	300	2	3	3400	370	145	120	170	84.00

DIRECT CURRENT

With Speed Regulators for Individual Forges only

Any attempt to operate blowers of this type with blast gates is certain to end disastrously. If the full strength of the current is left on the motor while the air outlet is partially or entirely closed, the motor will speed up and cause serious damage. This company reserves the right to withdraw all guarantee if blast gates are installed with outfits of this style contrary to instructions.

Trade No.	Type No.	Voltage	H.P.	Cubic Ft. Air per Minute	Pressure Ounces	No. Buffalo Pressure Blower	Approx. R. P. M.	Approx. Watts Full Load	Approx. Wt., Lbs. Net	Approx. Wt., Lbs. Pkd.	Price Each
011821	522AG	110	⅕	220	2	2	3000	200	60	110	$51.00
011822	522AG	220	⅕	220	2	2	3000	200	60	110	51.00

For Two Forges, with Blast Gates, without Speed Regulators

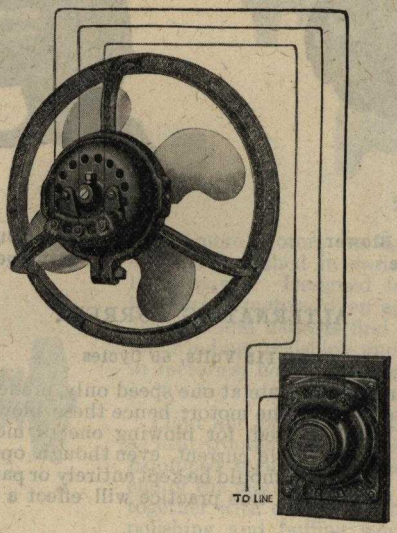
This outfit is designed for operating two forges with a minimum initial expense for equipment. Where the two forges are not far apart and both are in use a large proportion of the time, satisfactory results can be secured by this method, but if the two forges are so located as to necessitate a long piping system to conduct the air, or if both fires are not in fairly constant operation during working hours, a more efficient installation can be made by employing two individual blowers of the style shown above.

In operation this outfit differs radically from the individual forge style of blower. When supplying air through more than one outlet it is manifestly impracticable to regulate the delivery of air by varying the speed of the blower, and one of the blast gates furnished must be installed in the pipe leading to each forge. The motor furnished is a constant speed wound type, which will not speed up or cause injury to the outfit, even if both air outlets are entirely closed.

*011825	622AC	110	⅓	400	2	3	2500	325	100	145	84.00
*011826	622AC	220	⅓	400	2	3	2500	325	100	145	84.00

*Must be made to special order.

EMERSON VENTILATING FAN MOTORS



These ventilating fan motors give good results under favorable conditions, but are not designed to exhaust against wind pressure and cannot be expected to give the same service as powerful exhaust fans where conditions are unfavorable.

FOR ALTERNATING CURRENT ONLY

For Horizontal or Vertical Discharge

Three-speed 12 and 16-inch desk fan motors with supporting rings and separate three-speed regulating switches. Equipped with compression grease cups.

Parker four-blade fans are of polished brass. All styles finished in black enamel over motors and supporting rings.

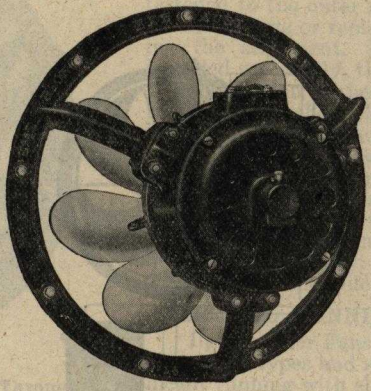
Trade No.	Mfrs. No.	Cycles	Voltage	Size, Fan Inches	Approx. Wt., Lbs. Net	Packed	Price Each
27901	22646	60	110	12	28	53	$23.40
27905	*22646	60	220	12	28	53	25.40
27903	22648	60	110	16	43	75	28.20
27906	*22648	60	220	16	43	75	30.20

For fans with stronger motors, fans in 18 and 24-inch sizes and for D. C. or special frequencies not listed, see separate listing of Emerson Exhaust Fans on another page.

*Must be made to special order.

EMERSON DIRECT-CONNECTED EXHAUST FANS

PARKER BLADE



For Single-Phase, Alternating Current

Trade No.	Motor Type No.	Cycles	Voltage	Size of Fan Inches	H. P.	Approx. R. P. M.	Approx. Watts	Cu. Ft. Air per Min.	Velocity Ft. per Minute	Approx. Wt Pounds Net	Pkd.	Price Each
083015	6641AB	60	110	12	1/15	1750	100	1200	1500	35	55	$27.00
083016	7362DJ	60	110	15	1/8	1150	130	2000	1400	50	95	46.50
083017	8162AD	60	110	18	1/4	1150	280	3000	1700	95	170	73.50
083018	*6521AB	25	110	12	1/20	1450	90	1100	1400	35	55	30.00
083019	*7342DJ	25	110	15	1/8	700	120	1500	1050	50	95	51.00
083020	*8140AD	25	110	18	1/5	700	270	2500	1350	95	170	81.00
083021	*6521AB	30	110	12	1/15	1750	110	1200	1500	35	55	30.00
083022	*7342DJ	30	110	15	1/8	850	120	1600	1100	50	95	51.00
083023	*8140AD	30	110	18	1/4	850	280	2600	1400	95	170	81.00
083024	*6641AB	40	110	12	1/20	1150	85	900	1150	35	55	30.00
083025	*7342DJ	40	110	15	1/8	1150	130	2000	1400	50	95	51.00
083026	*8140AD	40	110	18	1/4	1150	280	3000	1700	95	170	81.00
083027	*6641AB	50	110	12	1/20	1450	90	1100	1400	35	55	27.00
083028	*7362DJ	50	110	15	1/8	950	120	1800	1300	50	95	46.50
083029	*8162AD	50	110	18	1/4	950	260	2700	1500	95	170	73.50
083030	*6681AB	133	110	12	1/15	1850	110	1300	1650	35	55	27.00
083031	*73122DJ	133	110	15	1/8	1250	140	2100	1500	50	95	46.50
083032	*81120AD	133	110	18	1/4	1250	310	3300	1850	95	170	73.50

Speed of alternating current fans cannot be varied.

For Direct Current

Trade No.	Motor Type No.	Voltage	Size of Fan Inches	H. P.	Approx. R. P. M.	Approx. Watts	Cu. Ft. Air per Min.	Velocity Ft. per Minute	Approx. Wt. Pounds Net	Pkd.	Price Each
083033	522AK	110	12	1/15	1700	100	1200	1500	45	85	$27.00
083034	522AK	220	12	1/15	1700	100	1200	1500	45	85	27.00
083035	522AO	110	15	1/8	1200	130	2000	1400	50	95	40.50
083036	*522AO	220	15	1/8	1200	130	2000	1400	50	95	40.50
083037	632AD	110	18	1/4	1200	280	3000	1700	90	170	60.00
083038	632AD	220	18	1/4	1200	280	3000	1700	90	170	60.00

Price of 18-inch direct current fan includes speed regulator.

*Must be made to special order.

EMERSON DIRECT-CONNECTED EXHAUST FANS

DAVIDSON BLADE



For Single-Phase Alternating Current

Trade No.	Motor Type No.	Cycles	Volts	Size of Fan Inches	H. P.	Approx. Speed R. P. M.	Approx. Watts	Cu. Ft. of Air per Min.	Velocity Feet per Min.	Approx. Wt., Lbs. Net	Approx. Wt., Lbs. Pkd.	Price Each
083039	6762TP	60	110	12	1/15	1150	85	1500	1900	45	95	$ 45.00
083040	8182AE	60	110	18	1/4	850	240	3500	2000	90	170	102.00
083041	8182AF	60	110	24	1/3	850	350	5000	1600	110	240	120.00
083042	*6642TP	25	110	12	1/20	700	70	950	1200	45	95	51.00
083043	*8140AE	25	110	18	1/5	700	230	3000	1700	95	175	114.00
083044	*8140AF	25	110	24	1/4	700	330	4200	1350	115	245	132.00
083045	*6642TP	30	110	12	1/20	850	75	1200	1500	45	95	51.00
083046	*8140AE	30	110	18	1/4	850	240	3500	2000	95	175	114.00
083047	*8140AF	30	110	24	1/3	850	350	5000	1600	115	245	132.00
083048	*6642TP	40	110	12	1/15	1150	85	1500	1900	45	95	51.00
083049	*8160AE	40	110	18	1/4	750	230	3200	1800	95	175	114.00
083050	*8160AF	40	110	24	1/3	750	340	4500	1450	115	245	132.00
083051	*6762TP	50	110	12	1/20	950	80	1300	1650	45	95	45.00
083052	*8182AE	50	110	18	1/4	700	230	3000	1700	90	170	102.00
083053	*8182AF	50	110	24	1/3	700	330	4200	1350	110	240	120.00

Speed of alternating current fans cannot be varied.

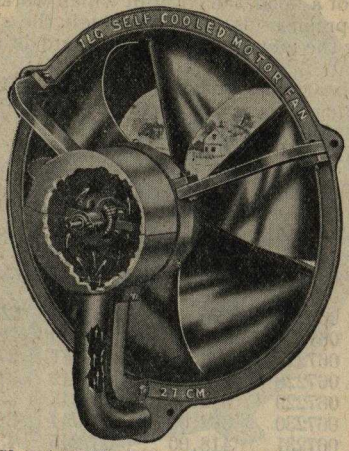
For Direct Current

Trade No.	Motor Type No.	Voltage	Size of Fan Inches	H. P.	Approx. Speed R. P. M.	Approx. Watts	Cu. Ft. of Air per Min.	Velocity Feet per Min.	Approx. Wt., Lbs. Net	Approx. Wt., Lbs. Pkd.	Price Each
083054	522AF	110	12	1/15	1200	100	1500	1900	50	95	$45.00
083055	*522AF	220	12	1/15	1200	100	1500	1900	50	95	45.00
083056	632AG	110	18	1/4	900	220	3500	2000	100	190	90.00
083057	*632AG	220	18	1/4	900	220	3500	2000	100	190	90.00
083058	732AD	120	24	1/3	700	350	5000	1600	150	350	120.00
083059	732AD	220	24	1/3	700	350	5000	1600	150	350	120.00

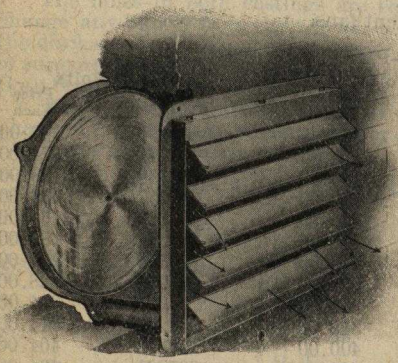
*Indicates made to special order only.

Prices of 18 and 24-inch direct current fans include speed regulators.

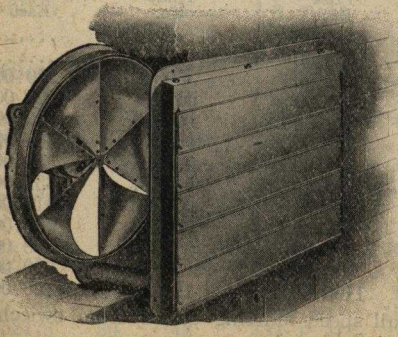
ILG SELF-COOLED MOTOR PROPELLER FANS



Showing Air Being Drawn Through Ventilating Pipe Cooling Motor



Showing Use of Automatic Shutter Fan Running



Showing Use of Automatic Shutter Fan not Running

The construction of the Ilg Fan combines strength and simplicity. The round-bodied motor fits into a cast iron ring supported by forged arms fastened to the outer ring. This makes it possible to interchange or replace motor without disturbing the alignment. Frame and motor can be installed separately, thus dividing weight.

Ventilation of the motor is accomplished by the patent method shown in the accompanying illustrations. The vacuum that is created at the axis of the motor draws a current of cool air from the outside over the motor, after which it is carried away with the general exhaust.

Oiling system of motors combines both ring oil bearings, thus eliminating possibility of back bearing running dry. This feature also permits the oiling of fan while in motion.

VERTICAL RUNNING PROPELLER FANS

Ilg Propeller Fans are built for vertical running in all types and sizes. By vertical running is meant running with shaft vertical as distinguished from standard fans built to run with shaft horizontal. Ilg Vertical Fans are furnished ordinarily without the vent pipe cooling feature because this feature is not usually adaptable on installations requiring vertical fans. If, however, the cooling feature is desired, it can be furnished without additional cost.

Notice the cost for vertical fans is obtained by adding 10 per cent to the list for direct current fans and 15 per cent for alternating current, shown on preceding page, the same discounts applying. Type A direct current fans are not furnished for vertical running.

AUTOMATIC SHUTTERS

The automatic shutter is largely employed for the protection of vent openings in connection with propeller exhaust fans and blowers. It consists of several horizontal aluminum slats, pivoted into a rigid frame, and hanging free in front of exhaust fan. The slats are so arranged that when hanging down they overlap each other, fitting closely, thus effectually preventing the ingress of sweeping winds, draughts, snow or rain. The shutter is opened with the force of air current from the fan or blower, and it shuts automatically by gravity. No attention need be given them.

Where specially ordered they are equipped with a solenoid, so that they can be wired in series with the motor operating the fan. In making application for prices, equipped with a solenoid, specify voltage and current, and whether series or shunt wound.

Trade No.	Size Inches	Weight Pounds	Price Each
53356	12	10	$ 9.00
53357	16	12	12.00
53358	18	25	18.00
53359	20	30	20.00
53360	24	40	24.00
53361	30	50	30.00
53362	36	60	36.00
53363	42	75	42.00
53364	48	95	60.00
53365	54	125	70.00
53366	60	175	80.00

Sizes 48, 54 and 60-inch are constructed with additional central support.

ILG VENTILATING FANS

Motors are enclosed and made dustproof by means of a hood, the cover of which works on a hinge. A current of cool, clean air from outside the premises is drawn through the small tube connecting with the hood. This air is drawn over the motor, ventilating it, and is then carried away with the general exhaust.

The combined oiling device protects the self-oiling bearings against neglect or overfilling. The motor can be removed from the frame by removing three cap screws and sliding it out of the supporting ring.

DIRECT CURRENT

Type Size	Cu. Feet of Air per Min.	Speed Free Air	Approx. Shipping Wt., Lbs.	110 Volts Trade No.	110 Volts Price Each	220 Volts Trade No.	220 Volts Price Each	500 Volts Trade No.	500 Volts Price Each
12B	1100	1400	30	127245	$63.00	127246	$64.00	.....	.....
16B	1600	1200	40	50371	77.00	50372	80.00	.....	.....
18A*	2530	1000	80	067209	110.00	067223	114.00	.....	.....
18B	3100	1100	95	067210	135.00	067224	140.00	.....	.....
20B	3590	900	175	067211	190.00	067225	195.00	067239	200.00
24A*	6300	800	220	067212	210.00	067226	215.00	067240	220.00
24B	7200	900	300	067213	255.00	067227	260.00	067241	270.00
30A*	9200	700	335	067214	290.00	067228	296.00	067242	310.00
30B	11000	800	360	067215	335.00	067229	342.00	067243	354.00
36A*	12500	600	395	067216	360.00	067230	368.00	067244	380.00
36B	14600	700	450	067217	408.00	067231	418.00	067245	430.00
42B	18000	500	600	067218	486.00	067232	496.00	067246	512.00
48B	23400	450	830	067219	598.00	067233	614.00	067247	630.00
54B	28500	400	1100	067220	850.00	067234	866.00	067248	884.00
60B	33600	360	1500	067221	1000.00	067235	1018.00	067249	1030.00
72B	44800	270	2230	067222	1260.00	067236	1284.00	067250	1320.00

For vertical running fans, add 25 per cent to list.

*Type A is not furnished for vertical running.

Speed controllers are furnished with all direct current fans.

ALTERNATING CURRENT—SINGLE-PHASE, 60 CYCLES

Type Size	Cu. Feet of Air per Min.	Speed 60 Cycles	Approx. Shipping Wt., Lbs.	110 Volts Trade No.	110 Volts Price Each	220 Volts Trade No.	220 Volts Price Each
12S	1100	1400	30	50377	$65.00	50387	$66.00
16S	1600	1200	50	50373	70.00	50374	74.00
18SL	2200	850	90	50378	130.00	50388	138.00
18SH	3240	1140	90	067251	130.00	067257	138.00
20SL	3300	850	130	50379	160.00	50389	164.00
20SH	4300	1140	130	067252	178.00	067258	182.00
24SL	5800	690	180	50380	210.00	50390	214.00
24SH	7000	850	180	067253	224.00	067259	228.00
30SL	7600	565	280	50381	300.00	50391	304.00
30SH	9100	690	280	067254	310.00	067260	314.00
36SL	10000	490	390	50382	400.00	50392	404.00
36SH	12000	565	390	067255	400.00	067261	404.00
42S	17800	490	520	50383	460.00	50393	464.00
48S	26200	490	610	067256	540.00	067262	540.00

Add 5 per cent to list price for 25, 30 and 40 cycles.

ALTERNATING CURRENT—POLYPHASE IN FREQUENCIES FOR 60 CYCLES

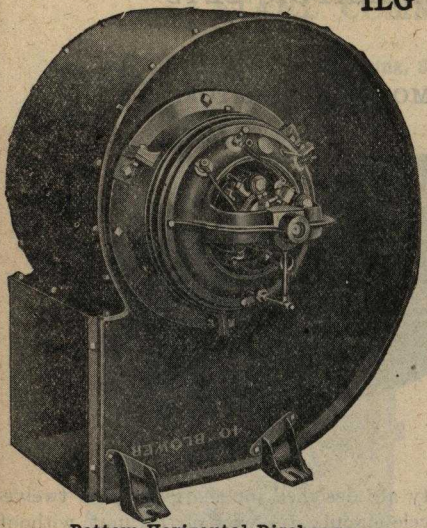
Type Size	Cu. Feet of Air per Min.	Speed 60 Cycles	Approx. Shipping Wt., Lbs.	100-200 Volts Trade No.	100-200 Volts Price Each	440-550 Volts Trade No.	440-550 Volts Price Each
18M	3240	1140	103	067263	$144.00	.....	.....
20M	4500	1140	150	067264	168.00	.....	.....
24ML	5800	690	220	50384	208.00	50394	220.00
24MH	7000	850	220	067265	208.00	067274	220.00
30ML	7700	570	335	50385	284.00	50395	300.00
30MH	9000	690	335	067266	284.00	067275	300.00
36ML	10000	490	402	50386	336.00	067276	352.00
36MH	12600	570	402	067267	336.00	067277	352.00
42M	17800	490	610	067268	400.00	067278	416.00
48M	26200	490	830	067269	488.00	067279	500.00
54M	29600	420	1100	067270	690.00	067280	708.00
60M	38000	380	1500	067271	900.00	50376	920.00
72M	48000	285	2200	50375	1100.00	127244	1120.00

Alternating current fan can be operated only at full speed starting direct from switch.

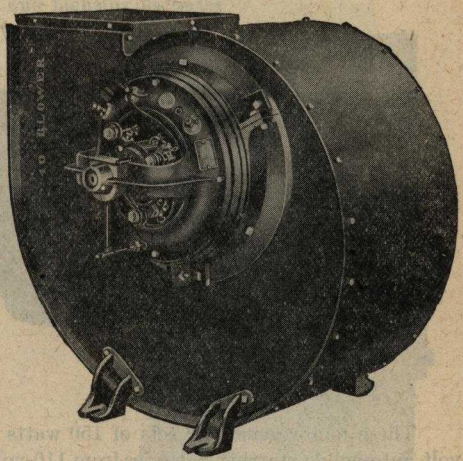
For vertical running alternating fans, add 25 per cent to list.

Add 5 per cent to list price for 25, 30 and 40 cycles.

ILG BLOWERS



Bottom Horizontal Discharge



Top Vertical Discharge

The construction of Ilg Blowers and Exhausters is a distinct departure from methods heretofore employed by blower or fan manufacturers. The motor is machined circular and set partially into the housing, giving a compactness never before accomplished in blower or fan construction. The motor is supported by a cast iron ring bolted in the same manner.

The holes in both castings are equally spaced, drilled to template, making it possible to change any blower from right to left-hand drive or vice versa. The construction also permits the discharge to be swung to any angle. The use of the round body type motor and the method of support makes it possible to interchange or replace motor without disturbing the alignment. Both bearings are combined and are oiled simultaneously from accessible side of the motor.

These blowers are built in all sizes and all speeds from direct current, single-phase, two-phase and three-phase current, and for any frequency.

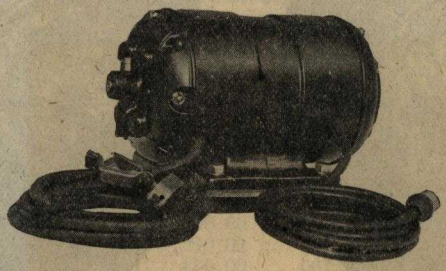
Prices quoted on application.

SPEEDS, CAPACITIES AND H. P. AT VARIOUS PRESSURES

Trade No.	Size Inches	Diam., In. Wheel		Pressure in Ounces ¼	½	¾	1	1¼	1½
052469	25	15¼	Cu. ft.	1400	1600	1800	2200	2400	2800
			R. P. M.	720	860	1030	1140	1230	1430
			H. P.	.21	.35	.57	.78	.91	1.14
052470	30	17¾	Cu. ft.	2000	2400	2800	3300	3400	4000
			R. P. M.	610	760	870	950	1050	1220
			H. P.	.29	.53	.74	.97	1.25	1.94
052471	35	20¼	Cu. ft.	2700	3300	3800	4300	4600	5400
			R. P. M.	530	660	750	820	900	1050
			H. P.	.40	.74	1.04	1.42	1.82	2.68
052472	40	22¼	Cu. ft.	3500	4300	4800	5200	5700	7000
			R. P. M.	460	580	660	720	790	920
			H. P.	.69	.97	1.48	1.94	2.50	3.76
052473	45	25	Cu. ft.	4500	5500	6400	7200	7700	9000
			R. P. M.	410	510	580	630	700	810
			H. P.	.74	1.26	1.71	2.20	2.72	4.10
052474	50	27½	Cu. ft.	5500	6700	7600	8000	9000	10500
			R. P. M.	370	460	500	580	640	740
			H. P.	1.02	1.90	2.28	2.62	3.88	5.45
052475	55	30½	Cu. ft.	6100	7400	8600	9700	10500	12000
			R. P. M.	330	410	470	510	570	660
			H. P.	1.04	1.90	2.30	2.97	4.00	6.25
052476	60	33	Cu. ft.	7800	9600	10800	12000	13000	14500
			R. P. M.	310	380	430	470	520	620
			H. P.	1.14	1.52	2.84	3.88	5.00	7.20
052477	70	38½	Cu. ft.	10700	13000	14000	15000	17000	19000
			R. P. M.	260	330	370	400	460	520
			H. P.	1.60	2.50	3.65	4.56	6.85	9.80
052478	80	46	Cu. ft.	16000	18500	22000	25000	28000	31000
			R. P. M.	240	280	310	355	400	480
			H. P.	2.51	3.65	4.60	6.85	9.55	13.9

EMERSON MOTOR GENERATOR SETS

TYPE No. 66420KA 150-WATT MOTOR GENERATORS



These motor generator sets of 150 watts capacity are designed for charging six or twelve-volt automobile starting batteries from 110-volt 60-cycle circuits. A view of this unit, without the rheostat supplied with it, is shown.

These motor-generators are of compact and attractive design, consisting of a split-phase induction motor for 110 volts 60 cycles and two-pole direct current generator contained in the same field ring. A single shaft carries armatures of both motor and generator, necessitating but two bearings. Field rings and housings are all cast iron, the latter of the ventilated-protected type which admit air but exclude dirt and water. A definite flow of air through the frame is insured by a fan mounted on the motor armature. Bearings are bronze, with wick-filled oil wells.

These sets are suitable for charging two 6-volt batteries in series or one 12-volt battery. They may also be used for charging one 6-volt battery. A C-H field rheostat is supplied with each generator for increasing the normal tapering effect of the charge where one 12-volt battery or two 6-volt batteries are under charge and for the purpose of reducing the output of the machine and securing a tapering effect to the charge when connected to one 6-volt battery.

The time required for charging will vary with the condition of the cells on charge; charging should be continued until hydrometer readings show the specific gravity recommended by the manufacturer of the battery for fully charged cells (ordinarily from 1.250 to 1.300).

These sets are supplied without switchboard or ammeter, but with terminals for the connection of rheostat to the field of the generator. If field regulator is not connected in circuit while charging, the two field terminals of the generator should be connected together.

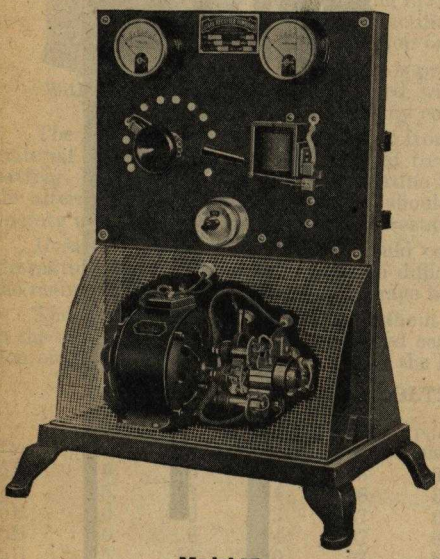
The generator has an output of 10 amperes direct current at 15 volts (without rheostat in circuit) and is operated at 1750 revolutions per minute. The unit is mounted on a wooden sub-base 7½ x 8½ inches, stands 8½ inches high, and has an over all length of 13 inches.

Field ring, housings and other external parts are finished in polished black enamel. A 10-foot cord with swivel plug is supplied at the motor end, and 12 feet of heavy re-enforced cord with lead covered spring clips are connected at generator end for convenient adjustment to battery terminals.

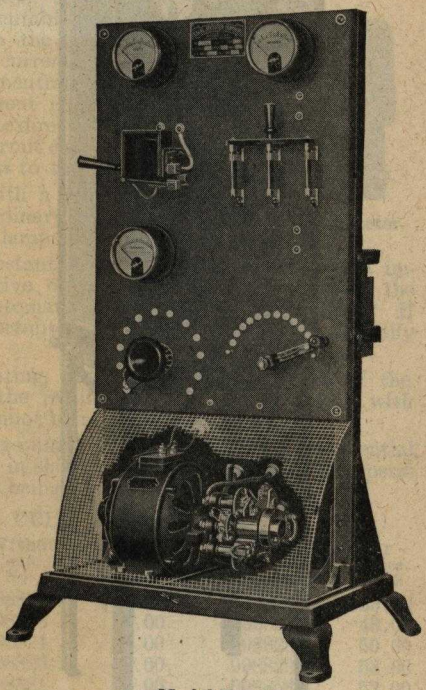
Trade No.	Mfrs. No.	Net Wt., Lbs.	Ship. Wt., Lbs.	Price Each
089224	66420KA	62	75	$94.50

STAHL COMMUTATOR RECTIFIERS

For Charging, Starting and Lighting Batteries



Model M.



Model N

These rectifiers are efficient and simple. A small inductive type synchronous motor requires only enough current to turn a shaft with collector rings and a commutator.

Through a separate circuit alternating current is carried to a transformer and voltage reduced to approximately that required on the battery charging side of the apparatus. The loss is thus reduced to a minimum and, as only a ⅛ horse power motor is used on either the single or two-circuit board, there can be no question about the efficiency.

Charging batteries at a profit for the garage is now possible with the Stahl Rectifier even if there are only one or two batteries to be charged. Any combination from 3 to 15 cells can be charged on a single circuit at a time; machines can be furnished for as many circuits as desired.

Each circuit is controlled by a separate rheostat with a charging range from 8 to 38 volts.

Switchboard is equipped with both volt and ampere meters which indicate the charging conditions at all times. Circuit breakers protect the battery and rectifier in case the main current should fail.

The outfit is complete and ready to set up on a bench out of the way and connected with main line.

MODEL M

Charging Range: 1 to 5 Six-volt Batteries

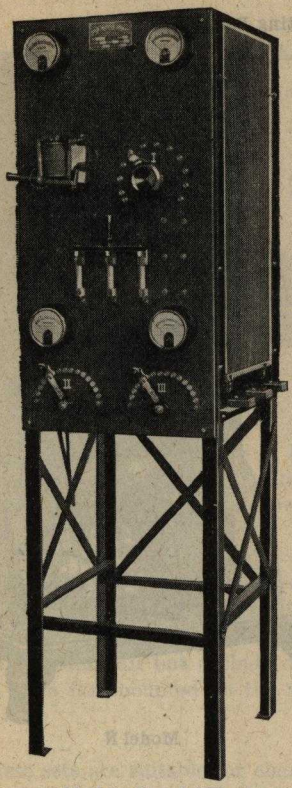
Trade No.	Amperes	Size Inches	Approx. Ship. Wt., Lbs.	Price Each
147229	15	18x20x30	175	$135.00

MODEL N, TWO-CIRCUIT BOARD

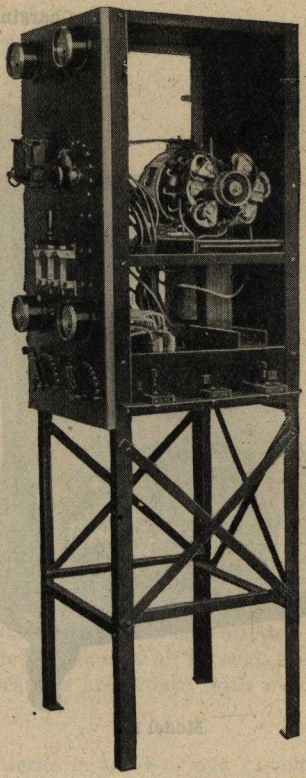
Charging Range: 1 to 10 Six-volt Batteries

147230	25	18x22x39	200	195.00

STAHL COMMUTATOR RECTIFIERS



Models S and SX
(Front View)



Models S and SX
(Side View)

Service stations and garages having a large number of batteries to charge at a time will find the Stahl Rectifier, with three-circuit board, a most flexible charging outfit.

Any combination of batteries from 30 to 60 volts can be charged on each circuit. This means that a total of 90 cells can be charged at one time at a maximum rate of 12 amperes.

Motor is only ¼ horse power, requiring not over 250 watts to turn the shaft on which are collector rings and a commutator with one-fourth the sections dead which produces a pulsating current and prevents overheating of the batteries. The use of such a small motor effects the utmost economy in current consumption; the waste of current in running a four or five horse power motor is eliminated. This saving alone will soon pay the cost of the outfit, this apparatus having 83 per cent efficiency.

The current from main line is reduced by a transformer, and not by resistance, to approximately the desired voltage and then taken direct from commutator without going through motor windings.

Rectifiers are furnished complete with switchboard, voltmeter, ammeters, and rheostats, all ready to connect up with main line and batteries. They can be set out of the way, requiring a space of only 22 inches square and 5½ feet high.

CIRCUITS.—3 circuits, 40 to 80 volts.

AMPERES.—Up to 12 amperes on each circuit.

CAPACITY.—2800 watts.

MOTOR.—¼ horse power.

MODEL SX—35 AMPERES

Trade No.	Description	Price Each
147241	Charging range of 5 to 30 six-volt batteries, complete with switchboard...	$350.00

MODEL S

147242	Charging range of 3 to 15 six-volt batteries, complete with switchboard...	300.00

When ordering, state whether current is 110 or 220 volts. Machines are for 60 cycles, single-phase only.

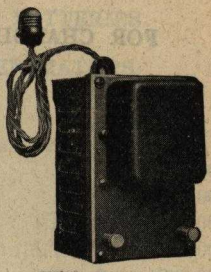
WAGNER ALTERNATING CURRENT RECTIFIERS



With Ammeter

As is well known, an alternating current consists of a very rapid series of current impulses, alternating first in one direction, then in the other. Such a current is not suitable for charging storage batteries, because the amount of charge put in the battery by the current flowing in one direction is immediately neutralized by a corresponding amount of current immediately following, flowing in the opposite direction. The function of the rectifier is to permit current flowing in one direction only to pass to the battery.

The rectifier is provided with a lamp cord terminal equipped with an ordinary extension plug which fits any convenient lamp socket.



Without Ammeter

The storage battery connections are from two substantial binding posts. It is quite immaterial which binding post is connected to the positive or to the negative terminal of the battery. When so connected, the operation begins automatically, requiring no attention. If the alternating electric supply current should be interrupted, the rectifier will automatically operate when the supply of current is re-established.

If for any reason the rectifier should cease operating, due either to interruption of the alternating current supplied or to some difficulty in the rectifier itself, it always stops with the main contacts open so that the storage battery cannot be rapidly discharged.

The rectifiers are built with and without indicating ammeter. The ammeter is not essential in the use of the rectifier, but is an added convenience in showing plainly at all times the operation of the device and the rate at which the battery is being charged.

25 CYCLES, 110 VOLTS, LEAD CELL BATTERIES

*Type	Amperes	**Volts	No. of Cells	†Weight, Pounds Net	Shipping	Without Ammeter Trade No.	Price Each	With Ammeter Trade No.	Price Each
7½B	5	6	3	28	34	098822	$32.00	098826	$39.00
7½B	5	8	4	28	34	098823	36.00	098827	43.00
15B	10	6	3	37	68	098824	43.00	098828	50.00
15B	10	8	4	37	68	098825	46.00	098829	53.00
15B	5	12	6	37	68	098861	46.00	098858	53.00

50 OR 60 CYCLES, 110 VOLTS, LEAD CELL BATTERIES

5B	5	6	3	21	29	098832	25.00	098843	32.00
5B	5	8	4	21	29	098833	28.00	098844	35.00
7½B	7½	6	3	28	34	098834	32.00	098845	39.00
7½B	7½	8	4	28	34	098835	36.00	098846	43.00
10B	10	6	3	32	61	098836	36.00	098847	43.00
10B	10	8	4	32	61	098837	39.00	098848	46.00
10B	5	12	6	32	68	53501	39.00	098859	46.00
15B	7½	12	6	37	68	53502	46.00	098860	53.00
15B	15	6	3	37	68	098838	43.00	098849	50.00
15B	15	8	4	37	68	098839	46.00	098850	53.00
15B	15	10	5	37	68	098840	50.00	098851	57.00

60 CYCLES, 110 VOLTS, EDISON BATTERIES

7½B	7½	6.5	5	28	34	098852	36.00	098855	43.00
15B	15	6.5	5	37	68	098853	46.00	098856	53.00
15B	15	9	7	37	68	098854	50.00	098857	57.00

REPAIR PARTS

Trade No.	Description	Net Price Each
53503	Single movement	$ 8.00
53504	Double movement	16.00
53505	Springs with platinum contacts, for single movement	2.60

When new movement is purchased, a credit of $1.00 will be allowed if the old movement is returned.

*Types 10B and 15B have double movement.

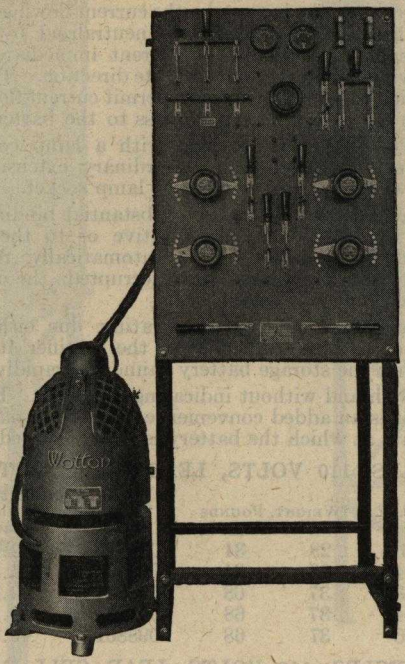
†Weights for rectifier with instrument will be approximately 1 pound more for each size.

**The actual voltage across the battery terminals varies according to the state of charge. The values given in this column indicate the normal rating of the battery and do not refer to the rectifier voltage.

220-volt rectifiers will be furnished at an increase in price of 10 per cent.

WOTTON BATTERY CHARGING OUTFITS

FOR CHARGING IGNITION, STARTING AND LIGHTING BATTERIES



**Type ASDP-12-40, Four-circuit Motor-generator
For the Charging (from Alternating Current Lines) of Ignition
Starting and Lighting Batteries Used on Gasoline Automobile**

MULTIPLE CIRCUIT MOTOR-GENERATOR

Trade No.	Type	Amps.	Volts	No. of Circuits	Circuit Cap. Amps.	No. of Cells	Cycles	Phase	Price Each
151261	K S T P -12- 20	20	32	2	10	24	60	1, 2 or 3	$375.00
151262	K S D P -12- 20	20	32	4	10	48	60	1, 2 or 3	445.00
151263	L S D P -12- 20	30	32	4	10	48	60	1, 2 or 3	505.00
151264	A S D P -12- 40	40	32	4	10	48	60	1, 2 or 3	555.00
151265	B S D P -12- 60	60	32	4	15	48	60	1, 2 or 3	640.00
151266	C S D D P-12-100	100	32	8	10	96	60	1, 2 or 3	980.00
151267	A S D P -21- 25	25	55	4	10	84	60	1, 2 or 3	630.00
151268	B S D P -21- 34	34	55	4	10	84	60	1, 2 or 3	675.00
151269	C S D P -21- 44	44	55	4	10	84	60	1, 2 or 3	710.00
151270	D S D D P-21- 75	75	55	8	10	168	60	2 or 3	995.00
151271	A S T P -42- 15	15	110	2	10	84	60	1, 2 or 3	555.00
151272	B S D P -42- 20	20	110	4	10	168	60	1, 2 or 3	650.00
151273	C S D P -42- 27	27	110	4	10	168	60	1, 2 or 3	710.00
151274	D S D P -42- 40	40	110	4	10	168	60	2 or 3	800.00

For the omission of paralleling switches, deduct $2.50 per circuit from above prices.

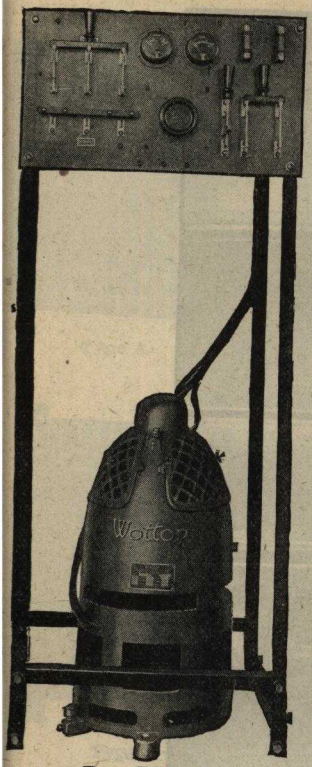
For circuit breaker to protect single-phase equipment against power interruptions, add $30.00 to above prices.

Above prices are for 60 cycles only. For other frequencies, special prices upon application.

NOTE.—The figures given under the heading No. of Cells refer to the number of individual cells and not to the number of batteries.

WOTTON BATTERY CHARGING OUTFITS

FOR CHARGING IGNITION, STARTING AND LIGHTING BATTERIES



Type KS-12-20 Single Circuit Motor-Generator

SINGLE CIRCUIT MOTOR-GENERATORS

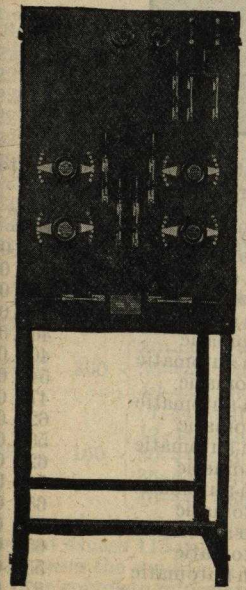
Alternating Current

Trade No.	Type	Amps.	Volts	Cycles	Phase	Price Each
151280	H-3-8	8	8	60	1	$ 88.00
151281	HS-12-8	8	32	60	1	195.00
151282	KS-12-20	20	32	60	1, 2 or 3	290.00
151283	LS-12-30	30	32	60	1, 2 or 3	350.00
151284	AS-12-40	40	32	60	1, 2 or 3	400.00
151285	BS-12-60	60	32	60	1, 2 or 3	460.00
151286	CS-12-100	100	32	60	1, 2 or 3	620.00
151287	AS-21-25	25	55	60	1, 2 or 3	450.00
151288	BS-21-34	34	55	60	1, 2 or 3	495.00
151289	CS-21-44	44	55	60	1, 2 or 3	530.00
151290	DS-21-75	75	55	60	2 or 3	695.00
151291	AS-42-15	15	110	60	1, 2 or 3	440.00
151292	BS-42-20	20	110	60	1, 2 or 3	470.00
151293	CS-42-27	27	110	60	1, 2 or 3	530.00
151294	DS-42-40	40	110	60	2 or 3	620.00

Above equipment includes motor-generator and single circuit switchboard complete except in the case of Type H-3-8 which includes no switchboard whatever.

Direct Current, 110 and 220 Volts

Trade No.	Type	Amps.	Volts	No. of Circuits	Cir. Cap. Amps.	Price Each
151295	HDS-12-8	8	32	1	8	$195.00
151296	HDS-12-12	12	32	1	15	272.00
151297	HDSDP-12-12	12	32	2	10	395.00
151298	HDS-20-50	50	55	1	50	550.00
151299	HDSDP-20-50	50	55	4	10	705.00



Type SDP-4-42 Rheostat

BATTERY CHARGING RHEOSTATS

110 Volts

Trade No.	Type	No. of Circuits	No. of Cells Lead	No. of Cells Edison	Price Each
151300	WR-5	5	3	5	$ 15.50
151301	WR-10	10	3 to 40	5 to 60	33.50
151302	SDP-2-42	10	3 to 80	5 to 120	200.00
151303	SDP-4-42	10	3 to 160	5 to 240	280.00
151304	SDP-8-42	10	3 to 320	5 to 480	440.00

For omission of paralleling switch on SDP types, deduct $2.50 per circuit.

For addition of voltammeter on WR types, add $26.00.

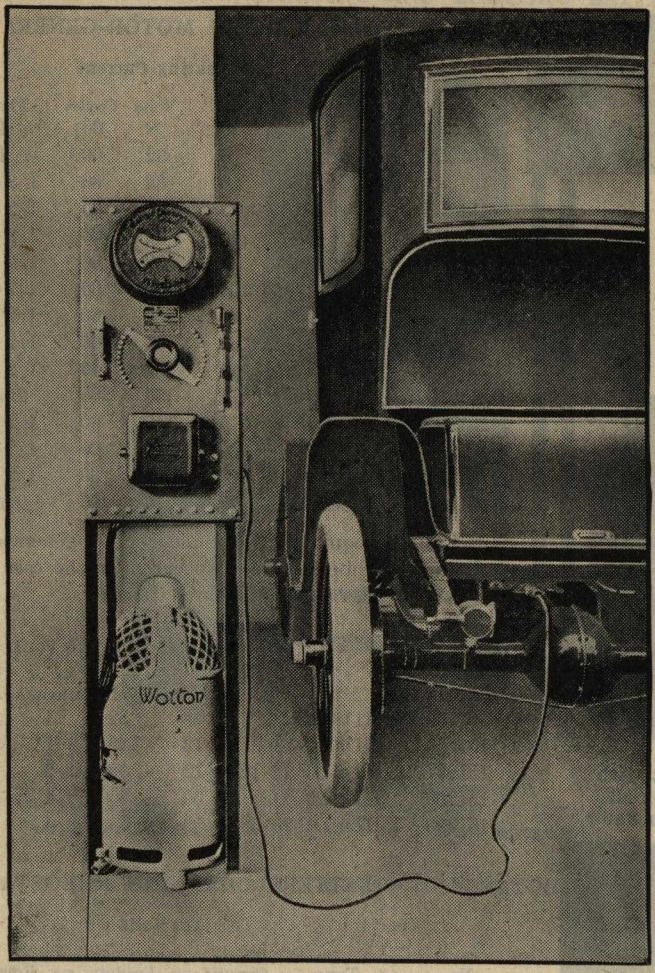
DISCHARGE RHEOSTATS

Trade No.	Type	No. of Cells Lead	No. of Cells Edison	Amperes	Circuits	Price Each
151305	DWR-100	3 to 12	5 to 21	20 to 100	1	$105.00
151306	DWR-200	3 to 12	5 to 21	20 to 160	1	130.00

For addition of resistance to discharge 12-cell battery, at a 5-ampere rate add $10.00 to above prices.

WOTTON BATTERY CHARGING OUTFITS

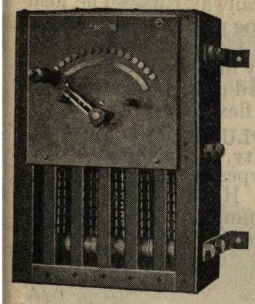
FOR CHARGING MOTOR VEHICLE BATTERIES



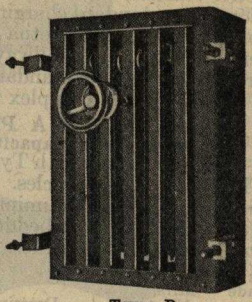
Automatic types are complete with automatic cut-off and automatic restarting. Non-automatic types include 4-inch volt-ammeter. All types start from battery discharge.

Trade No.	No. Battery Cells	Battery Plates Lead	Battery Plates Edison	Type	Price Each
151312	12	15 or 17	....	Automatic	$455.00
151313	12	15 or 17	....	Non-automatic	395.00
151314	24	11 to 15	....	Automatic	525.00
151315	24	11 to 15	....	Non-automatic	460.00
151316	40–42	9 to 11	....	Automatic	460.00
151317	40–42	9 to 11	....	Non-automatic	400.00
151318	40–42	13 to 15	....	Automatic	540.00
151319	40–42	13 to 15	....	Non-automatic	475.00
151320	21–24	.....	A-6	Automatic	625.00
151321	21–24	.....	A-6	Non-automatic	530.00
151322	36–40	.....	A-4	Automatic	625.00
151323	36–40	.....	A-4	Non-automatic	530.00
151324	42	.....	A-6	Automatic	650.00
151325	42	.....	A-6	Non-automatic	555.00
151326	60–65	.....	A-4	Automatic	650.00
151327	60–65	.....	A-4	Non-automatic	555.00
151328	60	.....	A-6	Automatic	875.00
151329	60	.....	A-6	Non-automatic	780.00

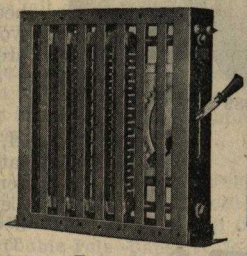
C-H CHARGING RHEOSTATS FOR LEAD BATTERIES



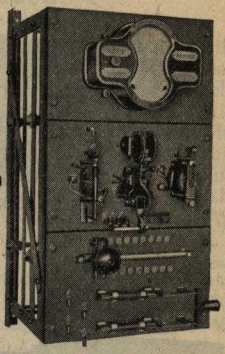
Type A



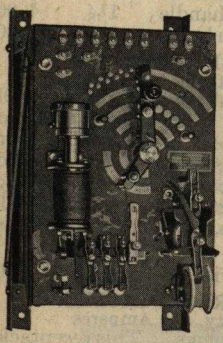
Type B



Type C



Type E



Type F

Type A rheostat is designed for front-of-switchboard mounting or for wall mounting. It is primarily intended for use in private charging stations, but may also be used in garages where it is desired to mount a rheostat at each charging plug.

Type B is similar to Type A, except that it is designed for mounting on back of switchboard, the operating shaft extending through to the face of the board. Copper handwheel and dial for mounting on front of switchboard are furnished with this rheostat.

Type C is intended to rest on the floor and is usually installed beneath the switchboard. It is particularly suitable for use in garages where it is desired to assemble a number of charging rheostats in a limited space.

Types E and F are furnished complete with resistance and angle iron frames designed to be mounted against a wall. The resistance is contained within the frame, with the successive steps connected to the corresponding contact segments, leaving only the terminal connections to be made when the rheostat is installed.

Have automatic features, making them especially suitable for the small private garage.

RHEOSTATS

Trade No.	Mfrs. No.	No. Cells in Series	Amperes Max.	Amperes Min.	Resis. Ohms	No. Steps	Price, Each Type A	Type B	Type C	Type E	Type F
022909	115	12–18	15	5	17	13	$50.00	$57.00	$51.00	$200.00	$110.00
022910	120	12–18	20	5	17	13	60.00	67.00	62.00	214.00	126.00
022911	220	20–28	20	5	13	13	52.00	59.00	54.00	206.00	118.00
022912	330	30–36	30	10	3.70	16	46.00	51.00	42.00	196.00	113.00
022913	331	36–44	30	10	2.50	16	38.00	44.00	39.00	191.00	102.00
022914	341	36–44	40	10	2.50	16	46.00	51.00	42.00	200.00	112.00
022915	430	40–44	30	10	1.50	16	36.00	41.00	37.00	188.00	99.00
022916	440	40–44	40	10	1.30	16	34.00	40.00	36.00	187.00	98.00
022917	450	40–44	50	12	1.10	16	39.00	46.00	40.00	190.00	101.00
022918	460	40–44	60	15	.90	16	46.00	51.00	47.00	192.00	102.00

RHEOSTATS RECOMMENDED FOR USE IN GARAGES

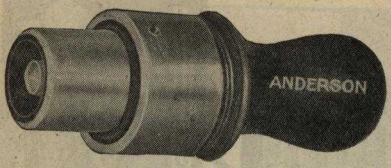
022919	121	12–28	20	5	17	16	61.00	68.00	63.00	234.00	145.00
022920	360	30–44	30	10	4	16	57.00	62.00	57.00	216.00	137.00
		36–44	40	10							
		40–44	60	10							
022921	160	1–44	10	6	17	25	97.00	103.00	99.00	262.00	173.00
		12–44	20	5							
		30–44	30	10							
		36–44	40	10							
		40–44	60	10							

The electric data given in above table is based on the assumption that the line potential does not exceed 115 volts. If the potential is higher than this the voltage should be stated, as in many cases the conditions would call for a special rheostat.

For complete information ask for Bulletin No. 11410.

Rheostats for Edison Batteries at slightly different prices.

ANDERSON CHARGING PLUGS AND RECEPTACLES



No. 1289



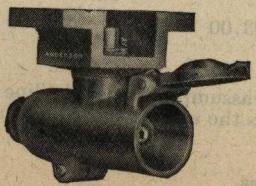
No. 1208



No. 1569



No. 1825



No. 1826

The following line of charging plugs and receptacles are adapted for charging storage batteries on electric vehicles, trucks and railway cars. The insulation in our standard charging plugs and receptacles is of the well-known Aetna Compound, which has been used for electric railway insulation all over the world. Terminals for standard plugs and receptacles are drilled for No. 6 duplex flexible cable.

TYPE A PLUGS

Double-Pole—Capacity, 65 Amperes

Suitable for use with Types A, B, C, D, E, G, H, K, P and R receptacles. Handle of Aetna insulation, gray iron or aluminum, with all metal current-carrying parts embedded in Aetna insulation. Length over all, 6½ inches. Maximum diameter, 3½ inches.

Trade No.	Mfrs. No.	Description	Net Wt., Lbs.	Price Each
78721	1289	With Aetna Handle	1½	$3.50
78722	1771	With iron handle	3	3.50
78723	1290	With wood handle	1⅛	4.00
78724	1291	With aluminum handle	1¼	4.20

TYPE A RECEPTACLES

Double-Pole—Capacity, 65 Amperes

Takes standard Types A and B plugs. Of strong construction. Frame is of iron castings, and contact parts of hard-drawn brass tubing. The insulation is Aetna. The contact parts are protected when not in use by a spring cover, which serves to keep out dust and dirt. Length over all, cover closed, 5⅜ inches. Height, 4 inches. Dimensions of base, 3x3¼ inches.

78725 1208 Complete, with lid 3 4.00

TYPE C SWIVEL RECEPTACLES

Double-Pole—Capacity, 100 Amperes

Takes standard Type A plugs. This receptacle is designed for use in charging batteries on steam passenger coaches, and is so arranged that it swivels in the frame, which is attached securely to the car body. Should the car move when the plug is in the receptacle, the swivel motion will permit of a direct straight pull, thus disengaging them without injury to either plug or receptacle. Wire terminals are concealed by the iron casing and the contact parts are protected when not in use by a spring lid, which excludes dirt, rain or snow. Height, 8½ inches. Dimensions of base, 9¼x2⅞ inches.

78726 1569 Complete, with swivel frame 20 10.00

TYPE L TELEPHONE PLUGS

Double-Pole—Capacity, 10 Amperes, 110 Volts

The handle of the plug is a strong iron casting, into which the body of the plug is threaded and anchored by a clamping screw. The contact and insulating parts are effectively protected from mechanical injury by the enclosing sleeves of seamless drawn steel tube. Over all length of plug, 7¾ inches. Maximum diameter, 2 inches.

78727 1825 Plug complete 2 6.50

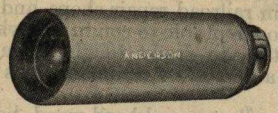
TYPE L TELEPHONE RECEPTACLES

Double-Pole—Capacity, 10 Amperes, 110 Volts

Many of the more modern passenger coaches, Pullman and parlor cars, also the better class of passenger steamships, are equipped with telephones, the efficiency of which depends in a large measure on the connection between the portable equipment and the local telephone lines. The complete device consists of a double-pole swivel base receptacle and plug, of the concentric type. Length over all, 9 inches. Height, 5 inches.

78728 1826 Receptacle complete 5½ 10.00

ANDERSON CHARGING PLUGS AND RECEPTACLES



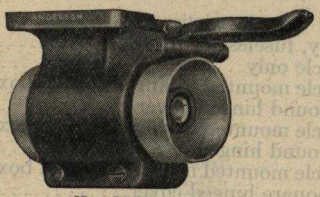
No. 1915



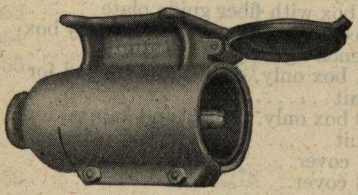
No. 1953



No. 1917



No. 1919



No. 1262



No. 1293

TYPE N PLUGS

Double-Pole—Capacity, 50 Amperes, 125 Volts

The Type N plug has a steel shell which fits closely into the cylindrical shell of the receptacle, thus providing a long supporting surface which takes all mechanical strain away from the current-carrying parts. It is equipped with a special cable clamp for preventing abrasion of the insulation on the cable. This clamp also takes the mechanical strain from the soldered joints at the terminals. Length over all, 5⅝ inches. Diameter of steel shell, 1¾ inches.

Trade No.	Mfrs. No.	Description	Net Wt., Lbs.	Price Each
78739	1915	Plug complete with cable clamp	1⅝	$3.50
78740	1916	Cable clamp only, for plug	¼	.40

Double-Pole—Capacity, 150 Amperes, 125 Volts

This plug is of the same general design as the 50-ampere Type N, described above, differing mainly in the carrying capacity. It is equipped with removable lugs, permitting of easily making soldered connections. Length over all, 9 inches. Diameter of steel shell, 2⅛ inches.

78741	1953	Plug complete with cable clamp	4½	5.50
78742	1954	Cable clamp only, for plug	¼	.50

TYPE N RECEPTACLES

Double-Pole—Capacity, 50 Amperes, 125 Volts

The receptacle proper is a seamless drawn steel shell, forming the housing for the current-carrying parts, which are insulated and held securely in position by a non-conducting compound of great heat-resisting properties. Made in several different forms of mounting.

Receptacles without Mounting

Trade No.	Mfrs. No.	Cap. Amps.	Description	Net Wt., Lbs.	Price Each
78743	1917	50	.....	⅞	$3.40
78744	1943	150	.....	2½	5.00

Receptacles without Mounting, Shell Threaded for Ball and Socket

78745	1918	50	.....	⅞	3.50
78746	1944	150	.....	2½	5.20

Receptacles for Switchboard Mounting, with Front and Rear Clamping Collars

78747	1960	50	.....	2½	5.00
78748	1961	150	.....	3	8.00

Receptacles for Vehicle Mounting

78749	1919	50	Iron.....	3⅛	4.00
78750	1920	50	Aluminum.....	1⅝	4.50
78751	1945	150	Iron.....	5¼	6.00
78752	1946	150	Aluminum.....	3⅜	7.00

Clamps only, with Spring Lid, without Receptacles

78753	1923	50	Iron.....	2¼	1.00
78754	1924	50	Aluminum.....	¾	1.50
78755	1947	150	Iron.....	2¾	1.50
78756	1948	150	Aluminum.....	⅞	2.30

TRAIL CAR COUPLER RECEPTACLES

The illustration shows a single-pole receptacle for car coupling up to 100 amperes at 500 volts, but is not intended for breaking live circuits.

78757	1262	100	Recep. comp. with spring lid	7½	7.00

TRAIL CAR COUPLER PLUGS

This plug is for use with receptacle shown above, and consists of an Aetna handle into which the current-carrying parts are embedded and securely fastened in such a manner as to prevent mechanical or electrical injury to same under operating conditions.

78758	1293	100	Plug complete.....	3⅜	7.00

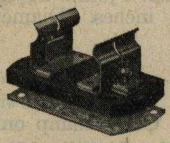
CAMPBELL ATTACHMENT PLUGS AND RECEPTACLES



Plug Inserted in Type A Box with Round Cover



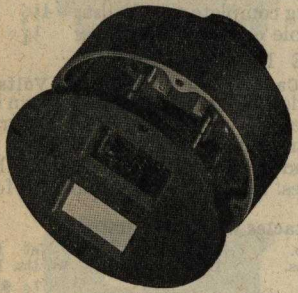
Plug Only



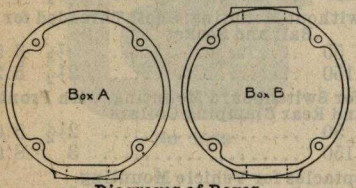
Receptacle Only



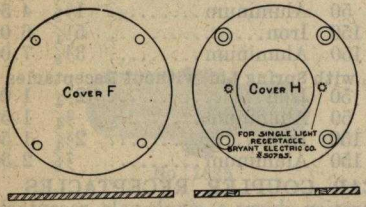
Square Hinged Cover



Double Pendant Box



Diagrams of Boxes



Diagrams of Covers

Campbell Attachment Plugs and Receptacles were orginally designed for use in railroad repair shops and round houses, but they are also adaptable to conditions which require rugged construction to stand rough usage. The rated capacity is 25 amperes. All illustrations are a quarter actual size.

The plug is made of well seasoned hard wood, boiled in paraffine until thoroughly impregnated. Copper contacts are mounted on the body of the plug. Plugs are equipped with fuse clips for Midget cartridge fuses or fuseless plugs can be furnished, if specified.

The receptacle proper consists of a molded composition base on which are mounted strong phosphor bronze spring contacts.

The receptacle is usually furnished enclosed in a 3½-inch round Type A or B cast iron box. The cover is fitted with a square hinged lid and fiber washer or guide plate. The cover is furnished round or square.

Types A and B cast iron boxes are adapted for use with Campbell Plugs and Receptacles. Conduit holes threaded unless otherwise specified.

Covers F, G, H, and J may be used on Types A and B boxes. Rubber gaskets furnished when required.

Single and double pendant boxes are designed for attachment to ½-inch conduit suspended from ceiling or roof. These boxes are fitted with fiber guide plates only, as the inverted position makes the usual cover unnecessary.

The four-way box is another adaptation for work bench lighting fixtures or standards.

The double pendant box is 5 inches in diameter. The fiber guide plate serves as a cover on account of the inverted position.

The single pendent box is similar in design to the double box but is only 3½ inches in diameter.

Trade No.	Description	Price Each
143662	Plug only, fuseless or fusible	$2.00
143663	Receptacle only	1.75
143664	Receptacle mounted in single Type A box with round hinged cover	3.00
143665	Receptacle mounted in single Type B box with round hinged cover	3.00
143666	Receptacle mounted in single Type A box with square hinged cover	3.25
143667	Receptacle mounted in single Type B box with square hinged cover	3.25
143668	Receptacle mounted in single pendant box with fiber guide plate	3.00
143669	Two receptacles mounted in double pendant box with fiber guide plate	8.25
143670	Four receptacles mounted in four-way box for bench lighting fixture	14.00
143671	Type A box only, drilled and tapped for conduit	.30
143672	Type B box only, drilled and tapped for conduit	.30
143673	Type F cover	.10
143674	Type G cover	.10
143675	Type H cover	.10
143676	Type J cover	.20
143677	Single fiber cover	.40
143678	Double fiber cover	1.20
143679	Round hinged cover	.40
143680	Square hinged cover	.50
143681	Cable support for use with pendant boxes.	1.25
143682	Conduit loop for use with cable boxes.	.50
143683	Conduit hook for use with pendant boxes	.50
143684	Rubber gasket for Types A and B boxes	.10

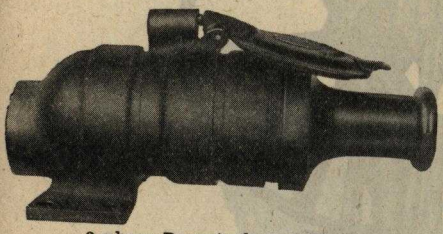
Further details and blue prints furnished on request.

DELTA-STAR RECEPTACLES AND PLUGS

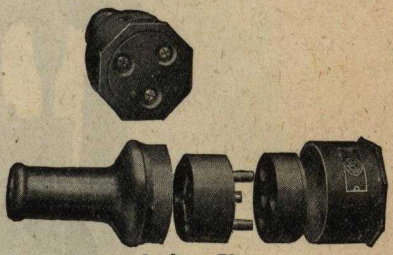
FOR INDUSTRIAL MOTOR SERVICE

TYPE J. I., 3-PHASE, 600-VOLT RECEPTACLES AND PLUGS

Patented



3-phase Receptacle and Plug



3-phase Plug

Molded insulating units form barriers between phases of both plugs and receptacles; easily and quickly wired.

CONSTRUCTION.—The case is cast iron baked black enamel finish. There are no sealed-in screws to become loose or ground on case. All parts screw together and are held securely in position by the interchangeable molded insulating units. All contacts are easily and quickly removed. Designed for either open or conduit work. Hinged cover automatically closes upon removal of plug.

APPLICATIONS.—For 3-phase motor circuits in industrial plants, railroad shops, portable substations, central station service, electrically-driven hoisting plants. mines and all installations where an exceptionally robust or durable equipment is necessary.

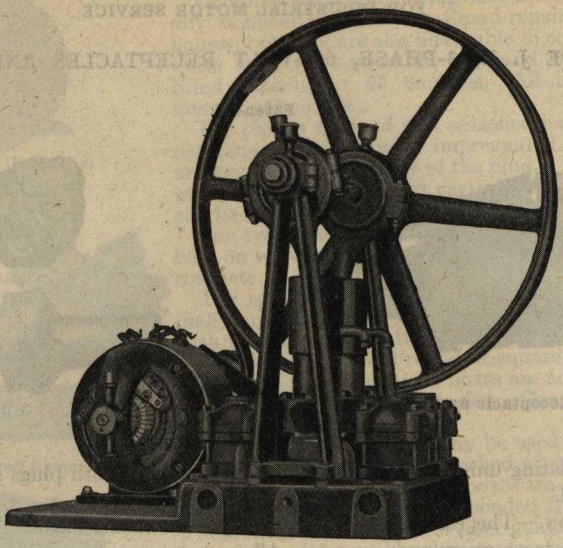
RECEPTACLES

Trade No.	Mfrs. No.	Capacity Amperes	No of Fingers	Price Each
95046	2277	60	3	$12.00
95047	2351	60	2	10.00
95048	2353	100	3	18.00
95049	2355	100	2	16.00
95050	2357	200	3	40.00
95051	2359	200	2	37.00
95052	2361	400	3	60.00
95053	2363	400	2	56.00
95054	2365	600	3	80.00
95055	2367	600	2	74.00

PLUGS

95056	2278	60	3	7.00
95057	2352	60	2	6.00
95058	2354	100	3	10.00
95059	2356	100	2	9.00
95060	2358	200	3	24.00
95061	2360	200	2	21.00
95062	2362	400	3	36.00
95063	2364	400	2	32.00
95064	2366	600	3	48.00
95065	2368	600	2	42.00

MIDVALE POWER PUMPS



Type A Pump

The extra heavy construction of Midvale Pumps make them especially desirable. They are suitable for various capacities and pressures that cover all demands. Reliability and dependability are built into Midvale Pumps by the quality of material and strength of construction used. Every part is inspected and tested. This and the extreme simplicity of design renders upkeep low and insures the utmost economy of operation.

Midvale Pumps are made in 2 to 12-cylinder sizes. Each cylinder, with its valves and valve chamber, is a separate and distinct interchangeable unit and can be removed in a short time without interfering with operation of other cylinders.

Valve openings are equal to plunger area. This accomplishes passage of water from suction through to cylinder and discharge without friction or choking. This arrangement eliminates useless waste of power and creates super-suction and discharge.

Midvale Plungers are fitted with spring bronze piston rings that expand and closely engage smooth cylinder walls. No packing or stuffing boxes are used. Perfect lubrication is secured by compression grease cups on all bearings. Cross-head bearings and guides run in oil.

For the benefit of customers the following suggestions and rules, are offered, applicable to pumps:

The outside limit for raising water vertically by suction is 33⅓ feet and this can be done only at sea level and when a perfect vacuum is formed. Ordinarily, 25 to 28 feet is the limit, but for a good, first-class job not over 20 feet of perpendicular suction pipe to pump is recommended.

TYPE A PUMPS

A small capacity, heavy, silent running, belted pump, suitable for use in residences, factories, sprinkler systems, as a bilge pump, or for any service suitable to its capacity not requiring a high pressure pump. Type A Pumps can be furnished in special types having from 2 to 6 cylinders. Each cylinder, if desired, can be designed with independent suction and discharge so as to accomplish the handling of several different liquids with the same pump.

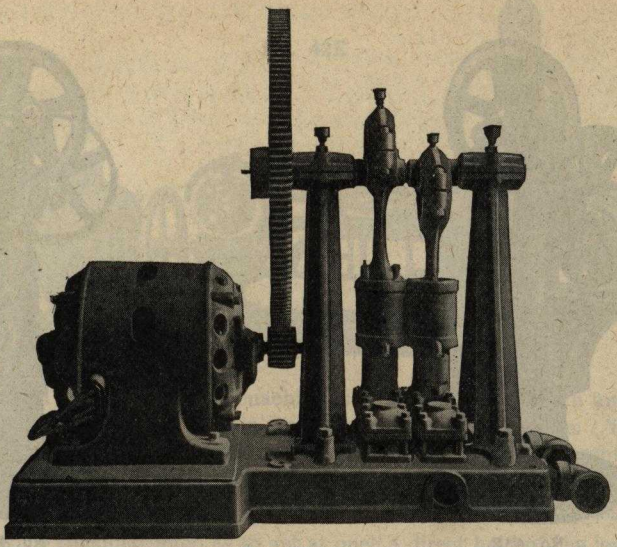
Trade No.	Mfrs. No.	Gallons per Hour	Lift in Feet	Pressure in Lbs. Sq. In.	No. of Cylinders	H. P. of Motor	Size Pipe Inches	Approx. Ship. Wt., Lbs.
25969	40200	200	80	40	2	⅛	¾	170
25970	20375	375	40	20	2	⅛	¾	185
25971	80200	200	160	80	2	¼	¾	175
25972	40375	375	80	40	2	¼	¾	190

Type A pumps can be equipped with pulley for belt drive. When so furnished, allowance will be made for motor.

Specifications Necessary in Ordering Types A, B and D Pumps

1.—For what purpose the pump is to be used. 2.—Maximum quantity to be pumped per hour. 3.—Exact suction lift. 4.—Height or pressure against which liquid is to be discharged. 5.—If pump is electric-driven, state voltage and cycle of current. 6.—If pump is for boiler feed service, state boiler pressure and size. 7.—If pump is to be belt-driven, state size and speed of driving pulley. 8.—Whether liquid to be pumped is hot, cold, acid, salt or fresh.

MIDVALE POWER PUMPS



Type B Pump

SPECIFICATIONS FOR TYPES B AND D PUMPS

BASE.—Close-grained iron, cast in one piece, forming exceptional rigid construction. Manifold is cast in base with suction and discharge openings on two sides and end.

SHAFT.—Open-hearth steel, accurately machined and key-seated.

BEARINGS AND SUPPORTS.—Cast close-grained iron, liberally proportioned bearings, heavy, long and babbitted.

GEARING.—Cast machine-cut gear. Pinion, compressed cloth machine cut, noiseless and waterproof.

CROSS-HEADS.—Cast shoe, running in bored guides.

CYLINDERS.—Heavy close-grained iron, bored and ground, combining cross-head guide in one piece; cylinders furnished brass lined at extra cost.

PLUNGERS.—Turned, ground and polished, fitted with non-leak bronze piston rings.

VALVES.—Phosphor-bronze, valve and seat removable by taking out one bolt; valves and seat grindable.

TYPE B PUMPS

A superior, heavily constructed, geared pump, suitable for low and medium pressure, constructed on same general lines as Type D pump, with exception of having larger cylinders and no high pressure parts. Recommended for large private water systems, office buildings, factories, railway pumping, marine service, moving oils or for irrigation and drain systems.

Trade No.	Mfrs. No.	Gallons per Hour	Lift in Feet	Pressure in Lbs. Sq. In.	No. of Cylinders	H. P. of Motor	Size Pipe Inches	Approx. Ship. Wt., Lbs.
77215	60500	500	120	60	2	½	1¼	410
77216	601000	1000	120	60	2	1	1¼	470
77217	602000	2000	120	60	4	1½	1½	630
77218	603000	3000	120	60	6	2	1½	820
77219	604000	4000	120	60	8	3	2	1100
77220	606000	6000	120	60	12	5	2	1510

TYPE D PUMPS

A special high pressure, direct geared pump, designed for boiler feed service, mine pumping, as a fire pump or for any purpose where a reliable and finely constructed pump is wanted. Type D pumps are furnished to operate on pressures up to 500 pounds square inch.

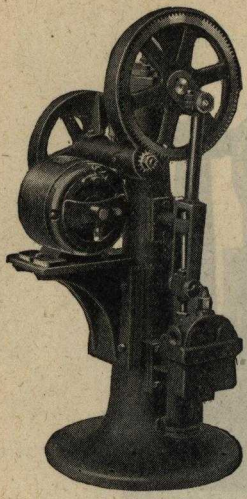
77221	500	500	250	125	2	1	1¼	480
77222	1000	1000	250	125	4	1½	1½	645
77223	1500	1500	250	125	6	2	1½	840
77224	2000	2000	250	125	8	3	2	1130
77225	3000	3000	250	125	12	5	2	1560

Types B and D pumps can be equipped with pulley for belt drive. When so furnished, allowance will be made for motor.

All Midvale Pumps are guaranteed for one year to be free from inherent defects. Any equipment proving defective within that time will be replaced free of charge—accidents and natural wear are excepted.

Type D pumps are made in capacities as large as 24000 gallons per hour. Send us your specifications.

HILL UPRIGHT HOUSE PUMPS



No. 45E



No. 45

UPRIGHT ELECTRIC HOUSE PUMPS, No. 45E

These machines are designed to meet the demand for small electric pumps that would not incur the expense of the No. 42E type. After severe tests they have proven a little wonder. They not only incur less first cost but are very economical in the consumption of current and are highly efficient.

They are well adapted to work in connection with open or attic tanks, but can also be used with closed or pneumatic tanks for moderate pressures. The capacity is sufficient for the average home where one does not expect to do much sprinkling. The gearing is machine cut with rawhide pinion on motor shaft and runs quietly. The cylinder is brass lined and material and workmanship throughout of high grade.

Trade No.	Size of Suction and Discharge Inches	Capacity Gallons per Hour	Maximum Elevation Feet	Maximum Pressure Pounds	Size of Base Inches	Height Inches	Weight Pounds	Price, with A. C. or D. C. Motor 110-220 V.
59861	¾	150	100	50	14	33	165	$104.00

When ordering, state if electric current available is direct or alternating and what voltage. If alternating state voltage, phase and cycle. Price with A. C. motor is for 60-cycle.

Motors used are self-starting under full load.

UPRIGHT POWER HOUSE PUMPS, No. 45

Belt Drive

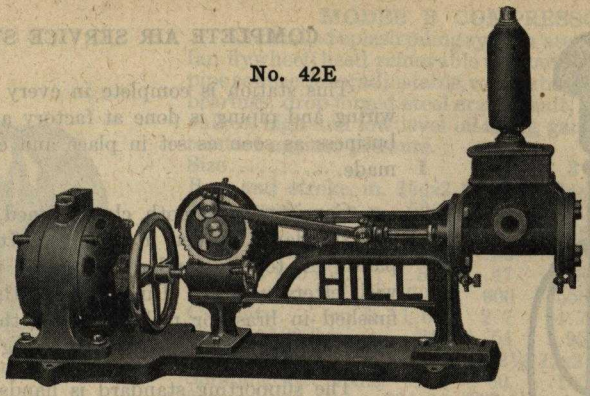
These are the same pumps described above, only fitted with pulley for belt drive from electric or gasoline motor or other power.

Trade No.	Size of Suction and Discharge Inches	Capacity Gallons per Hour	Maximum Elevation Feet	Speed of Pulley R. P. M.	Size of Pulley Inches	Size of Base Inches	Weight Pounds	Price Each
59862	¾	150	100	400	10x2	14	140	$66.00

Pulley can be run in either direction.

HILL SILENT ELECTRIC HOUSE PUMPS

No. 42E



The pumping end or cylinder of the machine is of a time-tried pattern known to give the best results for drawing water by suction and forcing against pressure. The frame is so constructed as to bring the center line up to accommodate placing the different types of electric motors in direct connection—shaft to shaft.

The crosshead, guides, connecting rod and other parts are of the simplest successful kind.

The worm gear is so constructed as to get at once a direct hold of the load with the least number of moving or wearing parts. This form of gearing also insures practically silent operation, a desirable feature in house pumping. Worm is provided with ball-bearing thrust bearing to reduce friction.

The wheel forming connection between motor and worm shafts also acts as a flywheel as well as a handwheel for turning around by hand when necessary to pack or work at the machine. Also forms a compensating coupling.

The closed or pneumatic tank system is becoming quite popular and is largely used.

The plan is to force the water into the tight tank and compress the air therein, which, being very expansive, forces the water out, and to such a height as corresponds to the pressure in the tank, when valve is opened in water line leading from bottom of tank. But all the air will finally get out of the tank if not replenished. So we have this pump arranged so that an air valve can be attached to one end of pump cylinder, with which some air can be admitted to pump and forced, with the water, into the tank where it at once takes its place on top of the water. In the operation, the water is thoroughly aerated. This attachment is extra and should be mentioned when ordering.

These pumps are furnished with three sizes of pumping cylinders, 2, 2½ and 3-inch, all 4-inch stroke.

All cylinders will draw water by suction 25 feet or less.

Dimensions over all: Length, 3 feet 10 inches; width, 15 feet; height, 28 feet at highest point.

Size No.	Size of Motor H. P.	Size of Cylinder Inches	Elevation Feet	Approx. Pressure Pounds	Capacity Gallons per Hour at 50 Rev.	With D. C. Motor 110 or 220 Volts Type O Trade No.	Price Each	With A. C. Motor 1-Phase, 60 Cycles 110 or 220 Volts Type P Trade No.	Price Each	With A. C. Motor 2 or 3-Phase 60 Cycles 110 or 220 Volts Type Q Trade No.	Price Each
2B	½	2 x4	150 or less	75 or less	250	59876	$190.00	59879	$190.00	59882	$180.00
2½B	½	2½x4	100 or less	50 or less	400	59877	190.00	59880	195.00	59883	185.00
3	½	3 x4	60 or less	30 or less	600	59878	200.00	59881	205.00	59884	190.00

2 and 2½-inch cylinders are fitted for 1¼-inch suction and 1-inch discharge; 3-inch cylinders for 1½-inch suction and 1¼-inch discharge—iron pipe. Shipping wt., 300 lbs.

Cylinders are brass-lined. Extra for air valve, $2.00 A slight additional charge must be made in some cases for 500-volt motor. When ordering, give number and type, and if with motor be sure to state voltage of electric current, and if alternating current also state phase and cycle.

MIDVALE SERVICE STATIONS



Complete Air Service Station

COMPLETE AIR SERVICE STATIONS

This station is complete in every respect. Electric wiring and piping is done at factory and it is ready for business as soon as set in place and electric connection made.

Consists of a smooth, close-grained, cast iron housing and standard, finished in attractive Italian-blue enamel paint. At top of standard is located the Free Air sign with letters in silver. Directly under this is the air gauge, finished in brass or nickel. Below that is the electric switch compartment with its protecting drop door.

The supporting standard is handsome and massive in design. The cast base and housing for the compressor is 20 inches square and contains two compartments, one for the air hose and attachments, the other for compressor.

The Midvale Air Station is ornamental and very highly finished. It is equipped with heavy duty type 2-cylinder air compressor, 20 feet of best air hose, fitted with approved self-clutching air chuck. The compressor and hose compartments have lock doors.

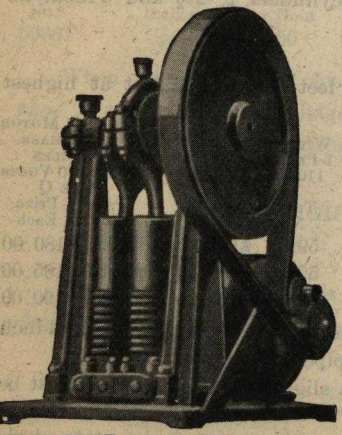
Trade No.	Height Over All, Feet	Shipping Wt., Lbs.	Price Each
25542	6	400	$151.00

CURB STANDARDS

The Midvale Curb Standard is of massive construction. All parts are of cast iron, finished in Italian-blue enamel paint. All lettering is in silver. This standard is complete with air gauge, electric control switch, 20 feet of hose and attachments. Will operate in connection with any make of compressor or air system. If desired, will be fitted with hand valve control instead of electric.

The curb standard is similar to the illustration of the complete air service station down to the arrow.

Trade No.	Height Over All, Feet	Shipping Wt., Lbs.	Price Each
25543	4	80	$20.00



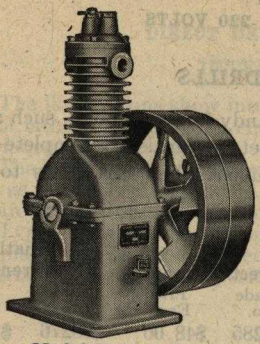
Two-cylinder Air Compressor

TWO-CYLINDER AIR COMPRESSORS

Capacity, 1½ cubic feet of air per minute. Equipped with ⅙ or ¼ horse power A. C. or D. C. electric motor, mounted on same cast base and belted to heavy cast fly-wheel.

Trade No.	Height Over All, Feet	Shipping Wt., Lbs.	Price Each
25544	..	..	$101.00

CURTIS GARAGE AIR COMPRESSORS

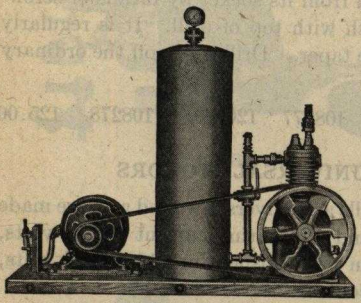


Model B Compressor

MODEL B COMPRESSORS

Controlled-splash oiling system assures no oil in tires; fan flywheel; head removable without breaking or bending pipe connections; adjustable, renewable die cast non-cutting bearings, drop-forged steel crank shaft, safety cage under valves, high and low level oil-filling gauge, hand unloader to start against pressure.

Size	1	2	3	4	5
Bore and stroke, in.	1⅝x2	2⅛x2½	2½x3	3x3½	4½x4½
Minimum speed....r. p. m.	500	400	350	300	250
Capacity.....cu. ft.	1.2	1.8	2.99	4.32	10.4
H. P. at 100 lbs....	.24	.36	.60	.87	2.09
H. P. at 200 lbs....	.31	.47	.78	1.14	2.75
Maximum speed....r.p.m.	700	600	550	500	400
Capacity.....cu. ft.	1.68	2.7	4.7	7.20	16.5
H. P. at 100 lbs.....	.34	.54	.95	1.45	3.34
Size pulley.....in.	9x1¾	11x2⅛	12x2⅛	14x2⅝	22x4½
Shipping wt.....lbs.	40	60	100	120	385
Price, with tight pulleys...	$34.20	$37.80	$47.40	$50.40	$108.00
Price, with T. & L. pulley .	37.80	41.40	51.30	54.00	126.00
Price, extra for air pressure unloader.....	16.20	16.20	16.20	16.20	19.80

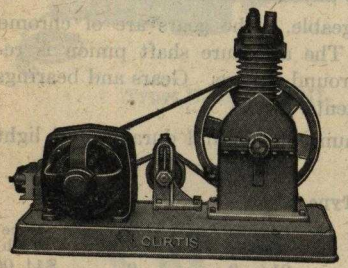


Style Z Outfit

STYLE Z OUTFITS

Style Z outfits are made belted only, are self-contained, wired and piped, ready to run. They can be moved without disturbing any connections.

Style and Number	†Size Tank In.	Motor H. P.	Without Motor: Pinion, Belt or Pulley Price Each	Wt. Lbs.	Complete, with Motor: D. C. 110-220 Volts	*A. C. Single-phase	*A. C. 2 or 3-phase	Wt. Lbs.
Z-1	10x30	¼	$75.60	130	$142.20	$171.00	$171.00	240
Z-1a	12x36	¼	77.40	155	144.00	172.80	172.80	265
Z-2	10x30	½	84.60	160	192.60	210.60	192.60	290
Z-2a	12x36	½	86.40	185	194.40	212.40	194.40	315
Z-3	12x36	¾	95.40	200	212.40	268.20	217.80	360
Z-3a	14x48	¾	99.00	280	216.00	271.80	221.40	440
Z-4	12x36	1	99.00	225	248.40	279.00	228.60	410
Z-4a	14x48	1	102.60	305	252.00	282.60	232.20	490
Z-4b	16x60	1	115.20	485	264.60	295.20	244.80	570
Z-5	16x60	3	169.20	645	468.00	507.60	361.80	920
Z-5a	20x60	3	187.20	745	486.00	525.60	379.80	1020

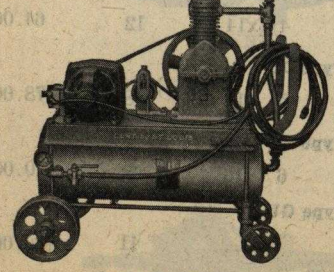


Style W Outfit

STYLE W OUTFITS

Style W outfits are furnished with iron base and made either belted or geared. Iron base is necessary for geared outfits to keep gearing in line.

Style and Number	Size Compressor	Motor H. P.	Without Motor: Starter, Pinion or Belt Price Each	Wt. Lbs.	Complete with Motor: D. C. 110-220 Volts	*A. C. Single-phase	*A. C. 2 or 3-phase	Wt. Lbs.
W-1	1⅝x2	¼	$57.60	125	$129.60	$149.40	$149.40	200
W-2	2⅛x2½	½	68.40	145	171.00	189.00	189.00	275
W-3	2½x3	¾	79.20	180	189.00	243.00	210.60	340
W-4	3 x3½	1	86.40	235	244.80	275.40	225.00	440
W-5	4½x4½	3	153.00	555	415.80	455.40	336.60	875



Style X Outfit

STYLE X OUTFITS

Same as Style W with tank underneath, complete with hose and electric cord; made belted or geared.

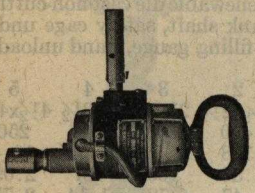
Style and Number	†Size Tank In.	Motor H. P.	Without Motor: Starter, Pinion or Belt Price Each	Wt. Lbs.	Complete, with Motor: D. C. 110-220 Volts	*A. C. Single-phase	*A. C. 2 or 3-phase	Wt. Lbs.
X-1	10x30	¼	$115.20	215	$187.20	$207.00	$207.00	290
X-1a	12x36	¼	118.80	240	190.80	210.60	210.60	315
X-2	10x30	½	127.80	235	228.60	246.60	246.60	365
X-2a	12x36	½	131.40	260	232.20	250.20	250.20	385

*A. C. motors are for 60 cycles, 110-220 volts.

†Size of compressor is given in table at top of page under the corresponding Style number.

U. S. ELECTRICALLY-DRIVEN DRILLS

DIRECT OR ALTERNATING CURRENT, 110 OR 220 VOLTS

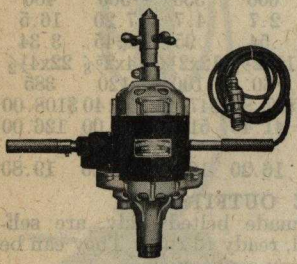


Type B

TYPE B DRILLS

Type B is air-cooled, very handy for small holes, such as oil holes, drilling lagging pin holes, etc. Furnished complete with chuck, flexible cable and attachment plug. Attaches to any incandescent lamp socket.

Speed R. P. M.	Capacity Inches	Dimens. Inches	Wt. Lbs.	Direct Current Trade No.	Direct Current Price Each	Alternating Current Trade No.	Alternating Current Price Each
900	¼	4x13	9	108285	$48.00	108276	$49.00

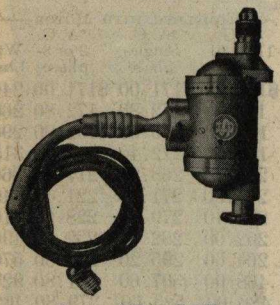


Type G

TYPE G DRILLS

Type G drill is removed from its socket by means of screwing collar on screw feed flush with top of drill. It is regularly equipped with a No. 3 Morse taper. Drill is run off the ordinary incandescent lamp socket.

180	1¼	6x18½	38	108277	120.00	108278	125.00



Types AU and BU

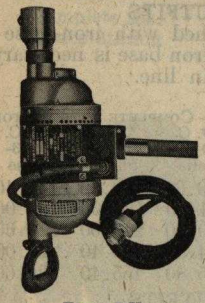
DRILLS WITH UNIVERSAL MOTORS

The motors in these drills are universal-wound and are made to operate on both direct and alternating current of 250 volts, 30, 40, or 60 cycles, and can be furnished for 110 or 220 volts, as specified. They are air-cooled.

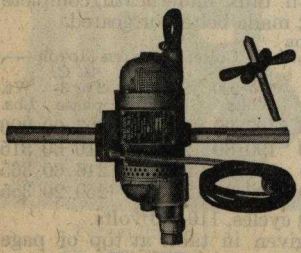
Each drill is equipped with a new type of switch of simple design, which can be very easily taken apart, and furnished with a cord and plug to connect to any lamp socket.

All parts are interchangeable. The gears are of chrome nickel steel and hardened. The armature shaft pinion is removable. All spindles are ground to size. Gears and bearings run in grease-filled compartments.

The cases are of aluminum, strong and durable, but light in weight.



Type DU



Type EU

Trade No.	Speed R. P. M.	Capacity Inches	Dimens. Inches	Wt. Lbs.	Price Each
			Type AU		
108279	1400	3/16	3½x 9	6	$44.00
			Type BU		
108280	900	¼	3½x11	7	49.00
			Type CU		
108281	750	⅜	4½x14	12	64.00
			Type DU		
108282	450	½	5 x18	18	78.00
			Type EU		
108283	280	⅞	6 x16½	28	110.00
			Type GU		
108284	....	1¼	.....	41	130.00

In ordering, specify voltage.

U. S. ELECTRIC COMBINATION GRINDERS

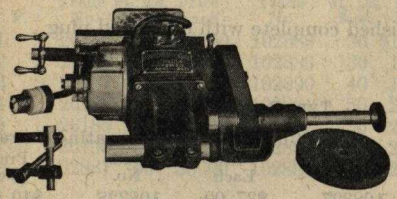
DIRECT OR ALTERNATING CURRENT, 110 OR 220 VOLTS

INTERNAL AND EXTERNAL GRINDERS

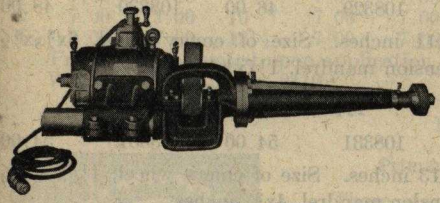
The illustrations show internal grinders, made with an angle plate to be bolted in tool post rest of lathe. For grinding engine cylinders, dies or journals, extra lengths of internal grinding attachment can be furnished.

The internal attachment can be taken off and the grinder then used for external grinding the same as regular center grinders. Any speed desired can be furnished by changing pulleys. Bearings are adjustable for wear and are dustproof. Runs off ordinary lamp socket.

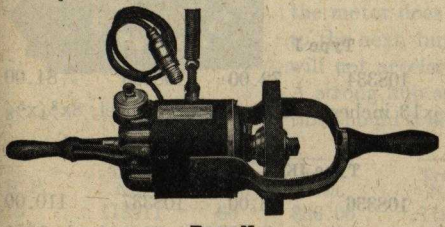
Types N and O are used in connection with spring or balance weight. Adapted for grinding high places off casting or chilled spots. They also carry a felt wheel for polishing or a wire brush. For grinding metal or composition; do away with hand filing and chipping.



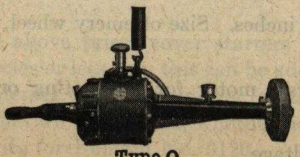
Type HL



Types JL, JKL and ML



Type N



Type O

Type HL

H. P.	Wt. Lbs.	Direct Current Trade No.	Direct Current Price Each	Alternating Current Trade No.	Alternating Current Price Each
¼	24	108296	$80.00	108297	$85.00

Speed, external, 4500 R. P. M.; internal, 18000 R. P. M.

Size of wheel for external grinding, 6x⅜ inches; for internal grinding, 1x¼ inch. Will grind to depth of 4½ inches.

Type JL

½	82	108298	110.00	108299	115.00

Speed, external, 3000 R. P. M.; internal, 9000 R. P. M.

Size of wheel for external grinding, 8x¾ inches; for internal grinding, 2x½ inches. Will grind to depth of 8 inches.

Type JKL

1	105	108300	130.00	108301	135.00

Speed, external, 2400 R. P. M.; internal, 8500 R. P. M.

Size of wheel for external grinding, 10x1 inches; for internal grinding, 2½x¾ inches. Will grind to depth of 12 inches.

Type ML

2	245	108302	185.00	108303	195.00

Speed, external, 2050 R. P. M.; internal, 7500 R. P. M.

Size of wheel for external grinding, 12x1¼ inches; for internal grinding, 3x¾ inches. Will grind to depth of 18 inches.

Type N

H. P.	Speed R. P. M.	Wt. Lbs.	Direct Current Trade No.	Direct Current Price Each	Alternating Current Trade No.	Alternating Current Price Each
1	2700	45	108304	$78.00	108305	$84.00

Dimensions, 6½x17 inches. Size of emery wheel, 8x1x⅝ inches.

Type NN

..	3000	45	108306	62.00	108307	72.00

Size of emery wheel, 8x¾x⅝ inches.

Type NK

..	2400	62	108308	84.00	108309	104.00

Size of emery wheel, 10x1x⅞ inches.

Type NE

..	2050	105	108310	120.00	.....	125.00

Size of emery wheel, 12x1¼x⅞ inches.

Type OB

¼	3500	20	108311	55.00	108312	65.00

Dimensions, 5½x21 inches. Size of emery wheel, 5x¾ inches.

Type O

½	3500	48	108313	75.00	108314	82.00

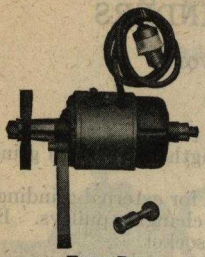
Dimensions, 6x30 inches. Size of emery wheel, 6x1 inches.

Type OO

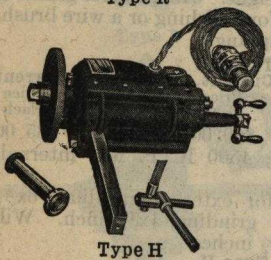
1	3000	65	108315	85.00	108316	104.00

Dimensions, 7½x32 inches. Size of emery wheel, 8x1 inches.

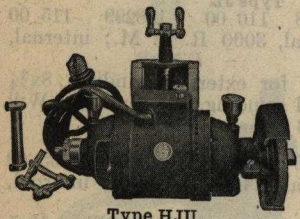
In ordering, specify voltage.



Type R



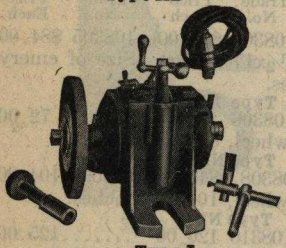
Type H



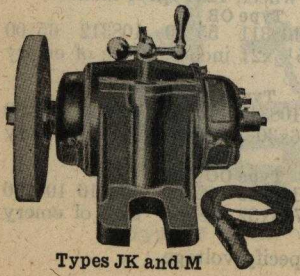
Type HJU



Type HB



Type J



Types JK and M

U. S. ELECTRIC CENTER GRINDERS

DIRECT OR ALTERNATING CURRENT, 110 OR 220 VOLTS

Type R has no slide and is made for lathes with a compound rest. Types R, H and HJU are furnished with an internal grinding attachment and Types H and HJU with tooth rest. Type HJU can be used on both direct and alternating current and is furnished with shank for tool post same as Type H or with angle plate as shown.

Types HB, J, JK and M are all fitted with angle plates and can be used on lathe, boring mill, shaper or planer, for cylindrical or surface grinding.

All types are furnished complete with cable and plug.

Type R

H. P.	Speed R. P. M.	Weight Pounds	Direct Current Trade No.	Direct Current Price Each	Alternating Current Trade No.	Alternating Current Price Each
¼	4500	13	108327	$37.00	108328	$40.00

Dimensions, 4½x8 inches. Size of emery wheel, 6x⅜x½ inches.

Type H

¼	4500	21	108329	46.00	108330	48.00

Dimensions, 5x11 inches. Size of emery wheel, 6x⅜x½ inches. Size of extension mandrel, 1¼x¼ inches.

Type HJU*

¼	5000	25	108331	54.00	108331	54.00

Dimensions, 5x13 inches. Size of emery wheel, 4½x½x½ inches. Size of extension mandrel, 4x¾ inches.

Type HB

¼	4500	20	108332	40.00	108333	44.00

Dimensions, 4x11 inches. Size of emery wheel, 6x⅜x½ inches.

Type J

½	3000	48	108334	72.00	108335	84.00

Dimensions, 6½x13 inches. Size of emery wheel, 8x¾x⅝ inches.

Type JK

1	2400	87	108336	98.00	108337	110.00

Dimensions, 7½x15½ inches. Size of emery wheel, 10x1 inches.

Type M

2	2050	120	108338	145.00	108339	145.00

Dimensions, 8½x18½ inches. Size of emery wheel, 12x1¼ inches.

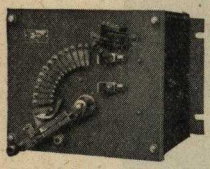
*For use with universal motor for alternating or direct current.

In ordering, specify voltage.

C-H MOTOR STARTERS

ALTERNATING CURRENT

SINGLE-PHASE MOTOR STARTERS



For Commutator Type Self-starting Motors

These starting rheostats have been especially designed to meet the requirements of single-phase commutator type self-starting motors. The resistance is of the ventilated type and is so arranged as to eliminate the effect of inductance. A strong spring coiled around the hub throws the lever to the off position should it be released in an intermediate position while starting the motor.

25 and 60 Cycles

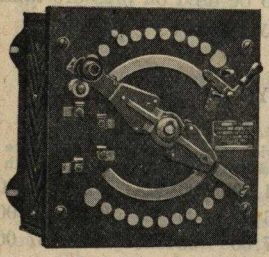
H. P.	110 Volts Trade No.	110 Volts Wt., Lbs. Boxed	110 Volts Price Each	220 Volts Trade No.	220 Volts Wt., Lbs. Boxed	220 Volts Price Each	H. P.	110 Volts Trade No.	110 Volts Wt., Lbs. Boxed	110 Volts Price Each	220 Volts Trade No.	220 Volts Wt., Lbs. Boxed	220 Volts Price Each
1	26185	30	$13.00	102888	30	$15.00	12½	102882	60	$32.00	102895	60	$30.00
2	26186	30	14.00	102889	30	15.00	15	102883	125	52.00	102896	60	32.00
3	26187	50	19.00	102890	40	15.00	20	102884	125	52.00	102897	100	38.00
4	26188	50	20.00	102891	50	20.00	25	.....	....	....	102898	100	38.00
5	26189	50	21.00	102892	50	20.00	30	.....	....	....	102899	125	52.00
7½	26190	50	29.00	102893	50	22.00	35	.....	....	....	102900	125	52.00
10	102881	60	39.00	102894	50	23.00	40	.....	....	....	102901	200	52.00

The prices listed above cover starters with no-voltage release. If no-voltage protection is not wanted, deductions from these prices made be made as follows:

H. P.	110 V.	220 V.	H. P.	110 V.	220 V.	H. P.	110 V.	220 V.	H. P.	110 V.	220 V.
1	$7.00	$7.00	5	$7.00	$7.00	15	$7.00	$7.00	30	$7.00	$13.00
2	7.00	7.00	7½	7.00	7.00	20	7.00	7.00	35	7.00	13.00
3	7.00	7.00	10	7.00	7.00	25	7.00	7.00	40	....	13.00
4	7.00	7.00	12½	7.00	7.00	....	....	....	....	....	....

Prices will be quoted upon application for starters for 440–550 volts.
Write for Bulletin No. 9110.

POLYPHASE MOTOR STARTERS



Primary Resistance Type—For Squirrel Cage Motors

These starters are designed for starting two or three-phase squirrel cage motors. A double ended lever is used to cut out non-inductive resistance connected into each of two phases of the primary circuit. This resistance is proportioned to apply to the motor terminals approximately 50 per cent of the line voltage. If the motor does not start on the first point, the lever can be moved to the next, but these starters should not be used where the motor will not accelerate with 60 to 70 per cent of the full line voltage. A strong hub spring is provided to return the lever to the off position should it be released while starting the motor.

H. P.	110 Volts Trade No.	110 Volts Wt., Lbs. Boxed	110 Volts Price Each	220 Volts Trade No.	220 Volts Wt., Lbs. Boxed	220 Volts Price Each	440 Volts Trade No.	440 Volts Wt., Lbs. Boxed	440 Volts Price Each
5	118911	60	$36.00	118916	50	$29.00	132771	50	$29.00
7½	118912	70	50.00	118917	60	39.00	132772	60	39.00
10	118913	70	56.00	118918	70	40.00	132773	60	42.00
15	118914	125	93.00	118919	70	53.00	132774	90	62.00
20	118915	125	100.00	118920	80	58.00	132775	90	64.00
25	.....	...	.....	132769	125	98.00	132776	125	67.00
30	.....	...	.....	132770	125	106.00	132777	125	72.00

The above prices cover starters without the non-voltage release feature. For frequencies of 60 cycles or less only this can be added at an additional charge of $11.00 list.

In ordering, give horse power, voltage, frequency, whether circuit is 3-phase or 2-phase, 3 or 4-wire, nature of the load, whether no-voltage release is desired.

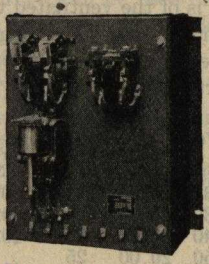
Write for Bulletin No. 9120.

C-H SELF-STARTERS

ALTERNATING CURRENT

PRIMARY RESISTANCE TYPE

Time Limit Acceleration—For Single-phase Self-starting or Polyphase Squirrel Cage Motors



These self-starters are designed for use with single-phase self-starting motors or with polyphase squirrel cage motors, but with the latter type only when the motor is to drive a centrifugal pump or other machine with such load characteristics that the starting torque required does not exceed that corresponding to 60 per cent of normal line voltage applied to the motor terminals.

Resistance in the primary circuit of the motor is used to reduce the voltage for starting. One step of resistance is employed in each of two phases only for either two or three-phase motors.

Two double-pole magnet switches and a solenoid operated dashpot timing relay are provided. One switch connects the motor and starting resistance to the supply lines; the other short-circuits this resistance after a definite time interval, determined by the setting of the relay.

They may be controlled by single-pole knife or snap switches, float switches, or by two push buttons, one normally open and one normally closed. If they are to be used on pressure tank systems, diaphragm or gauge type pressure or vacuum regulators may be used.

FOR POLYPHASE MOTORS—25 TO 60 CYCLES

	110 Volts			220 Volts			440 Volts			550 Volts		
H. P.	Trade No.	Wt., Lbs. Boxed	Price Each	Trade No.	Wt., Lbs. Boxed	Price Each	Trade No.	Wt., Lbs. Boxed	Price Each	Trade No.	Wt., Lbs. Boxed	Price Each
5	094832	175	$147.00	094840	225	$162.00	094848	175	$154.00	094823	175	$154.00
7½	094833	175	147.00	094841	200	162.00	094849	175	156.00	094824	175	156.00
10	094834	200	171.00	094842	200	165.00	094850	175	167.00	094825	175	167.00
15	094835	300	248.00	094843	200	178.00	094851	225	167.00	094826	175	169.00
20	094836	325	254.00	094844	225	182.00	094852	225	187.00	094827	250	198.00
25	094837	350	258.00	094845	250	187.00	094853	225	187.00	094828	225	198.00
30	.....	...	.....	094846	350	254.00	094854	275	194.00	094829	275	198.00

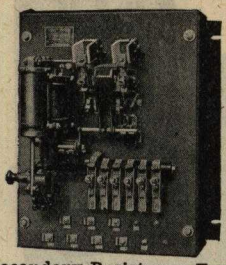
FOR SINGLE-PHASE SELF-STARTING MOTORS—25 TO 60 CYCLES

5	82460	175	149.00	82464	200	149.00	82472	175	149.00	82480	175	149.00
7½	82461	200	169.00	82465	200	154.00	82473	175	154.00	82481	175	154.00
10	82462	300	246.00	82466	200	154.00	82474	225	160.00	82482	175	160.00
15	82463	300	250.00	82467	200	178.00	82475	200	163.00	82483	225	163.00
20	.....	...	.....	82468	225	183.00	82476	225	187.00	82484	225	187.00
25	.....	...	.....	82469	325	256.00	82477	225	189.00	82485	225	187.00
30	.....	...	.....	82470	350	262.00	82478	250	196.00	82486	225	189.00

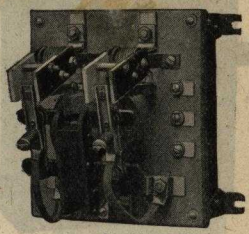
Write for Bulletin No. 9605.

C-H SELF-STARTERS

ALTERNATING CURRENT—25 TO 60 CYCLES



Secondary Resistance Type



Across-the-line Type

SECONDARY RESISTANCE TYPE SELF-STARTERS

For Low Tension Circuits—Time Limit Acceleration—For Polyphase Slip-ring Motors where High Starting Torque is Required

These self-starters are designed for the automatic or remote control of polyphase slip-ring motors driving pumps, air compressors, etc. They consist of a double-pole magnet primary switch and a self-starter which automatically cuts out resistance in the secondary circuit under the control of a gravity dashpot. They are particularly applicable to installations where the load is likely to vary between wide limits.

They may be controlled by single-pole knife or snap switches, float switches, or by two push buttons, one normally open and one normally closed. If they are to be used on pressure tank systems, diaphragm or gauge type pressure or vacuum regulators may be used.

		110 Volts		220 Volts		440 Volts		550 Volts	
H. P.	Wt., Lbs. Boxed	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
5	225	118670	$178.00	118678	$178.00	118687	$178.00	118696	$178.00
7½	225	118671	184.00	118679	178.00	118688	178.00	118697	178.00
10	225	118672	190.00	118680	184.00	118689	184.00	118698	184.00
15	250	118673	194.00	118681	190.00	118690	190.00	118699	190.00
20	250	118674	206.00	118682	194.00	118691	194.00	118700	194.00
25	275	118675	234.00	118683	200.00	118692	200.00	118701	200.00
30	300	118676	240.00	118684	212.00	118693	212.00	118702	212.00
35	300	118677	244.00	118685	218.00	118694	218.00	118703	218.00
40	300	.....	.....	118686	222.00	118695	222.00	118704	222.00

Full load rotor current per ring must not exceed 100 amperes.

ACROSS-THE-LINE TYPE SELF-STARTERS

For Single-phase Self-starting or Polyphase Squirrel Cage Motors

These starters are designed for use with single-phase self-starting or polyphase motors which may be thrown directly across the line. Each consists of a double-pole magnet switch mounted on a slate panel and supported on a suitable pressed steel wall frame.

They may be controlled by single-pole knife or snap switches, float switches, or by two push buttons, one normally open and one normally closed. If they are to be used on pressure tank systems, diaphragm or gauge type pressure or vacuum regulators may be used.

1	25	118705	27.00	118713	27.00	118721	33.00	118729	33.00
2	25	118706	27.00	118714	27.00	118722	33.00	118730	33.00
3	30	118707	33.00	118715	33.00	118723	40.00	118731	40.00
4	30	118708	40.00	118716	40.00	118724	40.00	118732	40.00
5	30	118709	40.00	118717	40.00	118725	40.00	118733	40.00
7½	40	118710	56.00	118718	40.00	118726	40.00	118734	40.00
10	40	118711	56.00	118719	56.00	118727	56.00	118735	56.00
15	75	118712	89.00	118720	56.00	118728	56.00	118736	56.00

Shipping weight, 75 pounds.

The prices and weights given above do not include control apparatus.

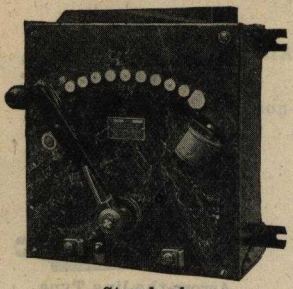
Across-the-line type starters are equipped with magnetic blow-outs, with the following exceptions:

110 volts, 1 to 3 H. P.; 220 volts, 1 to 3 H. P.; 440 volts, 1 and 2 H. P.; 550 volts, 1 and 2 H. P.

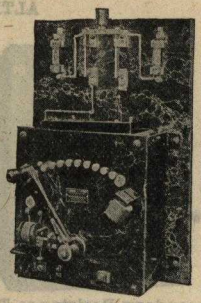
Write for Bulletins Nos. 9600 and 9625.

C-H MOTOR STARTERS

DIRECT CURRENT



Standard



Universal

STANDARD DUTY MOTOR STARTERS

With No-voltage Release

These starters are intended for use in starting direct current motors under normal full load conditions. The no-voltage release spool is usually connected in series with the shunt field of the motor, thus providing protection to the motor should the field circuit be opened while the motor is running.

	115 Volts			230 Volts			500 Volts		
H. P.	Trade No.	Wt., Lbs. Boxed	Price Each	Trade No.	Wt., Lbs. Boxed	Price Each	Trade No.	Wt., Lbs. Boxed	Price Each
¼	118368	10	$5.10	118382	10	$5.10	118398	10	$5.50
½	118369	10	5.10	118383	10	5.10	118399	10	5.60
1	118370	20	6.30	118384	20	6.60	118400	20	7.00
2	118371	20	6.60	118385	20	6.60	118401	20	7.00
3	118372	20	7.20	118386	20	7.30	118402	20	7.10
4	118373	50	12.20	118387	20	7.30	118403	20	7.50
5	118374	50	12.20	118388	20	7.30	118404	20	7.50
7½	118375	50	13.20	118389	50	13.20	118405	50	13.30
10	118376	60	24.80	118390	50	15.50	118406	50	15.50
15	118377	60	26.00	118391	50	16.80	118407	50	16.50
20	118378	60	29.10	118392	60	29.00	118408	60	21.80
25	118379	110	47.30	118393	90	33.00	118409	90	36.00
30	118380	110	47.30	118394	90	33.00	118410	90	36.00
35	118381	110	47.30	118395	90	39.00	118411	90	36.20
40	.....	.....	.....	118396	110	41.10	118412	90	36.20
50	.....	.....	.....	118397	110	46.80	118413	110	45.10

UNIVERSAL MOTOR STARTERS

With No-voltage and Overload Release, Knife Switch and Fuses

These starters combine in one compact piece of apparatus everything essential for a complete starting equipment. All studs on the back of the slate panel are countersunk and sealed, making it possible to mount the panel directly on the wall or other support.

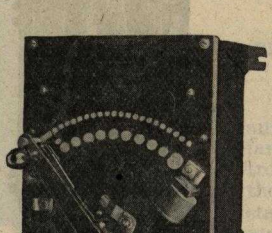
¼	118414	40	22.00	118427	40	22.00	118442	60	22.00
½	118415	40	22.00	118428	40	22.00	118443	60	22.00
1	118416	40	22.00	118429	40	22.00	118444	60	25.00
2	118417	40	22.00	118430	40	22.00	118445	60	25.00
3	118418	50	25.00	118431	50	22.00	118446	60	25.00
5	118419	90	36.00	118432	50	27.00	118447	60	27.00
7½	118420	90	39.00	118433	90	36.00	118448	90	36.00
10	118421	125	58.00	118434	125	40.00	118449	125	40.00
15	118422	125	67.00	118435	125	45.00	118450	125	42.00
20	118423	175	80.00	118436	175	65.00	118451	175	47.00
25	118424	250	114.00	118437	200	76.00	118452	200	72.00
30	118425	250	114.00	118438	200	80.00	118453	200	72.00
35	118426	250	114.00	118439	225	82.00	118454	200	72.00
40	.....	.....	.....	118440	250	102.00	118455	200	80.00
50	.....	.....	.....	118441	250	114.00	118456	250	95.00

Rheostats above 7½ H. P., 115 volts; 15 H. P., 230 volts, and 20 H. P., 500 volts, are equipped with renewable segment contacts. Smaller sizes have button contacts but, if desired, renewable segments will be furnished at an additional cost.

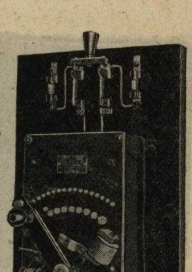
Write for Bulletins Nos. 2110 and 2150.

C-H COMPOUND MOTOR STARTERS

DIRECT CURRENT



With No-voltage Release



Universal—With No-voltage and Overload Release

These compound starters are intended for use with adjustable speed motors, and to combine in a single piece of apparatus a starting rheostat to bring the motor up to normal or full field speed and a field rheostat to regulate the speed above normal. The armature or starting resistance and the field regulating resistance are under the control of a single operating handle. The equipment is so arranged that the motor is always started under full field. The field regulating resistance is provided with from 15 to 30 speed setting points, and can be provided for any desired range of speed up to six times normal. The following prices, however, include only the amount of speed regulating resistance material required for the average conditions of speed range and motor design.

The summation watts dissipated in the field regulating resistance is the product of the maximum field current multiplied by the minimum field current multiplied by the total field regulating resistance in ohms.

COMPOUND MOTOR STARTERS

With No-voltage Release

		115 Volts			230 Volts			500 Volts		
H. P.	Summation Watts	Trade No.	Wt., Lbs. Boxed	Price Each	Trade No.	Wt., Lbs. Boxed	Price Each	Trade No.	Wt., Lbs. Boxed	Price Each
¼–2	160	118805	40	$21.00	118816	40	$21.00	118829	40	$21.00
3	240	118806	40	22.00	118817	40	22.00	118830	40	27.00
4	240	118807	50	27.00	118818	40	22.00	118831	40	27.00
5	240	118808	50	27.00	118819	40	22.00	118832	40	27.00
7½	400	118809	50	29.00	118820	50	29.00	118833	50	33.00
10	400	118810	100	42.00	118821	50	35.00	118834	50	39.00
15	400	118811	100	49.00	118822	50	38.00	118835	50	40.00
20	640	118812	100	51.00	118823	100	51.00	118836	50	51.00
25	640	118813	125	94.00	118824	100	58.00	118837	125	58.00
30	640	118814	125	94.00	118825	100	61.00	118838	125	61.00
35	640	118815	125	111.00	118826	100	67.00	118839	125	67.00
40	800	.....	....	.....	118827	125	100.00	118840	150	100.00
50	800	.....	....	.....	118828	125	122.00	118841	150	122.00

UNIVERSAL COMPOUND MOTOR STARTERS

With No-voltage and Overload Release, Knife Switch and Fuses

¼–2	160	118842	75	41.00	118853	75	41.00	118866	100	44.00
3	240	118843	75	43.00	118854	75	42.00	118867	100	49.00
4	240	118844	100	50.00	118855	75	42.00	118868	100	49.00
5	240	118845	100	50.00	118856	100	42.00	118869	100	49.00
7½	400	118846	100	58.00	118857	100	52.00	118870	100	56.00
10	400	118847	175	92.00	118858	100	58.00	118871	110	61.00
15	400	118848	175	103.00	118859	110	68.00	118872	110	65.00
20	640	118849	175	114.00	118860	175	101.00	118873	110	78.00
25	640	118850	400	177.00	118861	175	108.00	118874	250	96.00
30	640	118851	400	177.00	118862	175	113.00	118875	250	98.00
35	640	118852	400	198.00	118863	175	122.00	118876	250	111.00
40	800	.....	....	.....	118864	400	172.00	118877	325	156.00
50	800	.....	....	.....	118865	400	211.00	118878	325	167.00

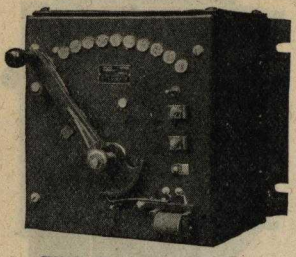
Add $2.50 list to above prices for each 100 summation watts, or fraction thereof, which must be dissipated in excess of the values given in the above tables.

Add $2.50 list to the above prices for each 1000 ohms, or fraction thereof, of field resistance required in excess of 2000 ohms.

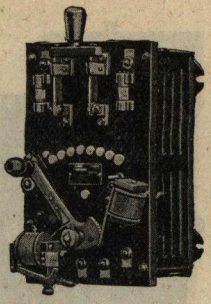
Write for Bulletins Nos. 2230 and 2245.

C-H MOTOR SPEED REGULATORS

DIRECT CURRENT



With No-voltage Release



Universal—with No-voltage and Overload Release

These regulators are intended for use only in decreasing the speed of the motor below normal by means of resistance in the armature circuit.

Fan duty regulators are intended for use with motors driving a load on which the torque decreases with the speed, and are designed to reduce the speed 50 per cent with 33 per cent of rated current flowing. They are used with ventilating fans, centrifugal pumps, ice cream freezers, etc.

Machine duty regulators are intended for use with motors driving a constant torque load, and are designed to reduce the speed 50 per cent with 80 per cent of rated current flowing. They are used with printing presses, positive pressure blowers, machine tools, etc.

MOTOR SPEED REGULATORS

With No-voltage Release

	Fan Duty						Machine Duty					
	115 Volts		230 Volts		500 Volts		115 Volts		230 Volts		500 Volts	
H.P.	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
¼	26551	$11.00	26566	$11.00	26581	$12.00	118747	$11.00	118761	$11.00	118778	$12.00
½	26552	12.00	26567	12.00	26582	13.00	118748	12.00	118762	12.00	118779	13.00
1	26553	14.00	26568	14.00	26583	14.00	118749	20.00	118763	20.00	118780	20.00
1½	26686	20.00	26688	20.00	26690	20.00	118750	22.00	118764	22.00	118781	22.00
2	26554	22.00	26569	22.00	26584	22.00	118751	28.00	118765	28.00	118782	28.00
3	26555	28.00	26570	28.00	26585	28.00	118752	33.00	118766	33.00	118783	33.00
4	26687	36.00	26689	36.00	26691	39.00	118753	39.00	118767	45.00	118784	45.00
5	26556	42.00	26571	42.00	26586	56.00	118754	45.00	118768	56.00	118785	56.00
7½	26557	56.00	26572	56.00	26587	67.00	118755	56.00	118769	69.00	118786	69.00
10	26558	72.00	26573	72.00	26588	84.00	118756	72.00	118770	72.00	118787	95.00
15	26559	100.00	26574	89.00	26589	111.00	118757	100.00	118771	89.00	118788	122.00
20	26560	117.00	26575	100.00	26590	122.00	118758	128.00	118772	111.00	118789	134.00
25	26561	150.00	26576	145.00	26591	144.00	118759	150.00	118773	146.00	118790	145.00
30	26562	167.00	26577	156.00	26592	156.00	118760	167.00	118774	156.00	118791	156.00
35	26563	200.00	26578	200.00	26593	200.00	.....	.....	118775	200.00	118792	200.00
40	.....	.....	26579	222.00	26594	222.00	.....	.....	118776	222.00	118793	222.00
50	.....	.....	26580	278.00	26595	278.00	.....	.....	118777	278.00	118794	278.00

UNIVERSAL SPEED REGULATORS

With No-voltage and Overload Release, Knife Switch and Fuses

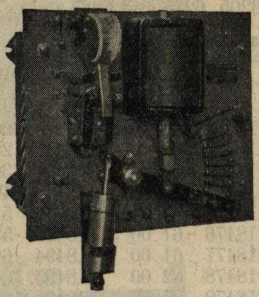
¼	26596	31.00	26626	31.00	26656	33.00	26611	31.00	26641	31.00	26671	33.00
½	26597	33.00	26627	33.00	26657	37.00	26612	33.00	26642	33.00	26672	37.00
1	26598	39.00	26628	39.00	26658	39.00	26613	45.00	26643	45.00	26673	45.00
1½	26692	45.00	26694	45.00	26696	45.00	26698	49.00	26700	49.00	26702	49.00
2	26599	47.00	26629	47.00	26659	47.00	26614	52.00	26644	52.00	26674	52.00
3	26600	50.00	26630	50.00	26660	50.00	26615	56.00	26645	56.00	26675	56.00
4	26693	67.00	26695	67.00	26697	80.00	26699	69.00	26701	80.00	26703	80.00
5	26601	78.00	26631	78.00	26661	91.00	26616	80.00	26646	91.00	26676	91.00
7½	26602	100.00	26632	100.00	26662	111.00	26617	100.00	26647	113.00	26677	113.00
10	26603	111.00	26633	107.00	26663	120.00	26618	111.00	26648	120.00	26678	131.00
15	26604	173.00	26634	144.00	26664	166.00	26619	173.00	26649	144.00	26679	178.00
20	26605	200.00	26635	166.00	26665	189.00	26620	212.00	26650	178.00	26680	200.00
25	26606	267.00	26636	206.00	26666	206.00	26621	267.00	26651	202.00	26681	206.00
30	26607	294.00	26637	230.00	26667	222.00	26622	294.00	26652	230.00	26682	222.00
35	26608	333.00	26638	306.00	26668	288.00	.....	.....	26653	306.00	26683	288.00
40	.....	.....	26639	356.00	26669	333.00	.....	.....	26654	356.00	26684	333.00
50	.....	.....	26640	422.00	26670	400.00	.....	.....	26655	422.00	26685	400.00

Regulators above 7½ H. P., 115 volts; 15 H. P., 230 volts, and 15 H. P., 500 volts, are equipped with renewable segment contacts. Smaller sizes have button contacts but, if desired, renewable segments will be furnished at an additional cost.

Write for Bulletins Nos. 3110 and 3150.

C-H SELF-STARTERS

DIRECT CURRENT



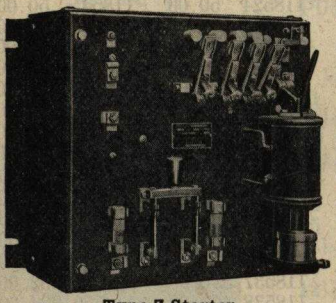
Starter with Pivoted Arm Rheostat

TIME LIMIT TYPE SELF-STARTERS

PIVOTED ARM RHEOSTAT—WITH MAGNETIC MAIN SWITCH WITHOUT KNIFE SWITCH OR FUSES

These starters can be used in practically all cases where automatic starting or remote control is desired, as with pumps, fans, machine tools, etc. The rate of acceleration is controlled by an oil-filled dashpot, which can be adjusted to suit the load conditions, and which, when once set, causes the starter always to cut the resistance in the same time. The main line switch is provided with magnetic blow-out and has solid copper contacts which may be easily renewed. The capacity of the resistance is adequate for the frequent starting service required with elevators, pumps, compressors, etc., where the motor requires about 150 per cent of full load current for acceleration.

	115 Volts		230 Volts		500 Volts	
H. P.	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
½	105892	$73.00	105894	$71.00	105896	$78.00
1	094901	73.00	094910	71.00	094919	78.00
1½	105893	73.00	105895	72.00	105897	78.00
2	094902	73.00	094911	72.00	094920	78.00
3	094903	76.00	094912	73.00	094921	78.00
4	094904	78.00	094913	78.00	094922	78.00
5	094905	80.00	094914	78.00	094923	82.00
7½	094906	96.00	094915	98.00	094924	98.00
10	094907	100.00	094916	100.00	094925	106.00
15	094908	111.00	094917	106.00	094926	111.00
20	.....	.....	094918	122.00	094927	122.00



Type Z Starter with Knife Switch

TYPE Z

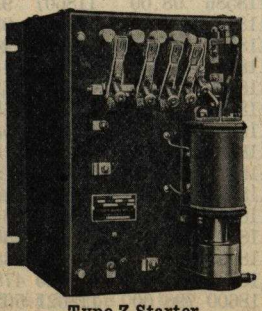
These starters are designed for the automatic or remote control of motors driving pumps, fans, etc. The time of acceleration of the motor is adjustable by means of an air dashpot.

With Knife Switch and Fuses

	115 Volts		230 Volts		500 Volts	
H. P.	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
1	105869	$38.00	105876	$38.00	105884	$48.00
2	105870	39.00	105877	39.00	105885	49.00
3	105871	40.00	105878	40.00	105886	50.00
4	105872	84.00	105879	46.00	105887	58.00
5	105873	84.00	105880	47.00	105888	60.00
7½	105874	88.00	105881	84.00	105889	87.00
10	105875	96.00	105882	87.00	105890	91.00
15	.....	.....	105883	91.00	105891	96.00

Without Knife Switch or Fuses

1	094955	32.00	094962	32.00	26158	41.00
2	094956	33.00	094963	33.00	26159	42.00
3	094957	36.00	094964	36.00	26160	43.00
4	094958	70.00	094965	41.00	26161	49.00
5	094959	70.00	094966	42.00	26162	50.00
7½	094960	73.00	26155	74.00	26163	77.00
10	094961	77.00	26156	77.00	26164	82.00
15	.....	.....	26157	79.00	26165	87.00



Type Z Starter without Knife Switch

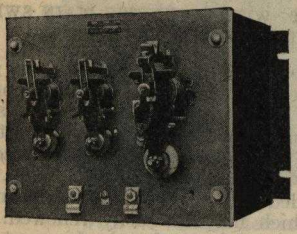
For complete information, write for Bulletins Nos. 6105, 6110 and 6140.

C-H MOTOR STARTERS

DIRECT CURRENT.

MAGNETIC LOCKOUT SELF-STARTERS

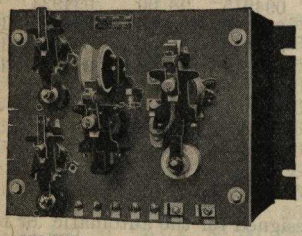
Designed for the automatic or remote control of motors, driving pumps, compressors, fans, machine tools, or other heavy machinery. Write for Bulletins Nos. 6205, 6215 and 6225.



Without Magnetic Main Switch

Without Magnetic Main Switch—Without Knife Switch or Fuses

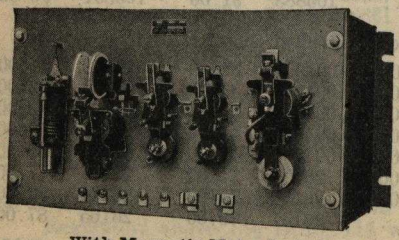
H. P.	115 Volts Trade No.	115 Volts Price Each	230 Volts Trade No.	230 Volts Price Each	500 Volts Trade No.	500 Volts Price Each
1	118457	$28.00	118471	$28.00	118488	$28.00
2	118458	29.00	118472	29.00	118489	29.00
3	118459	30.00	118473	30.00	118490	30.00
4	118460	49.00	118474	49.00	118491	49.00
5	118461	51.00	118475	51.00	118492	51.00
7½	118462	58.00	118476	61.00	118493	58.00
10	118463	61.00	118477	61.00	118494	60.00
15	118464	107.00	118478	82.00	118495	100.00
20	118465	107.00	118479	87.00	118496	100.00
25	118466	111.00	118480	89.00	118497	100.00
30	118467	167.00	118481	113.00	118498	109.00
35	118468	178.00	118482	124.00	118499	111.00
40	118469	224.00	118483	142.00	118500	160.00
50	118470	228.00	118484	151.00	118501	162.00
60	.....	.....	118485	240.00	118502	167.00
75	.....	.....	118486	272.00	118503	212.00
100	.....	.....	118487	318.00	118504	248.00



With Magnetic Main Switch

With Magnetic Main Switch—Without Knife Switch or Fuses

1	118505	49.00	118522	49.00	118543	49.00
2	118506	50.00	118523	50.00	118544	50.00
3	118507	50.00	118524	50.00	118545	50.00
4	118508	71.00	118525	71.00	118546	71.00
5	118509	72.00	118526	72.00	118547	72.00
7½	118510	82.00	118527	82.00	118548	78.00
10	118511	87.00	118528	82.00	118549	80.00
15	118512	147.00	118529	111.00	118550	127.00
20	118513	147.00	118530	116.00	118551	129.00
25	118514	151.00	118531	118.00	118552	129.00
30	118515	232.00	118532	156.00	118553	136.00
35	118516	240.00	118533	162.00	118554	138.00
40	118517	288.00	118534	182.00	118555	200.00
50	118518	290.00	118535	187.00	118556	206.00
60	118519	564.00	118536	300.00	118557	210.00
75	118520	598.00	118537	336.00	118558	232.00
100	118521	696.00	118538	400.00	118559	294.00
125	.....	.....	118539	702.00	118560	426.00
150	.....	.....	118540	740.00	118561	464.00
175	.....	.....	118541	760.00	118562	482.00
200	.....	.....	118542	772.00	118563	490.00



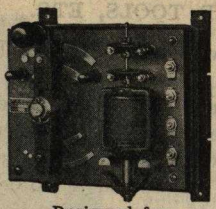
With Magnetic Main Switch and Overload

With Magnetic Main Switch and Overload—Without Knife Switch or Fuses

1	118564	65.00	118581	65.00	118602	65.00
2	118565	67.00	118582	67.00	118603	67.00
3	118566	67.00	118583	67.00	118604	67.00
4	118567	87.00	118584	87.00	118605	87.00
5	118568	89.00	118585	89.00	118606	89.00
7½	118569	102.00	118586	98.00	118607	93.00
10	118570	104.00	118587	98.00	118608	95.00
15	118571	169.00	118588	127.00	118609	144.00
20	118572	171.00	118589	133.00	118610	144.00
25	118573	173.00	118590	136.00	118611	147.00
30	118574	250.00	118591	178.00	118612	156.00
35	118575	260.00	118592	184.00	118613	158.00
40	118576	310.00	118593	200.00	118614	216.00
50	118577	314.00	118594	204.00	118615	218.00
60	118578	580.00	118595	322.00	118616	224.00
75	118579	616.00	118596	356.00	118617	264.00
100	118580	720.00	118597	416.00	118618	306.00
125	.....	.....	118598	720.00	118619	438.00
150	.....	.....	118599	760.00	118620	478.00
175	.....	.....	118600	798.00	118621	502.00
200	.....	.....	118601	810.00	118622	510.00

C-H SELF-STARTING SPEED REGULATORS

DIRECT CURRENT



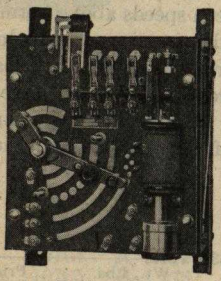
Designed for Knife Switch Control

KNIFE SWITCH CONTROL—SINGLE-STEP

Speed Regulation, 30 Per Cent Armature and 25 Per Cent Field

Designed for the control of cutters, trimmers, job presses, folders, and similar machines. A double-pole main line switch must be installed. Upon closing the main line switch, the motor is started with one step of resistance in circuit, which is cut out automatically.

H. P.	115 Volts Trade No.	115 Volts Price Each	230 Volts Trade No.	230 Volts Price Each	H. P.	115 Volts Trade No.	115 Volts Price Each	230 Volts Trade No.	230 Volts Price Each
¼	119309	$31.00	119317	$31.00	1½	119313	$42.00	119321	$42.00
½	119310	31.00	119318	31.00	2	119314	42.00	119322	42.00
¾	119311	31.00	119319	31.00	2½	119315	44.00	119323	44.00
1	119312	36.00	119320	36.00	3	119316	47.00	119324	47.00



Designed for Push Button Control without Dynamic Braking

PUSH BUTTON CONTROL—WITHOUT DYNAMIC BRAKING

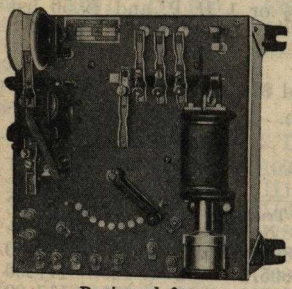
Speed Regulation, 50 Per Cent Armature and 20 Per Cent Field

Designed for the control of folders, job presses, and similar machines. Intended to be controlled through push button control stations, but may also be controlled by the main line switch.

H. P.	115 Volts Trade No.	115 Volts Price Each	230 Volts Trade No.	230 Volts Price Each	500 Volts Trade No.	500 Volts Price Each
1	82287	$62.00	82294	$62.00	82303	$67.00
1½	82288	67.00	82295	67.00	82305	71.00
2	82289	67.00	82296	67.00	82307	71.00
2½	82290	71.00	82297	71.00	82309	76.00
3	82291	73.00	82298	73.00	82311	78.00

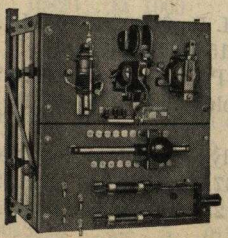
PUSH BUTTON CONTROL—WITH DYNAMIC BRAKING

Designed especially for the control of printing presses.



Designed for Push Button Control with Dynamic Braking

Speed Regulation, 20 Per Cent to 100 Per Cent Field						
½	119325	69.00	119335	69.00	119347	76.00
1	119326	70.00	119336	70.00	119348	77.00
1½	119327	71.00	119337	71.00	119349	78.00
2	119328	72.00	119338	72.00	119350	79.00
2½	119329	73.00	119339	73.00	119351	80.00
3	119330	76.00	119340	76.00	119352	82.00
4	119331	125.00	119341	115.00	119353	122.00
5	119332	125.00	119342	117.00	119354	125.00
7½	119333	150.00	119343	122.00	119355	131.00
10	119334	161.00	119344	128.00	119356	138.00
12½	.....	.....	119345	161.00	119357	172.00
15	.....	.....	119346	172.00	119358	193.00
Speed Regulation, 60 Per Cent Armature and 10 to 50 Per Cent Field						
1	146460	88.00	146467	88.00	146476	91.00
2	146461	92.00	146468	92.00	146477	96.00
3	146462	97.00	146469	98.00	146478	101.00
4	146463	149.00	146470	121.00	146479	159.00
5	146464	153.00	146471	129.00	146480	166.00
7½	146465	205.00	146472	165.00	146481	171.00
10	146466	215.00	146473	171.00	146482	183.00
12½	.....	.....	146474	214.00	146483	220.00
15	.....	.....	146475	220.00	146484	244.00
Speed Regulation, 40 Per Cent Armature and 50 to 100 Per Cent Field						
1	146485	87.00	146492	87.00	146501	91.00
2	146486	89.00	146493	89.00	146502	93.00
3	146487	92.00	146494	92.00	146503	97.00
4	146488	147.00	146495	140.00	146504	145.00
5	146489	153.00	146496	142.00	146505	148.00
7½	146490	196.00	146497	152.00	146506	150.00
10	146491	208.00	146498	156.00	146507	166.00
12½	.....	.....	146499	208.00	146508	214.00
15	.....	.....	146500	214.00	146509	220.00



Designed for Push Button Control with Dynamic Braking

A main line knife switch and fuses, mounted on the bottom of the controller so that the switch projects downward, can be furnished for 115 and 230 volts only at an additional charge.

All controllers except the knife switch type, listed at top of page, can be so furnished.

Write for Bulletins 6410, 6415, 6420 and 6425.

C-H ENCLOSED COMPOUND CONTROLLERS

CARPENTER TYPE, FOR PRINTING PRESSES, MACHINE TOOLS, ETC.



These controllers are made in two types—non-reversible and reversible.

The non-reversible type is designed to give five speeds below normal by insertion of resistance in the armature circuit and ten speeds above normal by field weakening. 65 per cent reduction in speed below normal can be secured if motor is carrying its full rated load and the field resistance can be so proportioned as to give a maximum of approximately 50 per cent increase in speed above normal.

The reversible type is designed to give six speeds below normal by armature resistance and fifteen speeds above normal by field weakening. 65 per cent reduction in speed below normal can be secured if motor is carrying the full rated load and the field resistance may be so proportioned as to give a maximum speed increase of 2 to 1, or even 3 to 1, depending upon the shunt field characteristics of the motor. Provision is made for three reverse speeds.

NON-REVERSIBLE TYPE

115 Volts				230 Volts			
Trade No.	Cap. H. P.	Wt., Lbs. Boxed	Price Each	Trade No.	Cap. H. P.	Wt., Lbs. Boxed	Price Each
11961	½	90	$72.00	11965	½	90	$76.00
11962	1	100	78.00	11966	1	100	82.00
11963	2	120	83.00	11967	2	120	87.00
11964	3	135	87.00	11968	3	135	91.00

Above prices cover front and resistance mounted separately.

For front and resistance mounted together add $5.00 list for ½ or 1 H. P. and $9.50 list for 2 or 3 H. P.

For overload and push button release add $14.50 list.

For overload protection and dynamic brake load resistance, add $24.00 list.

These features cannot be added to controllers already in service.

REVERSIBLE TYPE

115 Volts				230 Volts				500 Volts			
Trade No.	Cap. H. P.	Wt., Lbs. Boxed	Price Each	Trade No.	Cap. H. P.	Wt., Lbs. Boxed	Price Each	Trade No.	Cap. H. P.	Wt., Lbs. Boxed	Price Each
80562	1	140	$ 97.00	80570	1	140	$100.00	80578	1	140	$109.00
80563	2	160	100.00	80571	2	160	103.00	80579	2	160	111.00
80564	3	175	107.00	80572	3	175	111.00	80580	3	175	117.00
80565	4	195	115.00	80573	4	195	118.00	80581	4	195	126.00
80566	5	195	121.00	80574	5	195	125.00	80582	5	195	133.00
80567	7½	315	190.00	80575	7½	250	145.00	80583	7½	250	156.00
80568	10	355	212.00	80576	10	355	216.00	80584	10	350	222.00
80569	15	450	252.00	80577	15	450	260.00	80585	15	450	266.00

Above prices cover front and resistance mounted separately.

For front and resistance mounted together, add the following: 1 H. P., $5.00. 2 to 3 H. P., $9.50. 4 to 5 H. P., $12.00. 7½ H. P., $13.50. 10 H. P., $14.50. 15 H. P., $17.00.

For overload and push button release, add $22.00 list for 1 to 5 H. P., 115 volts, and 1 to 7½ H. P., 230 and 500 volts. Add $37.00 list for 7½ to 15 H. P., 115 volts, and 10 to 15 H. P., 230 and 500 volts.

For overload and push button release features, with addition of dynamic brake load resistance for quick stopping, add the following: 1 to 5 H. P., 115 volts, $47.00. 1 to 7½ H. P., 230 and 500 volts, $47.00. 7½ to 10 H. P., 115 volts, $64.00. 10 H. P., 230 to 500 volts, $64.00. 15 H. P., 115 to 500 volts, $78.00.

These features cannot be added to controllers already in service.

For complete information, write for Bulletins Nos. 3605 and 3620.



C-H REVERSIBLE DRUM CONTROLLERS

FOR CRANES AND HOISTS

These controllers are designed for use with direct current motors operating cranes, hoists or apparatus requiring similar control. The resistance provided is of intermittent capacity and will give 50 per cent speed reduction under average load conditions.

Either series or shunt-wound solenoid-operated brakes can be used with these controllers.

If it is desired to limit the travel in either or both directions, a magnet switch panel may be used with Types A, B, and C drums. The magnet switch panel regularly furnished with Type D drums may be employed in a like manner and avoid the necessity of buying additional equipment.

STANDARD DUTY—DRUM AND RESISTANCE COMPLETE

50 Per Cent Speed Reduction

H. P.	115 Volts Trade No.	Type	Wt. Lbs.	Price Each	230 Volts Trade No.	Type	Wt. Lbs.	Price Each	500 Volts Trade No.	Type	Wt. Lbs.	Price Each
1	10760	A	175	$109.00	10774	A	175	$108.00	10791	A	175	$108.00
2	10761	A	175	110.00	10775	A	175	110.00	10792	A	175	110.00
3	10762	A	175	114.00	10776	A	175	114.00	10793	A	175	112.00
4	10763	A	225	118.00	10777	A	200	115.00	10794	A	175	115.00
5	10764	A	225	118.00	10778	A	200	121.00	10795	A	200	120.00
7½	10765	B	275	149.00	10779	A	250	124.00	10796	A	200	129.00
10	10766	B	275	149.00	10780	A	250	121.00	10797	A	200	136.00
12½	10833	C	450	149.00	10834	A	250	121.00	10835	A	225	140.00
15	10767	C	450	208.00	10781	B	300	151.00	10798	A	225	142.00
20	10768	C	500	211.00	10782	B	350	152.00	10799	B	375	174.00
25	10769	C	500	211.00	10783	B	350	152.00	10800	B	375	174.00
30	10770	D	900	535.00	10784	C	525	235.00	10801	B	375	174.00
35	10771	D	900	535.00	10785	C	525	229.00	10802	B	375	174.00
40	10772	D	975	540.00	10786	C	600	232.00	10803	B	450	188.00
50	10773	D	1000	543.00	10787	C	600	235.00	10804	C	600	235.00
60	.....	..	...	.....	10788	D	1075	558.00	10805	C	625	253.00
75	.....	..	...	.....	10789	D	1100	565.00	10806	D	1100	565.00
100	.....	..	...	.....	10790	D	1175	589.00	10807	D	1175	589.00

STEEL MILL DUTY—DRUM AND RESISTANCE COMPLETE

1	10808	A	175	109.00	10822	A	175	108.00	013909	A	175	108.00
2	10809	A	175	111.00	10823	A	175	111.00	013910	A	175	110.00
3	10810	A	175	116.00	10824	A	175	116.00	013911	A	175	115.00
4	10811	A	225	118.00	10825	A	200	121.00	013912	A	200	120.00
5	10812	A	225	118.00	10826	A	325	141.00	013913	A	200	125.00
7½	10813	B	275	149.00	10827	A	300	138.00	013914	A	200	137.00
10	10814	B	275	149.00	10828	A	250	121.00	013915	A	225	150.00
12½	10836	C	500	149.00	10837	A	300	139.00	10838	A	250	154.00
15	10815	C	500	211.00	10829	B	350	164.00	013916	A	400	164.00
20	10816	C	500	211.00	10830	B	350	152.00	013917	B	375	174.00
25	10817	C	525	229.00	10831	B	375	170.00	013918	B	375	174.00
30	10818	D	975	538.00	10832	C	600	232.00	013919	B	375	174.00
35	10819	D	975	541.00	013903	C	600	235.00	013920	B	450	197.00
40	10820	D	1000	541.00	013904	C	625	235.00	013921	B	475	197.00
50	10821	D	1075	562.00	013905	C	700	256.00	013922	C	625	256.00
60	.....	..	....	.....	013906	D	1100	565.00	013923	C	725	259.00
75	.....	..	....	.....	013907	D	1175	589.00	013924	D	1175	589.00
100	.....	..	....	.....	013908	D	1400	613.00	013925	D	1400	613.00

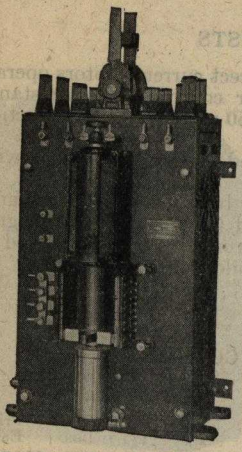
For complete information write for Bulletin No. 5300.

STANDARD DUTY OR STEEL MILL DUTY—DRUM ONLY

Type Drum	115 Volts Trade No.	Cap. H. P.	230 Volts Trade No.	Cap. H. P.	500 Volts Trade No.	Cap. H. P.	Finger Size Inches	Cap. Amps.	No. of Speeds Ea. Way	Wt., Lbs. Boxed	Price Each
A	013926	1– 5	013930	1– 12½	013934	1– 15	½	50	6	125	$ 98.00
B	013927	7½–10	013931	15– 25	013935	20– 40	¾	100	7	175	128.00
C	013928	12½–25	013932	30– 50	013936	50– 60	1	200	9	325	187.00
D	013929	30– 50	013933	60–100	013937	75–100	2–1	400	9	700	493.00

Price and weight of Type D controllers include magnet switch panel.

C-H ELEVATOR CONTROLLERS



Semi-mechanical Controller

REVERSIBLE, SINGLE-SPEED, SEMI-MECHANICAL CONTROLLERS

Direct Current, Dashpot Type, for Slow Speed Elevators

These controllers consist of a quick-break reverse switch, self-contained with the control panel, which carries a solenoid operated rheostat with air dashpot. Operation from the car may be by wheel, lever or rope, as desired.

Hatchway limit switches cannot be used with this controller without adding a magnet main switch and only then if a solenoid brake is used.

For complete information, write for Bulletin No. 7005.

H. P.	115 Volts Trade No.	Ship. Wt., Lbs.	Price Each	230 Volts Trade No.	Ship. Wt., Lbs.	Price Each	500 Volts Trade No.	Ship. Wt., Lbs.	Price Each
5	82426	225	$150.00	82432	200	$145.00	82439	200	$145.00
7½	82427	225	150.00	82433	225	145.00	82440	200	145.00
10	82428	225	167.00	82434	225	145.00	82441	225	145.00
15	82429	225	200.00	82425	225	167.00	82442	275	167.00
20	82430	250	222.00	82436	250	178.00	82443	275	178.00
25	.....	....	.....	82437	250	200.00	82444	275	189.00

Above prices do not include sprockets.

REVERSIBLE, SINGLE-SPEED, FULL MECHANICAL CONTROLLERS

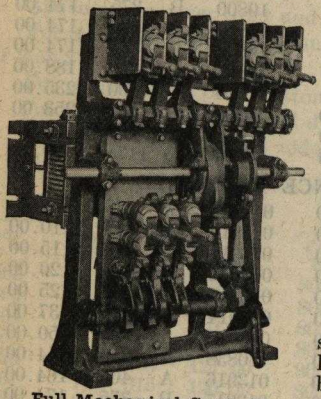
Alternating Current

Dashpot Type, for Slip-ring Induction Motors

These are self-contained, designed for either wheel, lever or rope drive.

Hatchway limit switches and slack cable switches suitable for use with magnet main switch equipment can be furnished.

For complete information, write for Bulletin No. 9750.



Full Mechanical Controller

Trade No.	H. P.	Ship. Wt., Lbs.	Price Each
	25 to 60 Cycles, 110 Volts		
82446	5–20	400	$232.00
	220 to 550 Volts		
82447	5–20	400	232.00
82448	25–30	400	234.00
82449	35–40	400	236.00

If magnet main switch is desired add the following prices: 5 to 20 H. P., 110 volts, and 5 to 25 H. P., 220–550 volts, $78.00. 30 to 40 H. P., 220–550 volts, $93.00.

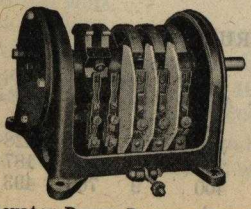
ELEVATOR DRUM REVERSE SWITCHES

Alternating Current, with Main Line Magnet Switch, for High Torque Squirrel Cage Motors

These controllers consist of a primary magnet switch and a separate drum reverse switch. Designed primarily for connecting high torque polyphase squirrel cage motors directly to the line, but may also be used with special single-phase motors provided with centrifugal interlock. Operation from the car may be by wheel, lever or rope, as desired.

Magnetic blow-outs are furnished on the magnet switch for all sizes except 1 and 2 H. P., all voltages and 3 H. P., 110 and 220 volts.

For complete information, write for Bulletin No. 9715.



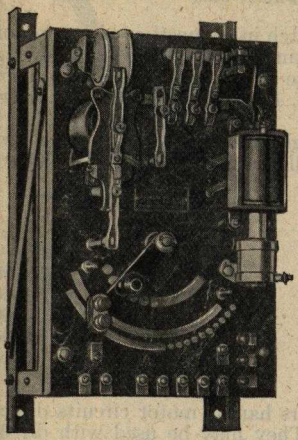
Elevator Drum Reverse Switch

H. P.	25 to 60 Cycles 110 Volts Trade No.	Price Each	220 Volts Trade No.	Price Each	440 Volts Trade No.	Price Each	550 Volts Trade No.	Price Each	Ship. Wt. Lbs.
1	119769	$77.	119776	$77.	119785	$83.	119794	$83.	110
2	119770	77.	119777	77.	119786	83.	119795	83.	110
3	119771	83.	119778	83.	119787	90.	119796	90.	110
5	119772	90.	119779	90.	119788	90.	119797	90.	110
7½	119773	106.	119780	90.	119789	90.	119798	90.	110
10	119774	106.	119781	106.	119790	106.	119799	106.	110
15	119775	139.	119782	106.	119791	106.	119800	106.	110
20	.....	....	119783	139.	119792	139.	119801	139.	150
25	.....	....	119784	139.	119793	139.	119802	139.	150

Above prices do not include sprockets.

C-H SELF-STARTING SPEED REGULATORS

PREDETERMINED SPEED ADJUSTING, DYNAMIC BRAKING REGULATORS



For Printing Presses or Similar Service

With these controllers the inrush current and consequently the torque, on starting, is always the same regardless of the position of the adjustable speed arm, and provision is made, by one or more down contacts on the rocker arm, so that the motor always starts with full field. The field rheostat is never cut in until the motor is accelerated up to normal speed, then the field rheostat is inserted in one or more sections, depending upon the size of the motor and the percentage of field control.

These controllers are designed primarily for use in connection with one or more push button stations or in combination with other types of reversing and controlling stations making any desirable combination.

For complete information, write for Bulletin No. 6425.

For 10–50 Per Cent Field Control and 60 Per Cent Armature Reduction

H. P.	115 Volts Trade No.	Style of Regulator	Ship. Wt., Lbs.	Price Each	230 Volts Trade No.	Style of Regulator	Ship. Wt., Lbs.	Price Each	500 Volts Trade No.	Style of Regulator	Ship. Wt., Lbs.	Price Each
1	82339	A	100	$88.00	82346	A	100	$88.00	82353	A	100	$91.00
2	82340	A	100	92.00	82347	A	100	92.00	82354	A	100	96.00
3	82341	A	100	97.00	82348	A	100	98.00	82355	A	100	101.00
4	82342	B	100	149.00	82349	A	100	121.00	82356	B	100	159.00
5	82343	B	125	153.00	82350	A	125	129.00	82357	B	125	166.00
7½	82344	C	125	205.00	82351	B	125	165.00	82358	B	125	171.00
10	82345	C	190	215.00	82352	B	130	171.00	82359	B	130	183.00

For 55–100 Per Cent Field Control and 40 Per Cent Armature Reduction

1	82385	A	115	87.00	82392	A	115	87.00	82401	A	115	91.00
2	82386	A	115	89.00	82393	A	115	89.00	82402	A	115	93.00
3	82387	A	115	92.00	82394	A	115	92.00	82403	A	115	97.00
4	82388	B	140	147.00	82395	B	140	140.00	82404	B	140	145.00
5	82389	B	140	153.00	82396	B	140	142.00	82405	B	140	148.00
7½	82390	C	210	196.00	82397	B	150	152.00	82406	B	150	159.00
10	82391	C	210	208.00	82398	B	150	156.00	82407	B	150	166.00
12½	.....	..	...	.....	82399	C	225	208.00	82408	C	175	214.00
15	.....	..	...	.....	82400	C	225	214.00	82409	C	200	220.00

When ordering, the speed range and field control must be specified.

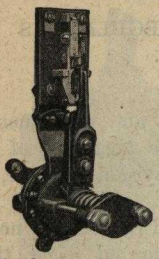
For accessories for use with these controllers, see Bulletin No. 10250.

EXTRA PARTS

Main Line Switch and Fuse Mounted on Bottom of Frame

Trade No.	Description	Price Each
82413	For Type A speed regulator, 115 or 230 volts	10.00
82414	For Type B speed regulator, 115 or 230 volts	11.00
82415	For Type C speed regulator, 115 or 230 volts	16.00

C-H REGULATORS



Diaphragm Type Pressure Regulator Single-pole

DIAPHRAGM TYPE PRESSURE REGULATORS

For Pressure above Atmospheric only

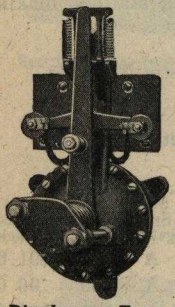
Designed primarily to act as a pilot switch in connection with a motor self-starter. They may also be used as a single-pole switch for throwing across the line a small direct or single-phase alternating current motor of a capacity not greater than ¼ horse power, 110 volts, or ½ horse power, 220–550 volts.

These regulators open the switch at high pressure and close it at low.

For complete information, write for Bulletins Nos. 10001 and 10003.

Single-pole

Trade No.	Type	Pressure Range Lbs. per Sq. In.	Ship. Wt., Lbs.	Price Each
118995	A	1½ to 14	20	$33.00
118996	B	3 to 60	18	24.00
118997	C	5 to 115	18	24.00
118998	D	5 to 175	18	24.00



Diaphragm Type Pressure Regulator Double-pole

Double-pole

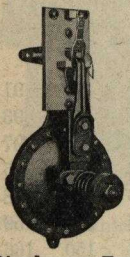
These double-pole diaphragm regulators handle motor circuits direct without an additional magnetic switch. They may be used with direct current motors up to 1 horse power, 115, 230 and 500 volts, and alternating current motors, single-phase, 2 horse power, 110 volts; 4 horse power, 220 volts; 5 horse power, 440 and 550 volts; and two and three-phase alternating current motors, 3 horse power, 110 volts; 5 horse power, 220, 440 and 550 volts.

105857	A	10 to 75	30	28.00
105864	B	10 to 95	30	28.00

DIAPHRAGM TYPE VACUUM REGULATORS

Designed to act similar to above regulators. They open the switch at high vacuum and close at low.

For complete information, write for Bulletin No. 10005.



Diaphragm Type Vacuum Regulator

Single-pole

Trade No.	Type	Vacuum Range Inches of Mercury	Ship. Wt., Lbs.	Price Each
119001	A	3 to 9	30	$33.00
119002	B	3 to 18	30	33.00
119003	C	3 to 28	30	33.00

GAUGE TYPE PRESSURE REGULATORS

For Pressures above or below Atmospheric—Handles Solenoid Current only

Designed to handle solenoid currents only and must always be used in connection with a suitable self-starter. The gauges can be furnished with dials reading from 0 to 25, 50, 100, 150 and 250 pounds per square inch above atmospheric pressure, and from 0 to 30 inches of mercury below atmospheric.

The closest practicable setting of the two contact points is 5 per cent of the maximum pressure shown on the dial of the gauge used; i. e., 2.5 pounds for the 50-pound gauge, or 12.5 pounds for the 250-pound gauge. The lowest reliable pressure setting is 5 pounds for the 25-pound gauge, and 10 per cent of the maximum pressure shown on the dial for the other capacities.

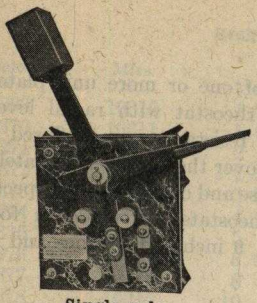
For complete information, write for Bulletin No. 10010.



Gauge Type Pressure Regulator

Trade No.	Approx. Ship. Wt., Lbs.	Price Each
118999	11	$44.00

C-H FLOAT SWITCHES



Single-pole
Float Switch
Open Type

OPEN TYPE FLOAT SWITCHES

Designed for handling self-starter pilot circuits for the automatic control of direct or alternating current motors operating tank or sump pumps.

SINGLE-POLE—FOR SOLENOID CURRENTS ONLY

Trade No.	Description	Price Each
094972	Open type float switch	$ 9.00

DOUBLE-POLE—FOR SMALL MOTOR SERVICE

118985	Open type float switch	17.00

Accessories

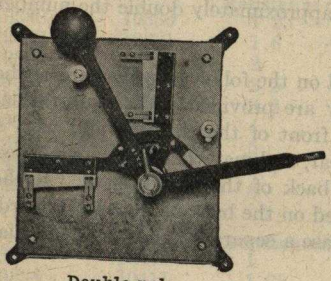
094970	Outfit of copper float, iron counterweight, two iron pulleys, 15 feet of copper chain, with four stop buttons	8.00

For complete information write for Bulletins Nos. 10020 and 10025.

ENCLOSED TYPE FLOAT SWITCHES

These switches are designed for use in connection with a suitable self-starter for automatically controlling direct or alternating current motors operating tank or sump pumps. The switches can be furnished for various mountings as listed below.

No. 1. For mounting on the inside wall of tank.
No. 2. For clamping over the edge of tank.
No. 3. With floor pedestal.
No. 4. With floor pedestal, arranged for chain operation.
No. 5. For mounting on the outside of tank, with operating shaft extended to project through the tank wall.



Double-pole
Float Switch
Open Type

SINGLE-POLE—FOR SOLENOID CURRENTS ONLY
110 to 550 Volts

Trade No.	Price, Each — Style Mounting — No. 1	No. 2	No. 3	No. 4	No. 5
105865	$21.00	$23.00	$24.00	$32.00	$22.00

Shipping weight, 45 pounds.

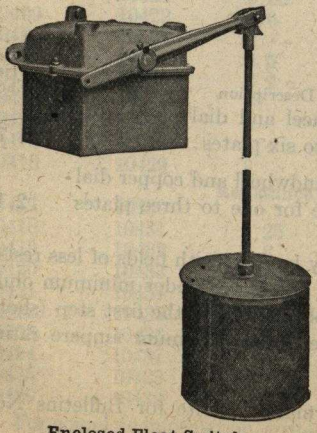
Above prices include switch and accessories.

TWO, THREE OR FOUR-POLE—FOR SMALL MOTOR SERVICE

For Single-phase Self-starting Motors, and Polyphase Squirrel Cage Motors which may be Thrown Directly Across the Line to Start.

	Single-phase; Two-pole; Rated Capacity, 5 H. P., 110, 220, 440 and 550 Volts				
105866	24.00	27.00	28.00	36.00	26.00
	Three-phase or Two-phase, Three-wire; Three-pole; Rated Capacity, 5 H. P., 110 Volts; 7½ H. P., 220, 440 and 550 Volts				
105867	37.00	39.00	40.00	48.00	38.00
	Two-phase, Four-wire; Four-pole; Rated Capacity, 5 H. P., 110 Volts; 7½ H. P., 220, 440 and 550 Volts				
105868	40.00	42.00	43.00	51.00	41.00
	For Direct Current Motors when used with Suitable Self-starter Rated Capacity, up to 7½ H. P., 115 and 230 Volts				
118983	24.00	27.00	28.00	36.00	26.00
	Rated Capacity, up to 7½ H. P., 500 Volts*				
118984	40.00	42.00	43.00	51.00	41.00

*Switches for 115 and 230-volt service are two-pole. For 500-volt circuits the four-pole structure is used with the four blades connected two in series, giving a double break in each line.



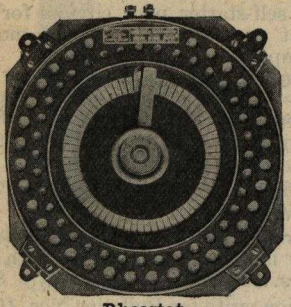
Enclosed Float Switch

Above prices cover switch and accessories.

When ordering, state whether sump switch or tank switch is desired, and the style mounting wanted. Also state the horse power of motor and the voltage; type of motor, single-phase or polyphase; shunt, compound or series; if motor is for A. C., whether it is single-phase, three-phase or two-phase three or four-wire; if motor is for D. C., state type of self-starter with which switch is to be used.

For complete information, write for Bulletins Nos. 10030 and 10035.

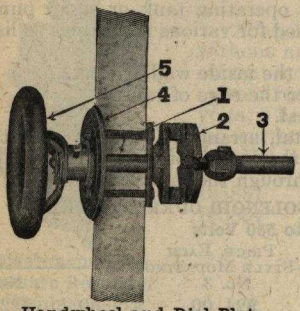
C-H PLATE TYPE FIELD RHEOSTATS



Rheostat

These rheostats consist of one or more unit plates, each unit being a complete rheostat with radial lever, contacts and resistance. The resistance wire, reflexed to provide for expansion and to cover the surface adequately, is fastened to the soapstone base and covered with a special cement. The single-plate rheostats are made in four sizes, approximately 6 inches, 9 inches, 12 inches and 15 inches square.

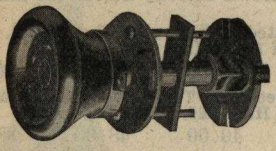
In the larger size rheostats, a number of the 15-inch plates are mounted parallel to each other on supporting rods and are provided with a common operating shaft. They are connected in parallel or in series, depending on the ampere rating and resistance of the rheostat. If the plates are in series, the shaft is insulated between alternate plates.



Handwheel and Dial Plate

Rheostats consisting of two or more plates have the levers staggered, giving approximately double the number of steps of a single plate.

The rheostats listed on the following pages are of the convertible type. They are provided with a substantial insulated knob on the front of the rheostat and with a clutch member at the rear, and may therefore be mounted either on the front or back of the switchboard. If the rheostat is to be mounted on the back of the switchboard, it is necessary to purchase a separate handwheel and dial plate.

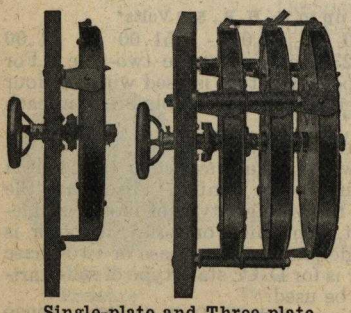


Composition Handwheel

COPPER HANDWHEEL AND DIAL PLATE

1. Handwheel shaft with clutch member.
2. Insulating fiber coupling.
3. Field rheostat shaft with clutch member.
4. Dial plate with screws and back plate.
5. Handwheel.

Trade No.	Description	Price Each
26883	Copper handwheel and dial plate suitable for one to six plates	$4.70
26884	Composition handwheel and copper dial plate suitable for one to three plates	2.10



Single-plate and Three-plate Combinations Back-of-board Type

These rheostats may be used with fields of less resistance than that given in the tables under minimum ohms only when the current obtainable on the first step (short-circuited) does not exceed the maximum ampere rating of the rheostat.

For complete information, write for Bulletins Nos. 11110 and 10410.

C-H PLATE TYPE FIELD RHEOSTATS

24-32 VOLTS

Trade No.	Mfrs. No.	Amperes Max.	Amperes Min.	Total Ohms of Rheostat	Minimum Ohms of Field	No. of Steps	Size of Plate, In.	Price Each
		Resistance of Rheostat Equal to Resistance of Field						
119369	10310	1.25	.64	25	25	19	6	$4.00
119370	10311	1.6	.8	20	20	19	6	4.00
119371	10312	2	1	16	16	19	6	4.00
119372	10313	2.5	1.25	12.5	12.5	19	6	4.00
119373	10314	3.2	1.6	10	10	19	6	4.00
119374	10315	4	2	8	8	19	6	4.00
119375	10316	5	2.5	6.4	6.4	19	6	4.00
119376	10317	6.4	3.2	5	5	19	6	4.00
119377	10318	8	4	4	4	19	6	4.00
119378	10319	10	5	3.2	3.2	19	6	4.00
		Resistance of Rheostat 1.6 Times Resistance of Field						
119379	10320	1.25	.5	40	25	19	6	4.00
119380	10321	1.6	.64	32	20	19	6	4.00
119381	10322	2	.8	25	16	19	6	4.00
119382	10323	2.5	1	20	12.5	19	6	4.00
119383	10324	3.2	1.25	16	10	19	6	4.00
119384	10325	4	1.6	12.5	8	19	6	4.00
119385	10326	5	2	10	6.4	19	6	4.00
119386	10327	6.4	2.5	8	5	19	6	4.00
119387	10328	8	3.2	6.4	4	19	6	4.00
		Resistance of Rheostat 2.5 Times Resistance of Field						
119388	10330	1.25	.36	64	25	19	6	4.00
119389	10331	1.6	.45	50	20	19	6	4.00
119390	10332	2	.57	40	16	19	6	4.00
119391	10333	2.5	.71	32	12.5	19	6	4.00
119392	10334	3.2	.92	25	10	19	6	4.00
119393	10335	4	1.2	20	8	19	6	4.00
119394	10336	5	1.4	16	6.4	19	6	4.00
119395	10337	6.4	1.8	12.5	5	19	6	4.00
119396	10338	8	2.3	10	4	26	9	4.00

32–40 VOLTS

		Resistance of Rheostat Equal to Resistance of Field						
119397	10410	1	.5	40	40	19	6	4.00
119398	10411	1.25	.64	32	32	19	6	4.00
119399	10412	1.6	.8	25	25	19	6	4.00
119400	10413	2	1	20	20	19	6	4.00
119401	10414	2.5	1.25	16	16	19	6	4.00
119402	10415	3.2	1.6	12.5	12.5	19	6	4.00
119403	10416	4	2	10	10	19	6	4.00
119404	10417	5	2.5	8	8	19	6	4.00
119405	10418	6.4	3.2	6.4	6.4	19	6	4.00
119406	10419	8	4	5	5	19	6	4.00
		Resistance of Rheostat 1.6 Times Resistance of Field						
119407	10420	1	.4	64	40	19	6	4.00
119408	10421	1.25	.5	50	32	19	6	4.00
119409	10422	1.6	.64	40	25	19	6	4.00
119410	10423	2	.8	32	20	19	6	4.00
119411	10424	2.5	1	25	16	19	6	4.00
119412	10425	3.2	1.25	20	12.5	19	6	4.00
119413	10426	4	1.6	16	10	19	6	4.00
119414	10427	5	2	12.5	8	19	6	4.00
119415	10428	6.4	2.5	10	6.4	19	6	4.00
119416	10429	8	3.2	8	5	26	9	4.00
		Resistance of Rheostat 2.5 Times Resistance of Field						
119417	10430	1	.28	100	40	19	6	4.00
119418	10431	1.25	.36	80	32	19	6	4.00
119419	10432	1.6	.45	64	25	19	6	4.00
119420	10433	2	.57	50	20	19	6	4.00
119421	10434	2.5	.71	40	16	19	6	4.00
119422	10435	3.2	.92	32	12.5	19	6	4.00
119423	10436	4	1.2	25	10	19	6	4.00
119424	10437	5	1.4	20	8	19	6	4.00
119425	10438	6.4	1.8	16	6.4	26	9	4.00
119426	10439	8	2.3	12.5	5	26	9	4.00

For complete information, write for Bulletin No. 11110.

C-H PLATE TYPE FIELD RHEOSTATS

50–64 VOLTS

Trade No.	Mfrs. No.	Amperes Max.	Amperes Min.	Total Ohms of Rheostat	Minimum Ohms of Field	No. of Steps	Size of Plate, In.	Price Each
		Resistance of Rheostat Equal to Resistance of Field						
119437	10610	1	.5	64	64	19	6	$4.00
119438	10611	1.25	.64	50	50	19	6	4.00
119439	10612	1.6	.8	40	40	19	6	4.00
119440	10613	2	1	32	32	19	6	4.00
119441	10614	2.5	1.25	25	25	19	6	4.00
119442	10615	3.2	1.6	20	20	19	6	4.00
119443	10616	4	2	16	16	19	6	4.00
119444	10617	5	2.5	12.5	12.5	19	6	4.00
119445	10618	6.4	3.2	10	10	26	9	6.10
119446	10619	8	4	8	8	26	9	6.10
		Resistance of Rheostat 1.6 Times Resistance of Field						
119447	10620	1	.4	100	64	19	6	4.00
119448	10621	1.25	.5	80	50	19	6	4.00
119449	10622	1.6	.64	64	40	19	6	4.00
119450	10623	2	.8	50	32	19	6	4.00
119451	10624	2.5	1	40	25	19	6	4.00
119452	10625	3.2	1.25	32	20	19	6	4.00
119453	10626	4	1.6	25	16	19	6	4.00
119454	10627	5	2	20	12.5	26	9	6.10
119455	10628	6.4	2.5	16	10	26	9	6.10
119456	10629	8	3.2	12.5	8	26	9	6.10
		Resistance of Rheostat 2.5 Times Resistance of Field						
119457	10630	1	.28	160	64	19	6	4.00
119458	10631	1.25	.36	125	50	19	6	4.00
119459	10632	1.6	.45	100	40	19	6	4.00
119460	10633	2	.57	80	32	19	6	4.00
119461	10634	2.5	.71	64	25	19	6	4.00
119462	10635	3.2	.92	50	20	19	6	4.00
119463	10636	4	1.2	40	16	26	9	6.10
119464	10637	5	1.4	32	12.5	26	9	6.10
119465	10638	6.4	1.8	25	10	26	9	6.10
119466	10639	8	2.3	20	8	45	12	8.20

64–80 VOLTS

		Resistance of Rheostat Equal to Resistance of Field						
119467	10810	1	.5	80	80	19	6	4.00
119468	10811	1.25	.64	64	64	19	6	4.00
119469	10812	1.6	.8	50	50	19	6	4.00
119470	10813	2	1	40	40	19	6	4.00
119471	10814	2.5	1.25	32	32	19	6	4.00
119472	10815	3.2	1.6	25	25	19	6	4.00
119473	10816	4	2	20	20	19	6	4.00
119474	10817	5	2.5	16	16	26	9	6.10
119475	10818	6.4	3.2	12.5	12.5	26	9	6.10
119476	10819	8	4.6	10	10	26	9	6.10
		Resistance of Rheostat 1.6 Times Resistance of Field						
119477	10820	1	.4	125	80	19	6	4.00
119478	10821	1.25	.5	100	64	19	6	4.00
119479	10822	1.6	.64	80	50	19	6	4.00
119480	10823	2	.8	64	40	19	6	4.00
119481	10824	2.5	1	50	32	19	6	4.00
119482	10825	3.2	1.25	40	25	19	6	4.00
119483	10826	4	1.6	32	20	26	9	6.10
119484	10827	5	2	25	16	26	9	6.10
119485	10828	6.4	2.5	20	12.5	26	9	6.10
119486	10829	8	3.2	16	10	45	12	8.20
		Resistance of Rheostat 2.5 Times Resistance of Field						
119487	10830	1	.28	200	80	26	9	6.10
119488	10831	1.25	.36	160	64	19	6	4.00
119489	10832	1.6	.45	125	50	19	6	4.00
119490	10833	2	.57	100	40	19	6	4.00
119491	10834	2.5	.71	80	32	19	6	4.00
119492	10835	3.2	.92	64	25	26	9	6.10
119493	10836	4	1.2	50	20	26	9	6.10
119494	10837	5	1.4	40	16	26	9	6.10
119495	10838	6.4	1.8	32	12.5	45	12	8.20
119496	10839	8	2.3	25	10	45	12	8.20

C-H PLATE TYPE FIELD RHEOSTATS

125–160 VOLTS

Resistance of Rheostat Equal to Resistance of Field

Trade No.	Mfrs. No.	Amperes Max.	Amperes Min.	Total Ohms of Rheostat	Minimum Ohms of Field	No. of Steps	Size of Plate, In.	No. of Plates	Price Each
119497	11020	.8	.4	200	200	19	6	1	$3.60
119498	11021	1	.5	160	160	19	6	1	3.60
119499	11022	1.25	.64	125	125	19	6	1	3.60
119500	11023	1.6	.8	100	100	19	6	1	3.60
119501	11024	2	1	80	80	19	6	1	3.60
119502	11025	.5	.25	320	320	26	9	1	6.10
119503	11026	.64	.32	250	250	26	9	1	6.10
119504	11027	.8	.4	200	200	26	9	1	6.10
119505	11028	1	.5	160	160	26	9	1	6.10
119506	11029	1.25	.64	125	125	26	9	1	6.10
119507	11030	1.6	.8	100	100	26	9	1	6.10
119508	11031	2	1	80	80	26	9	1	6.10
119509	11032	2.5	1.25	64	64	26	9	1	6.10
119510	11033	3.2	1.6	50	50	26	9	1	6.10
119511	11034	4	2	40	40	26	9	1	6.10
119512	11035	5	2.5	32	32	45	12	1	8.20
119513	11036	6.4	3.2	25	25	45	12	1	8.20
119514	11037	8	4	20	20	45	12	1	8.20
119515	11038	10	5	16	16	65	15	1	10.60
119516	11039	12.5	6.3	12.5	12.5	65	15	1	10.60
119517	11040	16	8	10	10	130	15	2	24.50
119518	11041	20	10	8	8	130	15	2	24.50
119519	11042	25	12.5	6.4	6.4	130	15	3	36.00
119520	11043	30	15	5	5	130	15	3	36.00
119521	11044	40	20	4	4	130	15	4	48.00
119522	11045	50	25	3.2	3.2	130	15	5	60.00
119523	11046	60	30	2.5	2.5	130	15	6	73.00

Resistance of Rheostat 1.6 Times Resistance of Field

119524	11050	2	.78	125	80	26	9	1	6.10
119525	11051	2.5	.98	100	64	26	9	1	6.10
119526	11052	3.2	1.23	80	50	26	9	1	6.10
119527	11053	4	1.54	64	40	45	12	1	8.20
119528	11054	5	1.4	50	32	45	12	1	8.20
119529	11055	6.4	2.4	40	25	45	12	1	8.20
119530	11056	8	3.1	32	20	65	15	1	10.60
119531	11057	10	3.9	25	16	65	15	1	10.60
119532	11058	12.5	4.43	20	12.5	130	15	2	24.50
119533	11059	16	6.15	16	10	130	15	2	24.50
119534	11060	20	7.8	12.5	8	130	15	3	36.00
119535	11061	25	9.8	10	6.4	130	15	3	36.00
119536	11062	32	12.3	8	5	130	15	4	48.00
119537	11063	40	15.4	6.4	4	130	15	5	60.00
119538	11064	50	19.5	5	3.2	130	15	6	73.00

For complete information, write for Bulletin No. 11110.

(Continued on following page.)

C-H PLATE TYPE FIELD RHEOSTATS

125–160 VOLTS—(Continued)

Resistance of Rheostat 2.5 Times Resistance of Field

Trade No.	Mfrs. No.	Amperes Max.	Amperes Min.	Total Ohms of Rheostat	Minimum Ohms of Field	No. of Steps	Size of Plate, In.	No. of Plates	Price Each
119707	11070	2	.6	200	80	26	9	1	$6.10
119708	11071	2.5	.7	160	64	26	9	1	6.10
119709	11072	3.2	.9	125	50	26	9	1	6.10
119710	11073	4	1.14	100	40	45	12	1	8.20
119711	11074	5	1.43	80	32	45	12	1	8.20
119712	11075	6.4	1.8	64	25	65	15	1	10.60
119713	11076	8	2.3	50	20	65	15	1	10.60
119714	11077	10	2.9	40	16	130	15	2	24.50
119715	11078	12.5	3.6	32	12.5	130	15	2	24.50
119716	11079	16	4.6	25	10	130	15	2	24.50
119717	11080	20	5.7	20	8	130	15	3	36.00
119718	11081	25	7.2	16	6.4	130	15	4	48.00

Resistance of Rheostat 4 Times Resistance of Field

119719	11090	2	.4	320	80	45	12	1	8.20
119720	11091	2.5	.51	250	64	45	12	1	8.20
119721	11092	3.2	.64	200	50	45	12	1	8.20
119722	11093	4	.8	160	40	45	12	1	8.20
119723	11094	5	1.02	125	32	65	15	1	10.60
119724	11095	6.4	1.23	100	25	65	15	1	10.60
119725	11096	8	1.6	80	20	130	15	2	24.50
119726	11097	10	2	64	16	130	15	2	24.50
119727	11098	12.5	2.56	50	12.5	130	15	2	24.50
119728	11099	16	3.2	40	10	130	15	3	36.00
119729	11100	20	4	32	8	130	15	4	48.00
119730	11101	25	5	25	6.4	130	15	4	48.00

250–320 VOLTS

Resistance of Rheostat Equal to Resistance of Field

119731	12000	1	.5	320	320	26	9	1	6.10
119732	12001	1.25	.64	250	250	26	9	1	6.10
119733	12002	1.6	.8	200	200	26	9	1	6.10
119734	12003	2	1	160	160	26	9	1	6.10
119735	12004	2.5	1.25	125	125	45	12	1	8.20
119736	12005	3.2	1.6	100	100	45	12	1	8.20
119737	12006	4	2	80	80	45	12	1	8.20
119738	12007	5	2.5	64	64	65	15	1	10.60
119739	12008	6	3	50	50	65	15	1	10.60
119740	12009	8	4	40	40	130	15	2	24.50
119741	12010	10	5	32	32	130	15	2	24.50
119742	12011	12.5	6.4	25	25	130	15	3	36.00
119743	12012	15	7.5	20	20	130	15	3	36.00
119744	12013	20	10	16	16	130	15	4	48.00
119745	12014	25	12.5	12.5	12.5	130	15	5	60.00
119746	12015	30	15	10	10	130	15	6	73.00

Resistance of Rheostat 1.6 Times Resistance of Field

119747	12020	2	.78	250	160	45	12	1	8.20
119748	12021	2.5	.98	200	125	45	12	1	8.20
119749	12022	3.2	1.23	160	100	45	12	1	8.20
119750	12023	4	1.54	125	80	65	15	1	10.60
119751	12024	5	1.9	100	64	65	15	1	10.60
119752	12025	6.4	2.46	80	50	130	15	2	24.50
119753	12026	8	3.1	64	40	130	15	2	24.50
119754	12027	10	3.9	50	32	130	15	3	36.00
119755	12028	12.5	4.93	40	25	130	15	3	36.00
119756	12029	16	6.15	32	20	130	15	4	48.00
119757	12030	20	7.8	25	16	130	15	5	60.00
119758	12031	25	9.8	20	12.5	130	15	6	73.00

For complete information, write for Bulletin No. 11110.

(Continued on following page).

C-H PLATE TYPE FIELD RHEOSTATS

250–320 VOLTS—Continued

Resistance of Rheostat 2.5 Times Resistance of Field

Trade No.	Mfrs. No.	Amperes Max.	Amperes Min.	Total Ohms of Rheostat	Minimum Ohms of Field	No. of Steps	Size of Plate, In.	No. of Plates	Price Each
119551	12040	5	1.43	160	64	130	15	2	$24.50
119552	12041	6.4	1.83	125	50	130	15	2	24.50
119553	12042	8	2.3	100	40	130	15	2	24.50
119554	12043	10	2.86	80	32	130	15	3	36.00
119555	12044	12.5	3.6	64	25	130	15	4	48.00
119556	12045	16	4.6	50	20	130	15	5	60.00
119557	12046	20	5.7	40	16	130	15	6	73.00

Resistance of Rheostat 4 Times Resistance of Field

119558	12050	5	1.02	250	64	130	15	2	24.50
119559	12051	6.4	1.28	200	50	130	15	2	24.50
119560	12052	8	1.6	160	40	130	15	3	36.00
119561	12053	10	2.04	125	32	130	15	3	36.00
119562	12054	12.5	2.56	100	25	130	15	4	48.00
119563	12055	16	3.2	80	20	130	15	5	60.00
119564	12056	20	4	60	16	130	15	6	73.00

500–640 VOLTS

Resistance of Rheostat Equal to Resistance of Field

119565	15000	1	.5	640	640	65	15	1	10.60
119566	15001	1.25	.64	500	500	45	12	1	8.20
119567	15002	1.6	.8	400	400	45	12	1	8.20
119568	15003	2	1	320	320	45	12	1	8.20
119569	15004	2.5	1.25	250	250	65	15	1	10.60
119570	15005	3	1.5	200	200	65	15	1	10.60
119571	15006	4	2	160	160	130	15	2	24.50
119572	15007	5	2.5	125	125	130	15	2	24.50
119573	15008	6	3	100	100	130	15	2	24.50
119574	15009	7.5	3.8	80	80	130	15	3	36.00
119575	15010	10	5	64	64	130	15	4	48.00
119576	15011	12 5	6.4	50	50	130	15	5	60.00
119577	15012	15	7.5	42	42	130	15	6	73.00

650–800 VOLTS

Resistance of Rheostat Equal to Resistance of Field

119578	16000	1	.5	800	800	65	15	1	10.60
119579	16001	1.25	.625	640	640	65	15	1	10.60
119580	16002	1.6	.8	500	500	65	15	1	10.60
119581	16003	2	1	400	400	65	15	1	10.60
119582	16004	2.5	1.25	320	320	130	15	2	24.50
119583	16005	3.2	1.6	250	250	130	15	2	24.50
119584	16006	4	2	200	200	130	15	2	24.50
119585	16007	5	2.5	160	160	130	15	3	36.00
119586	16008	6.4	3.2	125	125	130	15	4	48.00
119587	16009	8	4	100	100	130	15	4	48.00
119588	16010	10	5	80	80	130	15	5	60.00
119589	16011	12	6	64	64	130	15	6	73.00

Resistance of Rheostat 1.6 Times Resistance of Field

119590	16020	2	.77	640	400	65	15	1	10.60
119591	16021	2.5	.98	500	320	130	15	2	24.50
119592	16022	3.2	1.23	400	250	130	15	2	24.50
119593	16023	4	1.54	320	200	130	15	3	36.00
119594	16024	5	1.9	250	160	130	15	3	36.00
119595	16025	6.4	2.46	200	125	130	15	4	48.00
119596	16026	8	3.1	160	100	130	15	5	60.00
119597	16027	10	3.9	125	80	130	15	6	73.00

Resistance of Rheostat 2.5 Times Resistance of Field

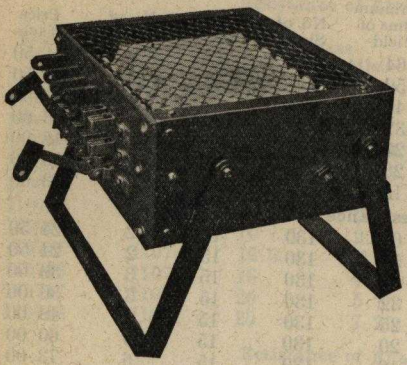
119598	16030	2	.57	1000	400	130	15	2	24.50
119599	16031	2.5	.72	800	320	130	15	2	24.50
119600	16032	3.2	.9	640	250	130	15	3	36.00
119601	16033	4	1.14	500	200	130	15	3	36.00
119602	16034	5.6	1.43	400	160	130	15	4	48.00
119603	16035	6.4	1.8	320	125	130	15	5	60.00
119604	16036	8	2.3	250	100	130	15	6	73.00

For complete information, write for Bulletin No. 11110.

C-H RHEOSTATS AND REGULATORS

LOAD RHEOSTATS

DIRECT OR ALTERNATING CURRENT
Portable Type—For Meter Testing, Etc.



Bench Type

These rheostats are especially designed for providing an artificial load for checking individual meters with a standard meter. They consist essentially of a number of steps of resistance, any one or all of which may be connected across the line by closing compact knife switches located on the front of the frame. The resistance consists of a number of flat cement-covered units especially designed for minimum weight and to be operated at high temperatures. These are mounted in a light, compact frame provided with feet for supporting it in a horizontal position.

These rheostats are intended to be connected directly across the line. The current must not be applied unless the rheostat is supported upon the feet in a horizontal position, permitting a free flow of air up through the units. In this position the current may be left on any number of switches indefinitely.

Bench Type

Trade No.	Mfrs. No.	Volts	Amperes Min.	Amperes Max.	Amp. Increments	No. of Switches	Dimensions, Inches Folded Width	Folded Depth	Folded Height	Open Top Area	Open Height	Net Wt. Lbs.	Price Each
118655	1800	115	.50	10	.50	4	9	5	10	9x9	8	8	$27.
118656	1801	115	.25	20	.25	6	12	5	15	11x12	10	13	33.
118657	1802	230	.25	10									
		600	.50	4	.50	4	12	5	15	11x12	10	13	33.
Floor Type													
118658	1803	115	.25	50	.25	8	14	5	20	14x17	20	27	50.
118659	1804	230	.25	25									
		600	.50	10	.50	6	14	5	20	14x17	20	27	51.

Write for Bulletin No. 11205.

CIRCULAR PLATE SPEED REGULATORS

For Motors not Exceeding ⅛ Horse Power



These regulators have been developed primarily for use as a means of varying the speed of small motors such as are now employed for operating small blowers, fans, buffers, adding and copying machines, jewelers' and dentists' lathes and drills, sewing machines, washing machines, etc.

They operate by means of a simple sliding lever. If the first contact is an "off" point, the motor will be started on the second. Without an "off" point there are seven running positions in the 6-inch size and ten on the 9-inch size. The resistance is moisture-proof and dust-proof, the resistor wire being wound on a flat porcelain core and imbedded in a special cement.

These devices are used also as field regulators, dimmers for lighting circuits, heating coil regulators, in connection with plating baths, etc.

The limitations in standard design are as follows: Maximum watt capacity, 125; maximum resistance per step, 150 ohms; maximum amperes, 10; maximum voltage of circuit, 250; net weight 2½ pounds; height of casting, 1⅝ inches.

The limitations in standard design are as follows:

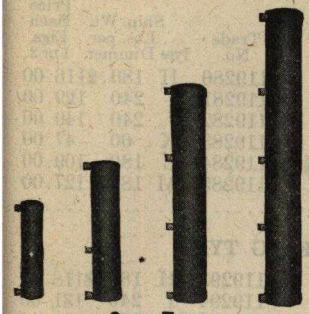
Size	6-inch	9-inch
Maximum watt capacity	125	225
Maximum resistance per step, ohms	150	250
Maximum amperes	10	10
Maximum voltage of circuit	250	250

Machine Type Trade Nos. 115 Volts	Machine Type Trade Nos. 230 Volts	Fan Type Trade Nos. 115 Volts	Fan Type Trade Nos. 230 Volts	Size Inches	Horse Power	Shipping Wt., Lbs.	Price Each
068443	068450	068457	068464	6	1/30	3	$2.6
068442	068449	068456	068463	6	1/16	3	2.6
068441	068448	068455	068462	6	1/12	3	2.6
068440	068447	068454	068461	6	1/10	3	2.6
068439	068446	068453	068460	6	1/8	3	2.6
068438	068445	068452	068459	6	1/7	3	2.6
068437	068444	068451	068458	6	1/6	3	2.6
118643	118646	118649	118652	9	1/5	6	4.9
118644	118647	118650	118653	9	1/4	6	4.9
118645	118648	118651	118654	9	1/3	6	4.9

NOTE.— Always specify whether or not an "off" point is desired.

Write for Bulletin No. 3290.

C-H UNIT TYPE RESISTORS



Open Type
Showing Standard
Arrangement of Terminals

C-H Unit Resistors are designed for use wherever a compact, protected, self-contained resistor of small size is desired.

The open type, while not fully enclosed, are nevertheless reasonably well protected by a heavy insulating coating of a special cement capable of resisting ordinary mechanical and moisture influences. The ohmic value of the larger sizes is high and on these sizes terminals dividing the resistance are provided.

The enclosed type possesses the added protection of a metal enclosing cylinder making it particularly useful in resisting the attacks of acid and considerable moisture. This type is provided with feet and has but two terminals.

The ferrule type is most advantageously used where quick renewal of units is desired, there being no terminals to connect.

The Edison Screw Base Type can be inserted in standard Edison Lamp and Receptacle Screw Shells, and because of its sturdy construction and long life, is replacing lamps in use as resistors.

OPEN TYPE

Trade No.	Continuous Watts	Size, Inches Length	Diam.	Max. Ohms	Min. Ohms	Net Wt. Lbs.	Price Each
51778	25	2	7/8	1000	.1	3 oz.	$0.65
51779	40	4	7/8	2000	.2	5 oz.	.80
51780	75	5 3/4	1 1/8	4000	.4	9 oz.	1.00
51781	150	9	1 3/8	8000	.6	1 1/4 lbs.	1.55
51782	210	12	1 1/2	12500	1.0	1 3/4 lbs.	2.10

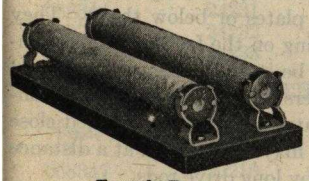


Enclosed Type

The above prices are for units with two terminals. Add ten cents each for additional terminals and specify ohms per step, if unequal steps are required.

ENCLOSED TYPE

51783	60	7 1/2	2	4000	.4	1 lb.	2.10
51784	115	10 3/4	2 1/2	8000	.6	2 1/4 lbs.	2.70
51785	160	13 3/4	2 1/2	12500	1.0	3 lbs.	3.30



Ferrule Type

The above prices are for units with two terminals. Add 20 cents each for additional terminals up to a maximum total of five on 115 and 160-watt units, and specify ohms per step, if unequal steps are required. Extra terminals cannot be furnished on 60-watt units.

FERRULE TYPE

51786	100	9	1	5000	1.0	10 oz.	1.65

Spring contact clips for these units will be furnished for 10 cents each. Ferrule type units cannot be furnished with intermediate terminals.

SCREW BASE TYPE

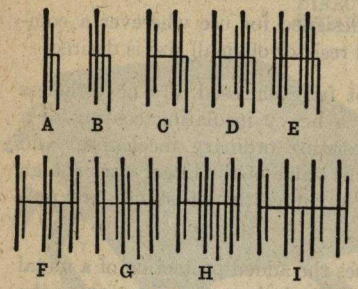
51787	40	5 1/2	1 1/8	800	2	4 oz.	1.10

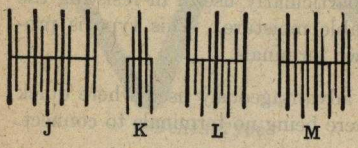


Edison Base Type

These units fit any standard Edison screw shell. They cannot be furnished with intermediate terminals.

C-H SIMPLICITY THEATER DIMMERS





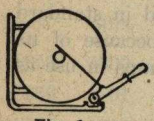


Fig. 1

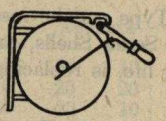


Fig. 2

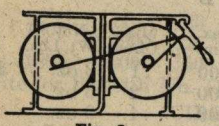


Fig. 3

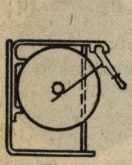


Fig. 4

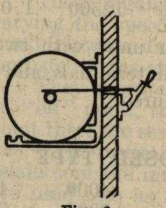


Fig. 6

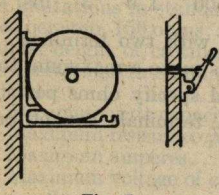


Fig. 7

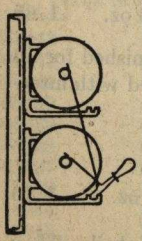


Fig. 25

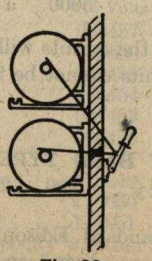


Fig. 26

NON-INTERLOCKING TYPE

Trade No.	Type	Ship. Wt. Lbs. per Dimmer	Price Each Figs. 1 or 2	Trade No.	Type	Ship. Wt. Lbs. per Dimmer	Price Each Figs. 1 or 2
119273	A	60	$33.00	119280	H	180	$116.00
119274	B	60	42.00	119281	I	240	129.00
119275	C	120	64.00	119282	J	240	149.00
119276	D	120	73.00	119283	K	60	47.00
119277	E	120	84.00	119284	L	180	109.00
119278	F	180	96.00	119285	M	180	127.00
119279	G	180	107.00	.....	..	...	.....

INTERLOCKING TYPE

119286	A	60	36.00	119293	H	180	$118.00
119287	B	60	44.00	119294	I	240	131.00
119288	C	120	67.00	119295	J	240	151.00
119289	D	120	76.00	119296	K	60	49.00
119290	E	120	87.00	119297	L	180	111.00
119291	F	180	98.00	119298	M	180	129.00
119292	G	180	109.00	.....	..	...	.....

The above prices cover dimmers banked in a frame only when six or more plates are ordered banked in one row. When less than these numbers of plates are ordered, add $18.00 to the list price of the bank.

The above prices for interlocking dimmers include a master lever for every six plates. When more master levers are desired, add $11.00 to list for each extra lever.

The shipping weight per dimmer given in the above table is an average value which must be multipled by the number of dimmers in a bank to obtain the approximate shipping weight of the bank.

The above prices apply to Fig. 1 and Fig. 2 constructions only. These two styles of construction will be found applicable in by far the greater number of installations.

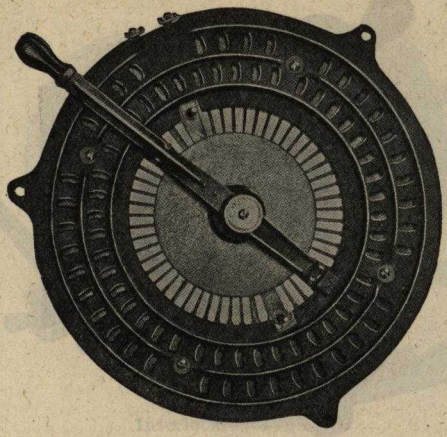
Sometimes, however, structural limitations or the appearance of the dimmer bank render it desirable to employ other types of construction. Six of the different types frequently used are illustrated on this page. Briefly, the plates in these dimmers may be arranged in one, two, or three rows (or more if desired) with operating levers assembled either above the plates or below them. They may be arranged for mounting on the front of the switchboard in plain view or may be installed behind the board with only the operating levers visible. Where space conditions are such that the plates cannot be assembled close to the operating levers, they may be mounted at a distance and connected to the levers by long drive rods.

Attention is called to the illustrations at the top of the page showing the different types of dimmers listed. It will be noted that all of these, excepting Types K, L and M, show single dimmers, made up of one, two, three, or four plates, according to the capacity required. Types K, L and M are combination dimmers and furnish two complete dimmers in the space required by one single dimmer. The total watt capacity of a combination dimmer, it should be noted, is the same as that of a single dimmer of the same number of plates.

C-H SIMPLICITY DIMMERS

TYPE No. 3, FOR MOUNTING FLAT AGAINST THE WALL OR SWITCHBOARD

For Theaters, Lodge Rooms, Clubs, Halls, Residences, Etc.



TWO-WIRE, FOR 110-VOLT CIRCUITS

Trade No.	Mfrs. No.	Total Lamp Wattage	No. of Metallic Filament Lamps 60-watt	40-watt	No. of 16 C. P. Carbon Lamps 55-watt	Size Plate Inches	Price Each
068327	24110	220	4	6	4	9	$10.00
068328	24111	330	5	8	6	9	10.00
068329	24112	550	9	14	10	9	10.00
068330	24113	660	11	17	12	9	10.00
068331	24114	830	14	21	15	12	14.00
068332	24115	1100*	18	27	20	12	14.00
068333	24116	1375	..	..	25	12	14.00
29262	24130	1375	23	34	..	16	20.00
068334	24131	1650	27	41	30	16	20.00
068335	24132	2200*	36	55	40	16	20.00
068336	24133	2750	..	..	50	16	20.00

TWO-WIRE, FOR 230-VOLT CIRCUITS

068337	24210	220	4	6	4	12	14.00
068338	24211	330	5	8	6	12	14.00
068339	24212	550	9	14	10	12	14.00
068340	24213	660	11	17	12	12	14.00
068341	24214	830	14	21	15	12	14.00
068342	24215	1100*	18	27	20	12	14.00
068343	24216	1375	..	..	25	12	14.00
29263	24230	1375	23	34	..	16	20.00
068344	24231	1650	27	41	30	16	20.00
068345	24232	2200*	36	55	40	16	20.00
068346	24233	2750	..	..	50	16	20.00

THREE-WIRE, FOR 110-220-VOLT CIRCUITS

Trade No.	Mfrs. No.	Total Lamp Wattage	No. of Metallic Filament Lamps 60-watt	40-watt	No. of 16 C. P. Carbon Lamps 55-watt	Size (2) Plates Inches	Price Each
068347	26210	440	8	12	8	9	$28.00
068348	26211	660	10	16	12	9	28.00
068349	26212	1100	18	28	20	9	28.00
068350	26213	1320	22	34	24	9	28.00
068351	26214	1650	28	42	30	12	34.00
068352	26215	2200*	36	54	40	12	34.00
068353	26216	2750	..	..	50	12	34.00
29264	26230	2750	46	68	..	16	46.00
068354	26231	3300	56	82	60	16	46.00
068355	26232	4400*	74	110	80	16	46.00
068356	26233	5500	..	..	100	16	46.00

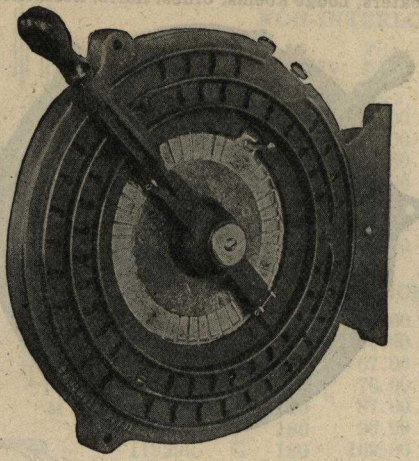
*Maximum capacity of metallic filament lamps.

Write for Bulletin No. 11310.

C-H SIMPLICITY DIMMERS

TYPE No. 4, FOR MOUNTING AT RIGHT ANGLES TO WALL OR SWITCHBOARD

For Theaters, Lodge Rooms, Clubs, Halls, Residences, Etc.



TWO-WIRE, FOR 110-VOLT CIRCUITS

Trade No.	Mfrs. No.	Total Lamp Wattage	No. of Metallic Filament Lamps 60-watt	No. of Metallic Filament Lamps 40-watt	No. of 16 C. P. Carbon Lamps 55-watt	Size Plate Inches	Price Each
068357	25110	220	4	6	4	9	$12.00
068358	25111	330	5	8	6	9	12.00
068359	25112	550	9	14	10	9	12.00
068360	25113	660	11	17	12	9	12.00
068361	25114	830	14	21	15	12	17.00
068362	25115	1100*	18	27	20	12	17.00
068363	25116	1375	..	..	25	12	17.00
29275	25130	1375	23	34	..	16	22.00
068364	25131	1650	27	41	30	16	22.00
068365	25132	2200*	36	55	40	16	22.00
068366	25133	2750	..	..	50	16	22.00

TWO-WIRE, FOR 230-VOLT CIRCUITS

068367	25210	220	4	6	4	12	17.00
068368	25211	330	5	8	6	12	17.00
068369	25212	550	9	14	10	12	17.00
068370	25213	660	11	17	12	12	17.00
068371	25214	830	14	21	15	12	17.00
068372	25215	1100*	18	27	20	12	17.00
068373	25216	1375	..	..	25	12	17.00
29276	25230	1375	23	34	..	16	22.00
068374	25231	1650	27	41	30	16	22.00
068375	25232	2200*	36	55	40	16	22.00
068376	25233	2750	..	..	50	16	22.00

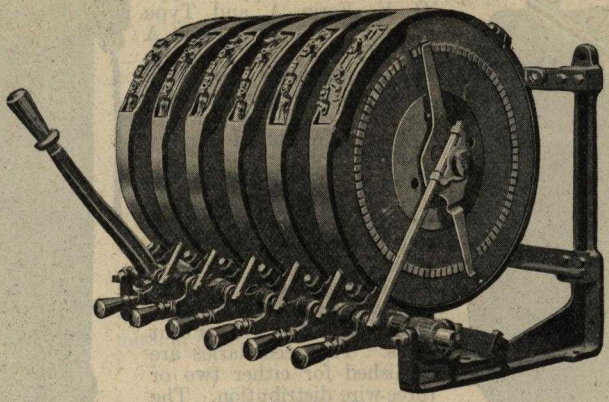
THREE-WIRE, FOR 110-220-VOLT CIRCUITS

Trade No.	Mfrs. No.	Total Lamp Wattage	No. of Metallic Filament Lamps 60-watt	No. of Metallic Filament Lamps 40-watt	No. of 16 C. P. Carbon Lamps 55-watt	Size (2) Plates Inches	Price Each
068377	27210	440	8	12	8	9	$31.00
068378	27211	660	10	16	12	9	31.00
068379	27212	1100	18	28	20	9	31.00
068380	27213	1320	22	34	24	9	31.00
068381	27214	1650	28	42	30	12	39.00
068382	27215	2200*	36	54	40	12	39.00
068383	27216	2750	..	..	50	12	39.00
29277	27230	2750	46	68	..	16	52.00
068384	27231	3300	56	82	60	16	52.00
068385	27232	4400*	74	110	80	16	52.00
068386	27233	5500	..	..	100	16	52.00

*Maximum capacity for metallic filament lamps.

Write for Bulletin No. 11310.

C-H SIMPLICITY THEATER DIMMERS



Interlocking Type

ELECTRICAL DATA—SINGLE DIMMERS

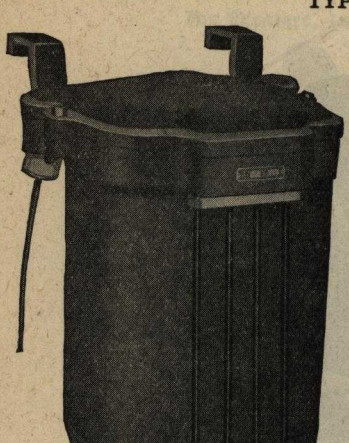
Capacity of Dimmer				Two-wire 110 Volts			Three-wire 110–220 Volts		
Total Wattage in Lamps	No. of Metallic Filament Lamps 60-watt	40-watt	No. of 16 C. P. Carbon Lamps 55-watt	Type	Trade No.	Mfrs. No.	Type	Trade No.	Mfrs. No.
450	8	11	8	A	118921	29997	B	118947	30047
600	10	15	11	A	118922	29998	B	118948	30048
750	13	19	14	A	118923	29999	B	118949	30049
900	15	22	16	A	118924	30000	B	118950	30050
1200	20	30	22	A	118925	30001	B	118951	30051
1500	25	37	27	A	118926	30002	B	118952	30052
1800	30	45	33	A	118927	30003	B	118953	30053
2100	35	52	38	A	118928	30004	B	118954	30054
2400	40	60	44	A	118929	30005	B	118955	30055
2700	45	67	50	A	118930	30006	B	118956	30056
3000	50	75	55	A	118931	30007	B	118957	30057
3300	55	82	60	B	118932	30008	B	118958	30058
3600	60	90	65	B	118933	30009	B	118959	30059
4200	70	105	76	C	118934	30010	C	118960	30060
4800	80	120	87	C	118935	30011	C	118961	30061
5400	90	135	100	C	118936	30012	C	118962	30062
6000	100	150	110	C	118937	30013	C	118963	30063
6600	110	165	120	D	118938	30014	E	118964	30064
7200	120	180	130	E	118939	30015	E	118965	30065
8100	135	200	150	F	118940	30016	G	118966	30066
9000	150	225	165	F	118941	30017	G	118967	30067
9600	160	240	175	G	118942	30018	G	118968	30068
10200	170	255	184	H	118943	30019	I	118969	30069
10800	180	270	200	I	118944	30020	I	118970	30070
12000	200	300	220	I	118945	30021	I	118971	30071
13200	220	330	240	J	118946	30022	J	118972	30072

ELECTRICAL DATA—COMBINATION DIMMERS

450	8	11	8	K	118973	30027	....	....	....
600	10	15	11	K	118974	30028	....	....	....
750	13	19	14	K	118975	30029	....	....	....
900	15	22	16	K	118976	30030	....	....	....
1200	20	30	22	K	118977	30031	....	....	....
1500	25	37	27	K	118978	30032	....	....	....
1800	30	45	33	K	118979	30033	....	....	....
4200	70	105	76	L	118980	30034	....	....	....
4800	80	120	88	L	118981	30035	....	....	....
5400	90	135	100	M	118982	30036	....	....	....

MOLONEY TRANSFORMERS

TYPE H. E. TRANSFORMERS



Moloney Transformers are made in two types, Type H. E., Form A, and Type H. E., Form B. Form A Transformers have lower core and copper losses than Form B and are recommended for use in all cases except where current is produced at very low cost.

They are provided with a terminal block whereby the primary can be arranged for either 1100 or 2200 volts. Capacity taps are placed in primary, giving an increase in secondary voltage from 1¼ to 10 per cent in 1¼ per cent steps. The secondaries are furnished for either two or three-wire distribution. The windings are so arranged that one half the rated load can be placed between the neutral and either outside wire.



60 CYCLES, POLE TYPE, 1100-2200 V. PRIMARY, 110-220 V. SECONDARY

Form A					Form B				
Trade No.	Capacity K. V. A.	Oil Required Gallons	Weight with Oil Pounds	Ship. Wt. with Oil Pounds	Trade No.	Capacity K. V. A.	Oil Required Gallons	Weight with Oil Pounds	Ship. Wt. with Oil Pounds
079034	.6	1¼	96	121	079050	.6	1½	86	111
079035	.1	1½	108	133	079051	1	1¼	100	125
079036	1.5	1½	119	144	079052	1.5	1½	112	137
079037	2	2	164	197	079053	2	1¼	130	155
079038	2.5	2½	171	204	079054	2.5	2¾	160	193
079039	3	2½	181	214	079055	3	2½	170	203
079040	4	3	221	254	079056	4	2¼	184	217
079041	5	4	282	315	079057	5	3	221	254
079042	7.5	7	355	405	079058	7.5	4	285	321
079043	10	12	450	510	079059	10	7	355	406
079044	15	12	545	607	079060	15	6½	475	525
079045	20	17	670	760	079061	20	13	628	690
079046	25	22	900	1015	079062	25	15	680	770
079047	30	29	1115	1230	079063	30	17	830	920
079048	40	38	1330	1480	079064	40	20	1100	1210
079049	50	37	1420	1570	079065	50	23	1285	1400

Adapted for use on circuits 60 to 140 cycles. Temperature rise after eight hours continuous full load, Form A, 45 degrees C.; Form B, 50 degrees C. May be operated on circuits 10 per cent above or below normal rated voltage. Ratio, 10 and 20 to 1.

Oil weighs approximately 7½ pounds per gallon.

Prices quoted will include oil, hangers, one pair primary switch cut-outs, boxing and crating.

TYPE D TUNGSTEN SIGN TRANSFORMERS

The Moloney D Sign Transformer embraces all the superior points of quality of the entire line. It has a separate primary and secondary and is three-wire either 110 or 220-volt primary with 11 and 22 volts on the secondary side. Case is cast iron, making the transformer absolutely weatherproof.

Trade No.	Cap. Watts	Core Loss	Copper Loss	Net Wt., Lbs.	Ship. Wt., Lbs.	Dimens., Inches Ht.	Lgth.	Thick.	Price Each
35323	150	7	7	25	37	8½	8½	5½	$23.00
35324	250	9	9	30	43	9	9	5½	25.00
35325	350	11	13	37	50	9½	9½	6	29.00
35326	500	14	15	45	60	10	11	6½	33.00
35327	750	18	21	52	71	10½	11½	6¾	40.00
35328	1000	21	24	60	80	10½	11½	6¾	46.00
35329	1250	23	30	67	87	10½	11½	6¾	50.00
35330	1500	25	35	73	93	10½	12	7	54.00
35331	2000	30	42	85	105	10½	12½	7¼	60.00

MOLONEY TRANSFORMERS



Type F

TYPE F

Type F Transformers are designed to meet the severe operating conditions that the small high-voltage transformer encounters on a large system.

Type F Transformers are manufactured in sizes from 5 to 50 KVA and in voltages from 22000 to 100000 volts.

All windings of these transformers are well insulated with a heavily re-enforced insulation of the end turns.

Type F Transformers are an ideal and economical apparatus with which to serve small communities from high voltage transmission lines.

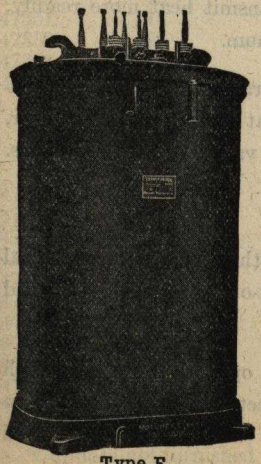


Type C

TYPE C

Type C Transformers are furnished in all sizes from 100 to 2500 KVA and in voltages up to 100000 volts. These transformers are built in the core type with circular coils sufficiently well braced to stand momentary short circuits with sustained voltage without mechanical injury. They are not only built for heavy duty mechanically but also electrically. The coils and core are provided with oil ducts whereby all parts of the transformer are in direct contact with the circulating oil.

The transformer case is constructed of sheet steel; the metal sides are cast directly on to a substantial cast iron base, making a perfect oil joint. All strain is taken off the sheet metal sides by means of inside bolts which secure the cover to the cast iron bottom. This construction allows the transformer, complete with oil, to be handled as a unit.



Type E

TYPE E

Moloney Type E Water-cooled Transformers are furnished in all sizes from 100 to 5000 KVA. The transformer case is made of heavy boiler plate with vertical seams, riveted and calked. The bottom, instead of being riveted to the sides, as is commonly done, is cast directly on to the boiler plate sides, making a very strong and substantial case, free from leaks.

The water coils furnished with Type E Transformers are of a continuous length. All joints are brazed, and the coil is guaranteed to withstand pressure of 250 pounds per square inch.

Type E Transformers can be furnished for use on either 25 or 60 cycles and for any voltage up to and including 100000 volts.

Prices and Full Specifications Furnished on Application.

WAGNER DISTRIBUTION TRANSFORMERS



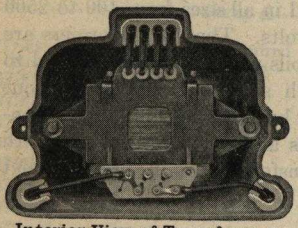
Exterior View of Transformer

These transformers are efficient, rugged and thoroughly reliable.

The cases are cast of the best iron that can be procured for the purpose. The coils and core are rigidly supported by cast end plates, clamped to the core. These end plates in turn are bolted to the case, so that there is no possibility of movement.

The outlet bushings are white glazed porcelain, of patented construction. There is no possibility of the bushing falling out of its place, and thus allowing the leads to touch the case. The secondary leads are all brought out through single four-hole bushings. The lips of these bushings rest on a shelf, cast in the case, and the leads rest in the grooves formed in the bushings.

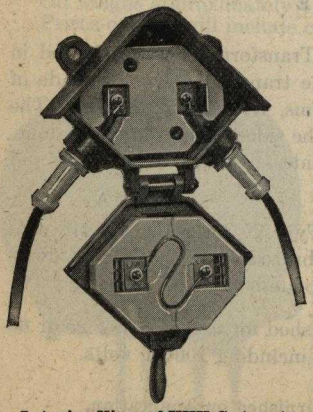
Wagner engineers have collaborated with the steel manufacturers to produce the best possible steel for Wagner Transformers. The core loss has thus been reduced to a minimum value, consistent with good design, and a better distribution of material has resulted.



Interior View of Transformer

The transformers are so designed that the cooling oil cannot collect in pockets and produce hot spots. The temperature rise is uniform for every part of the transformer, which is conducive to long life and reliability.

The insulating material used in Wagner Transformers is carefully tested. The best methods of applying it have been carefully worked out. Double cotton covered wire is used, and a layer of fiber insulation is placed between layers of the winding. After the coils and core have been assembled, the whole is placed in an impregnating vat and the impregnating compound is forced into the pores of the insulation. Transformers so treated are moisture-proof, are more rigid, transmit heat more readily, and reduce chemical action to a minimum.



Interior View of UUU Cut-out

Variable voltage taps of Wagner Transformers make it possible to maintain the voltage constant, at the end of a long feeder, as the voltage changes due to the load varying with the seasons.

Cut-outs

Wagner engineers, co-operating with those of a large central station company, have produced a cut-out that is original and effective.

This cut-out is easily re-fused by opening the cover which swings down and completely disconnects the fuse points from the line. Moisture-proof bushings are provided for lead entrances.

WAGNER TRANSFORMERS



S. T. TYPE TRANSFORMERS

60 Cycles { 2200 to 220/110 Volts; 2300 to 230/115 Volts; 2400 to 240/120 Volts }

Trade No.	K. V. A.	Type	Size Case	Transformer Weights in Pounds: Without Oil Hangers or Cut-outs Net	Without Oil Hangers or Cut-outs Ship.	Ship. Complete with Oil Hangers and Cut-outs	Quarts of Oil Req'd.
147338	1	Core	10-N	110	136	183	8
147339	2	Core	21-N	139	167	226	14
147340	3	Core	31-N	165	195	258	16
147341	5	Core	41-N	200	230	296	18
147342	7.5	Core	46-N	244	274	354	24
147343	10	Core	53-N	322	386	481	32
147344	15	Core	53-N	373	437	529	30

H. E. TYPE

25 Cycles { 2200 to 220/110 Volts; 2300 to 230/115 Volts; 2400 to 240/120 Volts }

147345	1	Core	41-N	182	212	278	18
147346	2	Core	46-N	230	260	340	24
147347	3	Core	53-N	269	333	428	32
147348	5	Core	53-N	363	427	522	32
147349	7.5	Shell	56-N	578	653	808	60
147350	10	Shell	56-N	654	729	874	54
147351	15	Shell	61-N	857	942	1182	93
147352	25	Shell	70-N	1248	1348	1746	132
147353	37.5	Shell	85-N34	1940	2140	2907	280
147354	50	Shell	85-N36	2170	2370	3172	300

60 Cycles { 2200 to 220/110 Volts; 2300 to 230/115 Volts; 2400 to 240/120 Volts }

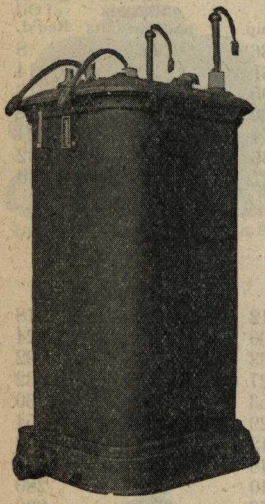
147355	1	Core	21-N	133	161	220	14
147356	2	Core	31-N	163	193	256	16
147357	3	Core	41-N	195	225	291	18
147358	5	Core	46-N	251	281	357	22
147359	7.5	Core	53-N	348	412	507	32
147360	10	Core	53-N	371	435	526	30
147361	15	Shell	56-N	611	686	841	60
147362	25	Shell	61-N	856	941	1181	93
147363	37.5	Shell	70-N	1235	1335	1740	136
147364	50	Shell	70-N	1376	1476	1853	120
147365	75	Shell	85-N36	2090	2290	3110	320
147366	100	Shell	85-N46	2430	2630	3625	420

*Cut-outs not furnished for 75 and 100 K. V. A. sizes.

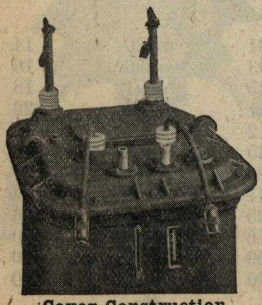
WAGNER POWER TRANSFORMERS



22000-Volt Outdoor Type Transformer, Oil-Filled, Self-Cooled



350-Kva., 11000-2200-Volt Transformer, Oil-Filled, Water-Cooled



Cover Construction 350-Kva. Transformer

A power transformer, to transform at all, must consist of coils surrounded by iron, or iron surrounded by coils, and if the transformer is to stand up to its service it must be sufficiently insulated. The difference, then, between transformers lies simply in the details both of electrical performance and mechanical construction.

To a very considerable extent the electrical performance is predetermined by specifications, but it would be exceedingly difficult for a buyer to outline the mechanical details, some of which may appear non-important. Wagner Transformers are built to meet all specification requirements and go further in many of its structural details.

There has been no sacrifice in materials, either as to quantity or quality in the manufacture of Wagner Transformers. At the same time, they are furnished at as low a price as is consistent with the use of the proper raw materials and skilled workmanship required in the production of thoroughly dependable, rugged and efficient transformers.

Wagner Transformers are built in all the commercial frequencies and voltages, in any desired size from 50 kilowatts up, in the oil-filled, self-cooled type; oil-filled, water-cooled type; or the air blast type. Air blast transformers, however, are not built for voltages above 20000.

Power transformers are furnished in two styles for indoor and outdoor use. When desired for outdoor use the transformer cover and bushings are especially constructed for that particular purpose.

Power transformers will be furnished either single-phase or polyphase, and the latter are already most favorably known and have met with entire success.

The transformer cases are rectangular in form, thus having minimum floor area and maximum oil space and efficiency.

These transformers are built in what is known as the shell type construction, that is, the iron core surrounds the copper coils.

The core is so securely supported that shifting of the laminae in shipment is impossible.

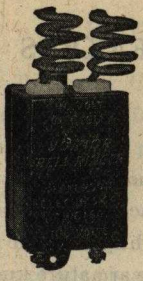
Non-aging alloy steel is used in all core construction.

The flat coils are carefully wound of flat, cotton covered, copper strip, with ample high grade insulation between layers. In heavy coils several flat strips in multiple are used per turn in order to facilitate the winding and produce a more compact coil.

The secondary bushings which carry heavy current conductors are mounted in a specially prepared, non-magnetic one-piece bushing board. This construction not only provides excellent electrical insulation but also obviates iron losses around the secondary leads. The primary bushings are substantial and are built up around copper tube conductors in such a manner as to provide the minimum insulation strain per unit of surface area.

Prices and Complete Descriptive Bulletins Furnished on Application.

JEFFERSON TRANSFORMERS



Junior Bell-ringing Transformer

BELL-RINGING TRANSFORMERS

Jefferson Bell Ringing Transformers embody all the essentials of a perfect design, electrical, magnetic and mechanical. Because of their heavy capacity and high electrical efficiency, combined with extra long primary leads, they are superior to anything on the market. A transformer for every requirement in the signal field.

The Junior Bell Ringer is designed for all classes of light signal work such as may be found in the ordinary residence or flat building. Will also operate all standard type of door openers; has one secondary voltage; generates 25 watts.

Trade No.	Capacity Watts	Dimensions Inches	Wt. Lbs.	Price Each
112557	25	2⅝x2x6	2½	$2.50

The Tri-volt Bell Ringer is designed for heavier work than the Junior Type, especially where long leads are used. Generates three secondary voltages: 6, 12 and 18.

112573	25	2½x2x5	2	3.00



Tri-volt Bell-ringing Transformer

The Type B is designed for heavier signal work and installations that require more power than is generated by the Junior or Tri-volt type. Generates three secondary voltages: 6, 14 and 20.

112558	50	3x3¾x4	4	5.00

The Heavy Duty Type B is designed primarily to take care of large installations and operate a greater number of bells and other signal devices than the smaller type transformers. Generates three secondary voltages: 6, 14 and 20.

112559	75	3¾x4⅛x6	7½	7.00

Type C transformers are designed to take care of extra large bells and other signal work such as is found in schools, factories, mines, etc., and will operate all types of alternating current bells, ranging in size from 2½ to 16 inches. Generates four secondary voltages: 6, 12, 18 and 24.

112560	125	3¾x4⅛x6	9	9.00

Standard winding will operate on 100 to 130 volts, A. C., 60 to 133 cycles.



Type B Bell-ringing Transformer

FLEXIBLE TOY TRANSFORMERS

The flexible feature of these transformers consists of a regulating switch and master connection post, by means of which a range of voltages from zero to the maximum limit of the transformer is available in small and uniform steps. This combination results in a very wide range of low voltages for operating and regulating the speed of electric engines, small motors, electric trains, etc. In fact, the different uses to which they may be put to are unlimited, depending only on the ingenuity of the experimenter. Each transformer is equipped with an extension cord and attachment plug, so that they can be attached to any alternating current circuit.

The Jefferson Toy Transformers are guaranteed to answer every electrical toy requirement.

The Midget type is designed primarily to meet the demand for a suitable low price transformer. Due to its large capacity and large number of secondary voltages, it will answer a wide range of toy requirements.

No. 1 transformer is arranged in 2 volt steps, Nos. 2 and 3 are in 1½-volt steps; Midget Type, in 3-volt steps.



Nos. 1, 2 and 3 Toy Transformer

Trade No.	Type	Cap. Watts	No. of Voltages	Range Volts	Dimensions Inches	Wt. Lbs.	Price Each
112561	1	50	10	2 to 20	4¼x3¾x3¼	5	$4.00
112562	2	75	16	1½ to 24	5 x4 x3¼	7	5.50
112563	3	150	20	1½ to 30	5½x5 x4	10	7.50
112574	Midget	50	10	2½ to 25	3½x3½x2¾	2½	3.00

Standard winding will operate on 100 to 130 volts, A. C., 60 to 133 cycles.

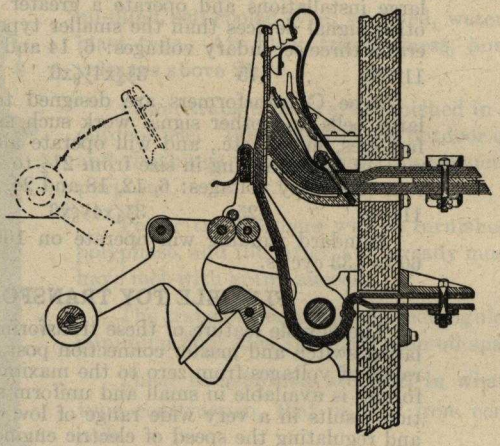
ROLLER-SMITH STANDARD CIRCUIT BREAKERS

PRINCIPLE OF OPERATION

The breaker is closed by pulling down the handle to the position shown in illustration. The arm is under compression against the brush and tends to open on account of the spring of its coil, but it is held closed by the roller on the handle (which is slightly over the center line between handle bearing and roller on arm). A slight kick from the armature knocks it back across the center line and the breaker flies open.

Note that there are no latches or triggers to hold arm closed, merely the rollers, which are non-rustable and practically without any wear.

There is an eccentric pin stop for the roller, which limits the distance it passes over center. The breaker may thus be made more or less sensitive, as desired.



Cross-Sectional View

This illustration shows the construction over 1200 amperes, in which the laminations are continuous from brush to bus-bar. In other respects the construction of smaller sizes is similar.

NOTE.—There is only one contact, which is laminated. As heating of breakers comes mostly at the contact, this type runs cooler than two-contact types.

There are no delicate parts anywhere. All parts built to wear and there is nothing to get out of order.

Bearings of nickel bronze, non-rustable.

ROLLER-SMITH CIRCUIT BREAKERS

INSTRUCTIONS FOR SELECTING CIRCUIT BREAKERS

ON TWO-WIRE CIRCUITS.—A single-pole plain overload gives protection and will save the fuses, but a fused knife switch must then also be employed. A double-pole plain overload breaker gives full automatic protection and fuses and switches can then be dispensed with.

ON THREE-WIRE CIRCUITS.—Either polyphase A. C. or three-wire D. C. use three-pole rigid arm breakers.

ON FOUR-WIRE CIRCUITS.—A double-pole rigid arm breaker gives protection if one pole is in one leg of one phase and the other pole in one leg of the other phase, but a fused knife switch must then also be employed. For full automatic protection use two two-pole rigid arm breakers.

ON BATTERY CHARGING CIRCUITS.—A plain underload circuit breaker will disconnect battery when charging current falls to about 10% of circuit breaker rating. Use combined overload and underload if overload protection is also desired.

ON ALL MOTOR CIRCUITS.—Specify no-voltage auxiliary trip if motor is to be cut off when line voltage fails. One trip serves for two-wire lines. On two and three-phase specify two no-voltage coils if there is a possibility of one phase alone failing; otherwise specify one no-voltage trip.

ON PUSH BUTTON TRIP LINES.—Specify one shunt trip auxiliary to trip breaker from a distance.

LARGER AND HIGHER VOLTAGE BREAKERS

Capacities not included in Roller-Smith Industrial line are supplied in Roller-Smith Standard Breakers.

BREAKER CAPACITY TABLE

The following table shows the ampere capacity of breakers to be used for the protection of motors. Necessarily average and not extreme values of motor efficiency had to be selected, but in general the table will be found conservative.

Horse Power	Direct Current			Alternating Current							
				Single-Phase		2-Phase, 4-Wire			3-Phase, 3-Wire		
	110 V.	220 V.	500 V.	110 V.	220 V.	110 V.	220 V.	440 V.	110 V.	220 V.	440 V
1	10	5	* 3	15	10	10	5	3	10	5	3
2	30	10	* 5	30	15	15	10	5	15	10	5
3	30	15	* 10	45	30	30	15	5	30	15	10
5	45	30	* 10	60	30	30	15	10	45	20	10
7.5	60	30	* 20	80	45	45	30	10	45	30	20
10	80	45	* 30	100	60	60	30	20	60	30	20
15	*150	60	* 30	*150	80	80	45	20	80	45	30
20	*150	80	* 45	*200	100	100	60	30	100	60	30
25	*200	100	* 45	*200	100	*150	60	45	*150	80	45
30	*300	*150	* 60	*300	*150	*150	80	45	*150	80	45
50	*400	*200	* 80	*500	*300	*300	*150	80	*300	*150	80
75	*600	*300	*150	*600	*400	*400	*200	100	*400	*200	100

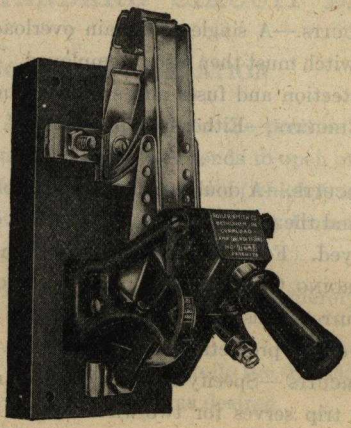
*These breakers are made in standard model only. All others are made in both industrial and standard models.

Note that standard breakers are supplied only with back connections, but for either switchboard or wall mounting, as specified.

Industrial breakers are supplied only with front connections for wall mounting.

ROLLER-SMITH INDUSTRIAL CIRCUIT BREAKERS

D. C. AND A. C.



60 Amperes Capacity

Circuit breakers should be recommended in preference to fused switches for all motor and most lighting circuits. While a little more expensive in first cost, they are far more accurate and reliable than fuse protection and eliminate all cost of renewals. Besides this, fuses are seldom right at hand to replace those which have blown, and while others are being hunted up, men and machinery are idle. With a circuit breaker, on the other hand, a single motion instantly restores normal circuit conditions. Circuit breakers also remove the temptation to fuse too heavily or cut out fuses by substituting copper wire, an important point in minimizing fire risk.

Roller-Smith Industrial Breakers are designed for use on circuits of 250 volts and under, D.C. of 440 volts and under, A.C. Mounted on slate bases, front connections, with terminal lugs.

Finish, black frame and dipped copper parts.

Operation, pull down on handle to close, and up to open.

PLAIN OVERLOAD

Rated Amperes Capacity	Range of Adjustment	Single-Pole	Double-Pole	Triple-Pole
3	3– 6	$19.00	$38.00	$57.00
5	5– 10	19.00	38.00	57.00
10	10– 20	19.00	38.00	57.00
15	15– 30	19.00	38.00	57.00
30	30– 60	19.00	38.00	57.00
45	45– 90	19.00	38.00	57.00
60	60–120	22.50	45.00	67.50
80	80–160	22.50	45.00	67.50
100	100–200	22.50	45.00	67.50

Two-pole breakers supplied with independent arm and three-pole with rigid arm, unless otherwise specified. No extra charge for rigid arm.

AUXILIARY TRIPS

Plain underload, operated when current drops to about 10 per cent of rated current, same price as plain overload.

Underload and overload, add $10.00 to list price of plain overload.

Shunt trip and overload, add $9.60 to list price of plain overload. Shunt trip is to operate breaker from special push button or other device located at a distance.

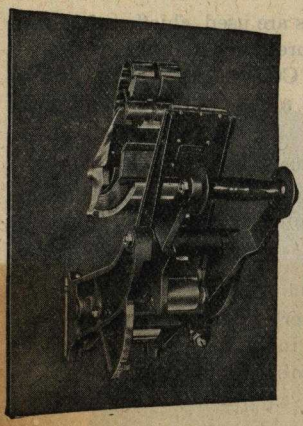
No-voltage and overload, add $12.00 for each no-voltage attachment (only one required, except on A. C. polyphase, which requires two).

Directions for Ordering

State ampere rating, voltage, A. C. or D. C., frequency if A. C., number of poles, rigid or independent arms and style of trip—that is, whether overload, underload, etc.

ROLLER-SMITH STANDARD CIRCUIT BREAKERS

DIRECT CURRENT AND ALTERNATING CURRENT



Independent arm type is composed of single-pole units, not inter-connected. This is of advantage on D. C. and single-phase circuits in that they are thrown in successively and the circuit is thus protected against closing on an initial overload. The rigid arm type is mechanically inter-connected and is used mostly on polyphase circuits.

The 600-volt styles have barriers between adjacent poles of multipole breakers.

Overload types have an overload coil for each pole. Narrow construction permits close spacing on switchboard. Finish, polished copper and dead black. Spade handles for 300 amperes and over. For switchboard use, breakers are furnished mounted on templates. For wall use, they are furnished back connection, mounted on individual slate bases, with feet to hold base out from wall and thus provide wiring space behind. This is known as "separate mounting," and takes regular prices.

Front connection is special and not recommended.

PLAIN OVERLOAD

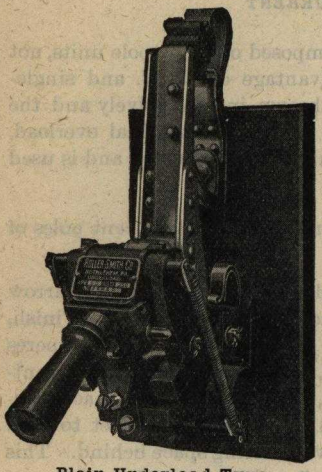
Rated Ampere Cap.*	250 Volts and Under, D. C. and A. C.					260 Volts to 600 Volts D. C. and A.C.				
	1-Pole	Independent Arm 2-Pole	Rigid Arm 2-Pole	Rigid Arm 3-Pole	Rigid Arm 4-Pole	1-Pole	Independent Arm 2-Pole	Rigid Arm 2-Pole	Rigid Arm 3-Pole	Rigid Arm 4-Pole
5	$25.50	$51.00	$57.00	$88.50	$120.00	$25.50	$55.00	$61.00	$96.50	$132.00
10	25.50	51.00	57.00	88.50	120.00	25.50	55.00	61.00	96.50	132.00
20	25.50	51.00	57.00	88.50	120.00	25.50	55.00	61.00	96.50	132.00
30	25.50	51.00	57.00	88.50	120.00	25.50	55.00	61.00	96.50	132.00
45	25.50	51.00	57.00	88.50	120.00	25.50	55.00	61.00	96.50	132.00
60	25.50	51.00	57.00	88.50	120.00	25.50	55.00	61.00	96.50	132.00
80	25.50	51.00	57.00	88.50	120.00	25.50	55.00	61.00	96.50	132.00
100	34.00	68.00	76.00	116.00	156.00	34.00	72.00	80.00	124.00	168.00
150	34.00	68.00	76.00	116.00	156.00	34.00	72.00	80.00	124.00	168.00
200	34.00	68.00	76.00	116.00	156.00	34.00	72.00	80.00	124.00	168.00
300	59.00	118.00	130.00	195.00	260.00	59.00	122.00	134.00	203.00	272.00
400	59.00	118.00	130.00	195.00	260.00	59.00	122.00	134.00	203.00	272.00
500	59.00	118.00	130.00	195.00	260.00	59.00	122.00	134.00	203.00	272.00
600	69.00	138.00	150.00	225.00	310.00	69.00	142.00	154.00	233.00	322.00
800	105.00	210.00	222.00	333.00	454.00	105.00	214.00	226.00	341.00	466.00
1000	155.00	310.00	335.00	500.00	.....	155.00	314.00	339.00	508.00	.....
1200	160.00	320.00	345.00	515.00	.....	160.00	324.00	349.00	523.00	.....
1500	210.00	420.00	460.00	.....	.....	210.00	424.00	464.00	.....	.....
1800	240.00	480.00	520.00	.....	.....	240.00	484.00	524.00	.....	.....
2000	340.00	680.00	.....	.....	.....	340.00	684.00	.....	.....	.....
2500	430.00	860.00	.....	.....	.....	430.00	864.00	.....	.....	.....
3000	475.00	950.00	.....	.....	.....	475.00	954.00	.....	.....	.....
4000	580.00	1160.00	.....	.....	.....	580.00	1164.00	.....	.....	.....
5000	740.00	.....	.....	.....	.....	740.00	.....	.....	.....	.....

Specify rated ampere capacity, number of poles, voltage and frequency, if A. C.

*Range of adjustment of overload trip: On single-pole and independent arm breakers, about 80 per cent to 180 per cent of rated capacity; on rigid arm multi-pole breakers, about 100 per cent to 180 per cent of rated capacity.

ROLLER-SMITH STANDARD CIRCUIT BREAKERS

DIRECT CURRENT AND ALTERNATING CURRENT



Plain Underload Type

UNDERLOAD

Underload circuit breakers are used chiefly with storage batteries to cut off before current drops to a point where it is likely to reverse. Coil is in series and trips breaker when current drops to about 10 per cent of rated amperes.

Plain Underload

Same prices as plain overload. A set containing one overload and one underload unit would be same price as double-pole plain overload.

Underload and Overload

These breakers have an overload coil for each pole and (one or two) underload coils in addition. Specify exact ampere rating, voltage and number of underload coils.

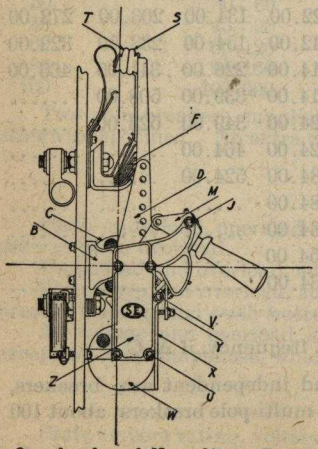
External appearance same as illustration of overload and no-voltage.

UNDERLOAD AND OVERLOAD COMBINED

Normal Rating* Amperes	250 Volts and Under, D. C., with Single Underload Coil			250-600 Volts D. C., with Single Underload Coil		
	1-Pole	Independent Arm 2-Pole	Rigid Arm 2-Pole	1-Pole	Independent Arm 2-Pole	Rigid Arm 2-Pole
5, 10, 20, 30, 45, 60 or 80	$39.50	$65.00	$71.00	$39.50	$69.00	$75.00
100, 150 or 200	52.00	86.00	94.00	52.00	90.00	98.00
300, 400 or 500	83.00	142.00	154.00	83.00	146.00	158.00
600	93.00	162.00	174.00	93.00	168.00	178.00
800	129.00	234.00	246.00	129.00	238.00	250.00

Normal Rating* Amperes	250 Volts and Under, with Two Underload Coils		250-600 Volts, with Two Underload Coils	
	Independent Arm 2-Pole	Rigid Arm 2-Pole	Independent Arm 2-Pole	Rigid Arm 2-Pole
5, 10, 20, 30, 45, 60 or 80	$ 79.00	$ 85.00	$ 83.00	$ 89.00
100, 150 or 200	104.00	112.00	108.00	116.00
300, 400 or 500	166.00	178.00	170.00	182.00
600	186.00	198.00	190.00	202.00
800	258.00	270.00	262.00	274.00

*For overload adjustment see note under plain overload.



Overload and No-voltage Type

NO-VOLTAGE

Plain No-voltage

These breakers open the circuit when the line voltage falls to about 30 per cent of normal. There is no reduction in price for omission of overload trip, and therefore the following is usually used:

No-voltage and Overload

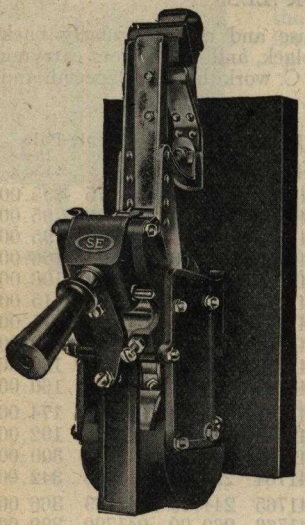
These have an overload coil in each pole and one or two no-voltage release coils in addition. For single-phase and for direct current, single no-voltage coil is sufficient. For polyphase circuits, two no-voltage coils are preferable.

PRICES ARE SAME AS FOR SHUNT TRIP AND OVERLOAD, BUT IN ORDERING, NO-VOLTAGE SHOULD BE SPECIFIED. Number of poles, mounting, voltage, frequency (if A. C.), number of no-voltage coils, and ampere rating should also be stated.

External appearance same as illustration of shunt trip type.

ROLLER-SMITH STANDARD CIRCUIT BREAKERS

DIRECT CURRENT AND ALTERNATING CURRENT



SHUNT TRIP

The shunt trip is a device for opening the circuit from distant points, as by means of push buttons or limit contacts. It consists of an extra coil (or coils) which are usually operated by current supplied from the main circuit but may be operated from an auxiliary circuit. In the latter case, it is advisable to obtain special prices, although listed prices will usually cover the attachment, provided auxiliary voltage is less than circuit voltage.

PLAIN SHUNT TRIP

A plain shunt trip breaker has no overload coil. As there is no reduction in price the combined overload and shunt trip type is usually employed.

SHUNT TRIP AND OVERLOAD

Normal Rating* Amperes	250 Volts and Under, D. C. and A. C. with Single Shunt Coil					250-600 Volts D. C. and A. C. with Single Shunt Coil				
	1-Pole	Independent Arm 2-Pole	Rigid Arm 2-Pole	Rigid Arm 3-Pole	Rigid Arm 4-Pole	1-Pole	Independent Arm 2-Pole	Rigid Arm 2-Pole	Rigid Arm 3-Pole	Rigid Arm 4-Pole
5, 10, 20, 30, 45, 60 or 80	$39.50	$ 65.00	$ 71.00	$102.50	$134.00	$ 45.50	$ 75.00	$ 81.00	$116.50	$152.00
100, 150, 200	52.00	86.00	94.00	134.00	174.00	58.00	96.00	104.00	148.00	192.00
300, 400, 500	83.00	142.00	154.00	219.00	284.00	89.00	152.00	164.00	233.00	302.00
600	93.00	162.00	174.00	249.00	334.00	99.00	172.00	184.00	263.00	352.00
800	129.00	234.00	246.00	357.00	478.00	135.00	244.00	256.00	371.00	496.00
1000	185.00	340.00	365.00	530.00	.....	191.00	350.00	375.00	544.00	.....
1200	190.00	350.00	375.00	545.00	.....	196.00	360.00	385.00	559.00	.....
1500	255.00	465.00	505.00	.....	.....	261.00	475.00	515.00	.....	.....
1800	285.00	525.00	565.00	.....	.....	291.00	535.00	575.00	.....	.....
2000	385.00	725.00	.....	.....	.....	391.00	735.00	.....	.....	.....
2500	490.00	920.00	.....	.....	.....	496.00	930.00	.....	.....	.....

Normal Rating* Amperes	250 Volts and Under, D. C. and A. C. with Two Shunt Coils				250-600 Volts D. C. and A. C. with Two Shunt Coils			
	Independent Arm 2-Pole	Rigid Arm 2-Pole	Rigid Arm 3-Pole	Rigid Arm 4-Pole	Independent Arm 2-Pole	Rigid Arm 2-Pole	Rigid Arm 3-Pole	Rigid Arm 4-Pole
5, 10, 20, 30, 45, 60 or 80	$ 79.00	$ 85.00	$116.50	$148.00	$ 95.00	$101.00	$136.50	$172.00
100, 150, 200	104.00	112.00	152.00	192.00	120.00	128.00	172.00	216.00
200, 400, 500	166.00	178.00	243.00	308.00	182.00	194.00	263.00	332.00
600	186.00	198.00	273.00	358.00	202.00	214.00	293.00	382.00
800	258.00	270.00	381.00	502.00	274.00	286.00	401.00	526.00
1000	370.00	395.00	560.00	.....	386.00	411.00	580.00	.....
1200	380.00	405.00	575.00	.....	396.00	421.00	595.00	.....
1500	510.00	550.00	.....	.....	526.00	566.00	.....	.....
1800	570.00	610.00	.....	.....	586.00	626.00	.....	.....
2000	770.00	.....	.....	.....	786.00	.....	.....	.....
2500	980.00	.....	.....	.....	996.00	.....	.....	.....

*For overload adjustment see note under plain overload.

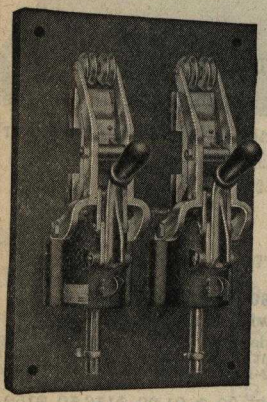
In ordering, state number of poles, mounting, voltage, frequency (if A. C.), number of shunt trip coils and ampere capacity.

CONDIT CIRCUIT BREAKERS

CARBON BREAK, PLAIN OVERLOAD, DIRECT CURRENT ONLY

TYPE K, 600, 220, AND 110 VOLTS OR LESS

The Type K circuit breakers are designed for switchboard use and come regularly back connected for 2-inch mounting. The finish of the case is dead black, and all current-carrying parts polished copper. These breakers can be adapted for A. C. work but are special, and prices will be supplied on application.

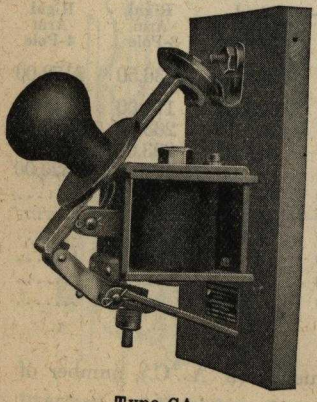


Type K

Form	Cap. Amps. Cont. Duty	Single-Pole Trade No.	Single-Pole Price Each	Double-Pole Trade No.	Double-Pole Price Each	Triple-Pole Trade No.	Triple-Pole Price Each
KL	5	041727	$30.00	041751	$65.00	041775	$95.00
KL	10	041728	30.00	041752	65.00	041776	95.00
KL	20	041729	30.00	041753	65.00	041777	95.00
KL	30	041730	32.00	041754	69.00	041778	106.00
KL	45	041731	32.00	041755	69.00	041779	106.00
KL	60	041732	35.00	041756	75.00	941780	115.00
KL	80	041733	35.00	041757	75.00	041781	115.00
KL	100	041734	40.00	041758	85.00	941782	130.00
KL	150	041735	40.00	041759	85.00	041783	130.00
KL	200	041736	50.00	041760	105.00	041784	160.00
KM	300	041737	58.00	041761	116.00	041785	174.00
KM	400	041738	64.00	041762	128.00	041786	192.00
KM	500	041739	100.00	041763	200.00	041787	300.00
KM	600	041740	114.00	041764	228.00	041788	342.00
KN	700	041741	122.00	041765	244.00	041789	366.00
KN	800	041742	130.00	041766	260.00	041790	390.00
KN	1000	041743	140.00	041767	280.00	041791	420.00
KO	1200	041744	160.00	041768	320.00	041792	480.00
KO	1500	041745	200.00	041769	400.00	041793	600.00
KP	2000	041746	360.00	041770	720.00	041794	1080.00
KP	2500	041747	420.00	041771	840.00	041795	1260.00
KQ	3000	041748	465.00	041772	930.00	.....	.....
KQ	4000	041749	550.00	041773	1100.00	.....	.....
KQ	5000	041750	800.00	041774	1600.00	.....	.....

Attachments for Type K Condit Circuit Breakers

Trade No.	Description	Price Additional Each
46753	Bell-ringing attachment	$8.00
46754	Shunt trip only	Same as overload
46755	Shunt trip and overload	25 00
46756	Underload only	Same as overload
46757	Underload and overload	25.00
46758	No-voltage only, 220 volts	Same as overload
46759	No-voltage and overload. 220 volts	35.00
46760	Reverse current only, 220 volts	75.00
46761	Reverse current and overload, 220 volts	100.00
46762	Time limit attachment, Type B, per pole	9.50



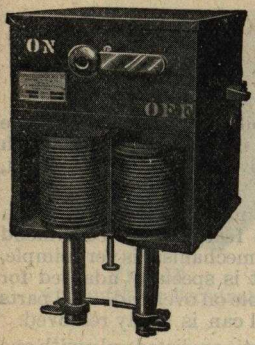
Type CA

CEMCO TYPE, 600, 220 AND 110 VOLTS OR LESS

The Type Cemco circuit breakers are designed for motor work where dirt and moisture are excessive. They come regularly unpolished, front connected, on slate base. Back connected, polished, 25 per cent additional.

Form	Amperes	Single-Pole Trade No.	Single-Pole Price Each	Double-Pole Trade No.	Double-Pole Price Each	Triple-Pole Trade No.	Triple-Pole Price Each
CA	5	055152	$12.00	055169	$24.00	055180	$36.00
CA	10	055153	12.00	055170	24.00	055181	36.00
CA	20	055154	12.00	055171	24.00	055182	36.00
CA	25	055155	12.00	055172	24.00	055183	36.00
CA	30	055156	12.00	055173	24.00	055184	36.00
CA	40	055157	12.00	055174	24.00	055185	36.00

CONDIT CIRCUIT BREAKERS AND STARTERS



Type ID

TYPE ID OIL CIRCUIT BREAKERS

The Type ID Oil Circuit Breaker is especially designed for the protection of small induction motors, which are started without the use of compensators. The ID is totally enclosed, dust-proof, fire-proof, and fool-proof, thus making it very safe and desirable for use in all classes of industrial plants.

In the overload Type ID Oil Circuit Breaker the overload coil or coils are depended upon to protect the motor from overload or short circuits. Two overload coils are recommended. All overload coils are fitted with a calibration tube which can be adjusted so that the circuit breaker will trip at any desired value of current from normal to three times normal. The overload circuit breakers may be equipped with time-limit attachment.

The no-voltage attachment is used when it is desired to protect the motor from failure of voltage. The no-voltage coils may be wound for any voltage up to and including 600, and are designed to be connected directly across the line. No potential transformers or resistances are needed.

Automatic, Plain Overload, One Coil and One Time Limit
50 Amperes or Less, 600 Volts or Less

Trade No.	No. of Poles	Ship. Wt. Pounds	Price Each
128201	2	25	$30.90
128202	3	25	31.90
128203	4	35	44.50

One additional overload coil with one time-limit, $8.60 extra.

Shunt trip, same price as overload.

No-voltage attachment, $18.00 extra.

For omission of time-limit. deduct for each time-limit, $1.00.

With the no-voltage attachment, additional shipping weight is 10 pounds.

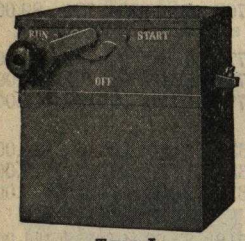
Automatic, No-voltage, without Overload Coils
50 Amperes or Less, 600 Volts or Less

128204	2	25	34.00
128205	3	25	35.00
128206	4	35	40.50

All the above prices include necessary oil.

Additional charge for drilling entrance holes for conduit wiring, 5 cents net per hole.

Additional charge for drilling entrance holes and furnishing porcelain bushings for open wiring, 10 cents net per hole.

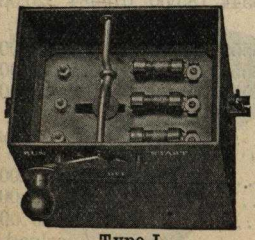


Type I
Exterior View
250 Volt

TYPE I OIL MOTOR STARTERS

The Type I Oil Starter meets the demand for a fused oil switch for use in starting small induction motors which are thrown directly on the line, without the use of a starting compensator.

It is a fundamental engineering principle that for safe and satisfactory operation, as well as for economical maintenance of the apparatus, the making and breaking of an alternating current circuit should take place in oil, irrespective of capacity or potential. The use of Type I Oil Starter permits the motor to be fused for proper overload protection without blowing the fuses on starting the motor and at the same time affords ample protection during the starting period. As it is totally enclosed there is no danger of the operator coming in contact with either the operating mechanism or any live parts.

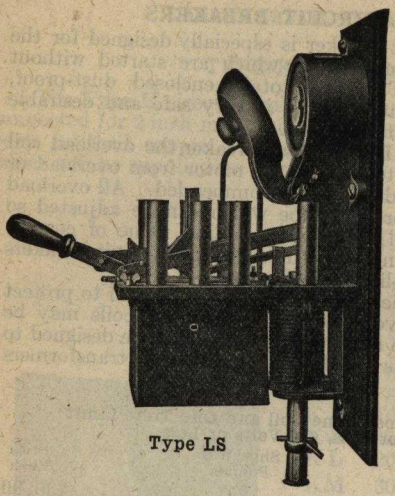

Type I
Interior View
250 Volt

30 Amperes or Less, 250 Volts or Less, without Fuses

46763	3	30	21.70
46764	4	35	27.80
	With Fuses		
46765	3	30	22.60
46766	4	35	28.90
	30 Amperes or Less, 251-600 Volts or Less, without Fuses		
46767	3	35	35.60
	With Fuses		
46768	3	35	37.00

Additional charge for drilling entrance holes, 5 cents net per hole.

CONDIT TYPE LS OIL CIRCUIT BREAKERS



Type LS

600, 440, 220, 110 VOLTS OR LESS, ALTERNATING CURRENT

The Condit Type LS oil circuit breakers come in non-automatic, automatic, no-voltage only, and with overload, and can be supplied with many attachments, as shown below.

They are designed for use in connection with induction motors and have features to recommend them for this purpose. The mechanism is very simple, there being few parts, and it is specially adapted for dirty places. It is non-closable on overload. All parts are easily accessible. The oil can is easily removed.

These switches in automatic are listed only with one overload coil. See below for additions necessary when two overload coils are wanted. The location of the terminals make the use of these switches for switchboard work an easy matter. Send for a complete bulletin devoted to Type LS switches, No. 402.

Non-Automatic, Switchboard Mounted

	Single-Throw						Double-Throw			
	Two-Pole		Three-Pole		Four-Pole		Two-Pole		Three-Pole		Four-Pole	
Cap. Amps.	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
5– 50	049702	$25.00	049718	$30.00	049734	$40.00	049750	$50.00	049766	$60.00	049782	$80.00
75	049703	27.50	049719	32.50	049735	42.00	049751	55.00	049767	65.00	049783	84.00
100	049704	30.00	049720	35.00	049736	44.50	049752	60.00	049768	70.00	049784	89.00

Non-Automatic, Wall Mounted

5– 50	049710	20.00	049726	24.00	049742	32.00	049758	40.00	049774	48.00	049790	64.00
75	049711	22.00	049727	26.00	049743	33.50	049759	44.00	049775	52.00	049791	67.00
100	049712	24.00	049728	28.00	049744	35.50	049760	48.00	049776	56.00	049792	71.00

Plain Overload, Switchboard Mounted

5– 50	076310	44.50	076326	54.50	076342	69.00	076318	89.00	076334	109.00	076350	139.00
75	076311	47.00	076327	57.00	076343	74.50	076319	94.00	076335	114.00	076351	149.00
100	076312	49.50	076328	62.00	076344	79.50	076320	99.00	076336	124.00	076352	159.00

Plain Overload, Wall Mounted

5– 50	076358	35.50	076398	43.50	076438	55.50	076478	71.00	076518	87.00	076558	111.00
75	076359	37.50	076399	45.50	076439	59.50	076479	75.00	076519	91.00	076559	119.00
100	076360	39.50	076400	49.50	076440	63.50	076480	79.00	076520	99.00	076560	127.00

Plain No-Voltage, Switchboard Mounted

5– 50	076366	57.00	076406	67.00	076446	81.50	076486	114.00	076526	134.00	076566	163.00
75	076367	59.50	076407	69.00	076447	86.00	076487	119.00	076527	139.00	076567	173.00
100	076368	62.00	076408	74.50	076448	91.50	076488	124.00	076528	149.00	076568	183.00

Plain No-Voltage, Wall Mounted

5– 50	076374	45.50	076414	53.50	076454	65.00	076494	91.00	076534	107.00	076574	130.00
75	076375	47.50	076415	55.50	076455	69.00	076495	95.00	076535	111.00	076575	138.00
100	076376	49.50	076416	59.50	076456	73.00	076496	99.00	076536	119.00	076576	146.00

Overload and No-Voltage, Switchboard Mounted

5– 50	076382	75.00	076422	85.00	076462	100.00	076502	150.00	076542	170.00	076582	200.00
75	076383	77.50	076423	87.50	076463	105.00	076503	155.00	076543	175.00	076583	210.00
100	076384	80.00	076424	92.50	076464	110.00	076504	160.00	076544	185.00	076584	220.00

Overload and No-Voltage, Wall Mounted

5– 50	076390	60.00	076430	68.00	076470	80.00	076510	120.00	076550	136.00	076590	160.00
75	076391	62.00	076431	70.00	076471	84.00	076511	124.00	076551	140.00	076591	168.00
100	076392	64.00	076432	74.00	076472	88.00	076512	128.00	076552	148.00	076592	176.00

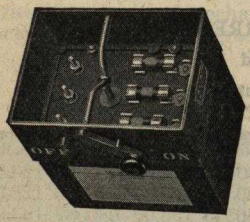
Attachments for Type LS Oil Circuit Breakers

Trade No.	Description	Price Additional Each
46711	Bell ringing attachments	$8.00
46712	Time limit, Type B, per coil	8.00
46713	Shunt trip and overload	25.00
46714	Shunt trip only	Same as overload.
46715	Double overload coil	13.00
46716	Switcholene, per gallon (can extra)	.90

CONDIT OIL SWITCHES



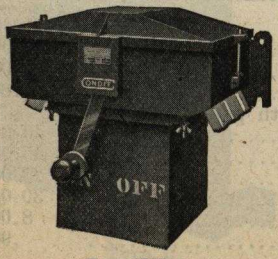
Type ID
without Fuse Terminals



Type ID
with Fuse Terminals



Type M-5



Type PK-5

TYPE ID OIL SWITCHES

Type ID oil switch is especially designed for the protection of small induction motors which are started without the use of compensators. It is totally enclosed, dustproof, fireproof and foolproof, thus making it very safe and desirable for use in all classes of industrial plants.

ALTERNATING CURRENT, SINGLE-THROW, NON-AUTOMATIC, WALL MOUNTED; WITHOUT FUSE TERMINALS
50 Amperes or Less, 600 Volts or Less

Trade No.	No. of Poles	Ship. Wt., Lbs.	Price Each
049683	2	20	$11.30
049684	3	20	12.30
049685	4	25	24.50

WITH FUSE TERMINALS
30 Amperes or Less, 250 Volts or Less

		Without Fuses		With Fuses	
No. of Poles	Ship. Wt., Lbs.	Trade No.	Price Each	Trade No.	Price Each
2	20	049686	$13.60	128180	$14.20
3	20	049687	14.80	128181	15.70
4	25	049688	26.00	128182	27.20
30 Amperes or Less, 251–600 Volts					
2	25	46728	18.50	128183	19.50
3	25	46729	19.80	128184	21.20
4	....	46730	On application	.....	On application

Additional charge for drilling entrance holes for conduit wiring 5 cents net per hole.

Additional charge for drilling entrance holes and furnishing porcelain bushings for open wiring, 10 cents net per hole.

Above prices include necessary oil.

TYPE M-5 MANHOLE OIL SWITCHES

Type M-5 oil switch is designed for use on underground systems, or in other locations where there is a possibility of flooding. It is constructed with a minimum number of joints and these are made water-tight. The handle not only operates the switch, but, being removable, also serves to insert and remove the plug which seals the switch. It is designed for mounting on flat surfaces, and a mounting bracket is furnished with each switch.

SINGLE-THROW, NON-AUTOMATIC
Arranged for Single-conductor Cable
200 Amperes or Less, 4500 Volts or Less

Trade No.	No. of Poles	Ship. Wt., Lbs.	Price Each
128185	2	150	$ 86.00
128186	3	150	103.50
128187	4	175	138.00

Switches arranged for multi-conductor cable, prices on application.

Double-throw switches, prices on application.

Standard cable sleeves have an inside diameter of 7/8, 1 1/16 and 1 5/16 inches. Cable sleeves of different diameters can be furnished; additional price of such special sleeves on application.

TYPE PK-5 POLE LINE OIL SWITCHES

The PK-5 oil switch is intended primarily for use out of doors as a pole-line switch, although it may be used on other kinds of service. As a pole-line switch it is used for sectionalizing lines, switching transformers, etc. Type PK-5 is intended for mounting on a flat surface or cross-arms. Ordinarily furnished without line wires. Line wires supplied in any length at an additional charge.

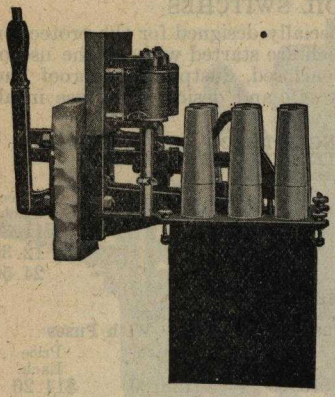
SINGLE-THROW, NON-AUTOMATIC
200 Amperes or Less, 4500 Volts or Less

128188	2	110	76.00
128189	3	130	81.50
128190	4	144	98.50

Line wires of No. 00 weatherproof braid, stranded cable can be furnished at the following additional net prices: 2-ft. lengths assembled in switch, $1.00; 4-ft. lengths, $1.50; 6-ft. lengths, $2.00.

Double-throw switches, prices on application.

CONDIT TYPE E OIL CIRCUIT BREAKERS



The Type E switch was designed to meet the requirements for a reliable oil switch at a moderate price.

The tripping coils are mounted on a separate insulating support, which is fastened to the back of the switch, and the tripping is accomplished in a positive and simple manner.

All poles are immersed in a single-lined tank and contact parts are mounted on porcelain pillars, insuring high insulation.

The contacts are our well-known laminated type, equipped with renewable auxiliary contacts.

This switch is made with either secondary or primary tripping, and in all cases is so arranged that it cannot be held closed on a short circuit.

The prices include one current transformer for double-pole breakers and two current transformers for triple-pole and four-pole breakers.

Double-throw switches, both automatic and non-automatic, may be arranged so that only one side can be thrown in at a time.

6600 VOLTS OR LESS, ALTERNATING CURRENT

Non-Automatic, Switchboard or Wall Mounted

	Single-Throw						Double-Throw					
	Two-Pole		Three-Pole		Four-Pole		Two-Pole		Three-Pole		Four-Pole	
Cap. Amps.	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
100	080375	$55.00	080417	$59.00	080459	$75.00	080501	$87.00	080543	$104.00	080585	$126.00
200	080376	55.00	080418	59.00	080460	75.00	080502	87.00	080544	104.00	080586	126.00
300	080377	71.00	080419	83.00	080461	99.00	080503	129.00	080545	153.00	080587	183.00
400	080378	77.00	080420	91.00	080462	113.00	080504	138.00	080546	168.00	080588	210.00
500	080379	83.00	080421	99.00	080463	124.00	080505	148.00	080547	178.00	080589	217.00
600	080380	119.00	080422	158.00	080464	198.00	080506	178.00	080548	237.00	080590	296.00

3300 VOLTS OR LESS, ALTERNATING CURRENT

Automatic Primary Trip, Switchboard or Wall Mounted

100	080627	85.00	080669	109.00	080711	124.00	080753	119.00	080795	153.00	080837	173.00
200	080628	85.00	080670	109.00	080712	124.00	080754	119.00	080796	153.00	080838	173.00
300	080629	109.00	080671	138.00	080713	163.00	080755	162.00	080797	208.00	080839	237.00
400	080630	133.00	080672	178.00	080714	223.00	080756	200.00	080798	267.00	080840	333.00
500	080631	148.00	080673	198.00	080715	247.00	080757	223.00	080799	296.00	080841	370.00
600	080632	170.00	080674	227.00	080716	284.00	080758	257.00	080800	340.00	080842	428.00

4500 VOLTS OR LESS, ALTERNATING CURRENT

Automatic Transformer Trip, Switchboard or Wall Mounted

100	080639	131.00	080681	178.00	080723	198.00	080765	158.00	080807	223.00	080849	247.00
200	080640	131.00	080682	178.00	080724	198.00	080766	158.00	080808	223.00	080850	247.00
300	080641	150.00	080683	213.00	080725	237.00	080767	198.00	080809	277.00	080851	296.00
400	080642	153.00	080684	223.00	080726	252.00	080768	220.00	080810	291.00	080852	346.00
500	080643	158.00	080685	228.00	080727	257.00	080769	227.00	080811	306.00	080853	409.00
600	080644	247.00	080686	326.00	080728	407.00	080770	365.00	080812	490.00	080854	613.00

For larger capacities or higher voltages send for Bulletins Nos. 404–408.

Attachments for Condit Type E Oil Circuit Breakers

Trade No.	Description	Price Additional Each
46688	Bell-ringing attachment	$8.00
46689	No-voltage only, without overload, 220 volts	10.00
46690	No-voltage only, without overload, 600 volts	15.00
46691	No-voltage and overload, 110 or 220 volts or for use with potential transformer	40.00
46692	No-voltage and overload, 600 volts	45.00
46693	Push button or shunt trip opening	25.00
46694	Hand-operated remote control attachment	30.00
46695	Time limit attachment, Type B, per coil	8.00
46696	Switcholene, per gallon (can not included),	.90

Send for bulletin describing Type E apparatus, No. 403.

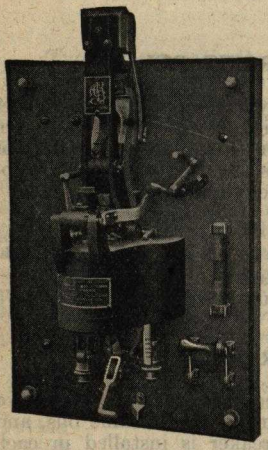
AUTOMATIC RECLOSING CIRCUIT BREAKERS

Automatic Reclosing Circuit Breakers are designed for the complete protection of any D C. circuit. They are built for any operating voltage up to 600 volts (nominal), and in any capacity up to 2000 amperes.

The operation of Automatic Reclosing Circuit Breakers is entirely automatic; that is, they open automatically whenever an overload or "short" takes place on the circuit they protect, and close automatically when, and only when, the overload or "short" has been removed. The cycle of operation is as follows: When an overload occurs the Automatic Reclosing Circuit Breaker opens automatically; it remains open for a definite time interval (which time interval is obtained by means of a dash pot and is adjustable) regardless of load conditions. After this time interval has elapsed the Automatic Reclosing Circuit Breaker automatically closes provided the "short" or overload has been removed from the line; if the overload still remains on the line, however, the breaker makes no attempt to reclose but remains open until the overload is removed when it closes instantly and automatically.

Automatic Reclosing Circuit Breakers afford complete protection because both their opening and closing are governed entirely by load conditions.

Automatic Reclosing Circuit Breakers for the protection of independent power circuits are built in three types, namely, Types AA, C and D, the use of one or the other of these depending upon the class of service and the capacity of breaker required. In all these types the operating coil, overload coil and resetting coil are completely housed and protected in a cast iron frame which carries the operating mechanism. They are designed to conform with standard circuit breaker practice as regards temperature rise.

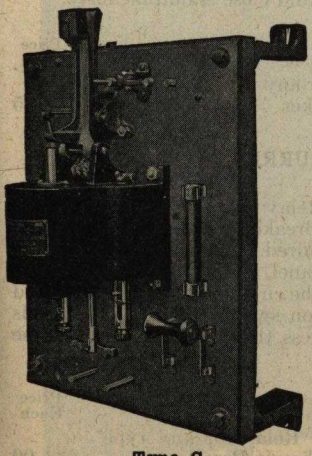


Type AA

TYPE AA

These breakers are built in rated capacities ranging from 300 amperes to 800 amperes. They are highly finished instruments adapted to switchboard mounting. The main current carrying contacts are of the laminated copper brush construction with secondary copper contacts and final carbon break. They are mounted on standard size slate, 15 inches wide by 21 inches high by 1½ inches thick, with ¼-inch bevelled edges and marine black finish, unless otherwise specified. Standard 1¼-inch pipe support brackets are furnished unless otherwise specified.

Trade No.	Rating Amperes	Calibration Range Min. Amps.	Calibration Range Max. Amps.	Price Each
144426	300	200	500	$156.00
144427	400	300	600	162.00
144428	500	300	700	169.00
144429	600	400	900	189.00
144430	800	600	1200	198.00



Type C

TYPE C

Type C breakers are built in rated capacities of 200 amperes and 400 amperes. The main current carrying contacts are solid copper, making a wiping contact and having a final carbon break. The 200-ampere breaker has one rear contact 1 inch wide and one front contact 1 inch wide. The 400-ampere breaker has two rear contacts each 1 inch wide and one front contact 2 inches wide. This type is mounted on a standard marine black finish slate, 14 inches wide by 18 inches high by 1¼ inches thick, with ¼-inch bevelled edges, unless otherwise specified. Wall support brackets are furnished unless otherwise specified.

Trade No.	Rating Amperes	Calibration Range Min. Amps.	Calibration Range Max. Amps.	Price Each
144431	200	100	300	$82.00
144432	400	200	600	94.00

AUTOMATIC RECLOSING CIRCUIT BREAKERS



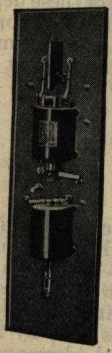
Type D

TYPE D

Type D Automatic Reclosing Circuit Breakers are built in rated capacities of 1200 amperes and 2000 amperes. They are highly finished instruments adapted to switchboard mounting. The main current carrying contacts are of the laminated copper brush construction with secondary copper contacts and final carbon break. They are mounted on a standard black marine finish slate 16 inches wide by 27 inches high by 2 inches thick with ¼-inch beveled edges, unless otherwise specified. Standard 1¼-inch pipe support mounting brackets are furnished unless otherwise specified.

Trade No.	Rating Amperes	Calibration Range Min. Amps.	Max. Amps.	Price Each
144443	1200	900	1800	$243.00
144444	2000	1200	3600	285.00

When an Automatic Reclosing Circuit Breaker is installed in a feeder which ties in with a line or system of distribution supplied with power from one or more other sources than through the breaker, then the use of relay is required in connection with the breaker, as listed below.

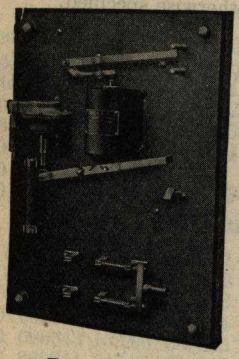


Type F-2 Relay

TYPE F-2 FEEDER CIRCUIT RELAYS

The Type F-2 Feeder Circuit Relay is required when the feeder in which the breaker is installed is tied in with a line or system of distribution supplied with power from another station or other stations. A Type F-2 relay is required with each Automatic Reclosing Circuit Breaker under these conditions.

Trade No.	Description	Price Each
144445	Type F-2 Feeder Circuit Relay for any type Automatic Reclosing Circuit Breaker.....	$35.75



Type M Relay

TYPE M MASTER RELAYS

The Type M Master Relay is required when there are two generators in the same station feeding onto the same bus, and an Automatic Reclosing Circuit Breaker is installed in each generator circuit. One Type M Relay is then required to control the operation of the two Automatic Reclosing Circuit Breakers so that they open simultaneously and close simultaneously.

Trade No.	Description	Price Each
144446	Type M Master Relay for any type Automatic Reclosing Circuit Breaker.....	$35.75



Type J Relay

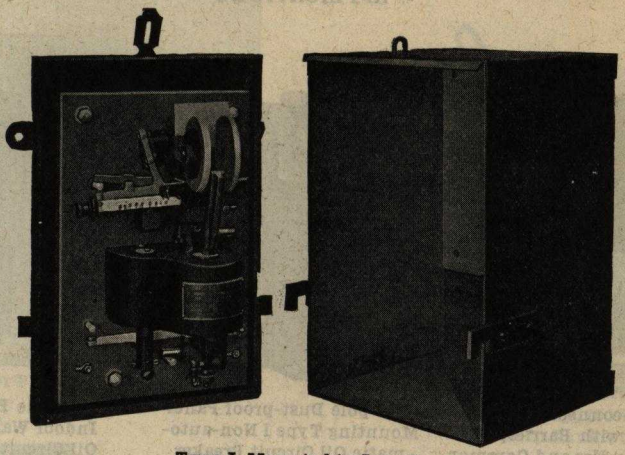
TYPE J REVERSE CURRENT RELAYS

The Type J Reverse Current Relay is applicable to any type of Automatic Reclosing Circuit Breaker where reverse current and low voltage protection is required. This relay is mounted on the back of the circuit breaker panel, and is furnished complete with necessary resistance units in the circuit of the polarizing and resetting coil and with push button switch for resetting. This relay gives reliable operation on less than five per cent reverse current.

Trade No.	Description	Price Each
144447	Type J Reverse Current Relay for any type Automatic Reclosing Circuit Breaker.....	$33.00

AUTOMATIC RECLOSING CIRCUIT BREAKERS

TYPE I, FOR INDIVIDUAL MOTOR PROTECTION

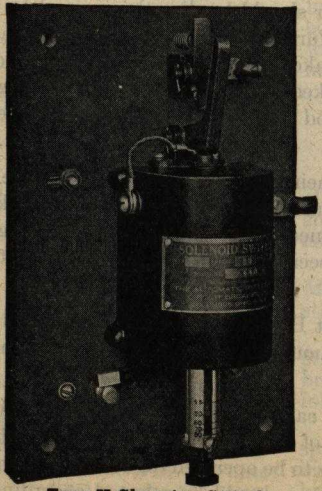


Type I, Mounted in Iron Box

Type I Automatic Reclosing Circuit Breakers are designed for individual motor protection. They are wired up in connection with the motor starting device in such a manner that they open, due either to overload or failure of voltage and remain open so long as the starting box is in any other position than the "off" position. When the starting box is returned to the "off" position, the breaker automatically and instantly recloses.

Type I Automatic Reclosing Circuit Breakers are built for any operating voltage up to 600 volts D. C. (nominal) and in 50-ampere and 100-ampere capacities. They are applicable to any standard form of controller or starting box without any modifications whatever in the controller or starting box. This breaker is mounted on a standard black marine finish slate, 9 inches wide by 14 inches high by 1 inch thick, drilled for three-point support and furnished with wall mounting brackets. When desired the Type I breaker is furnished mounted in an iron box of the following dimensions over all: 12½ inches wide by 17½ inches high by 13 inches deep. This box is constructed as shown in the illustration. When the cover is locked on this box, it is impossible to tamper with the breaker.

Trade No.	Rating Amperes	Calibration Range Min. Amps.	Calibration Range Max. Amps.	Price Each
144458	50	30	75	$55.00
144459	100	60	150	55.00
144460	Iron box for mounting either of the above breakers, extra			8.00



Type H Charging Switch

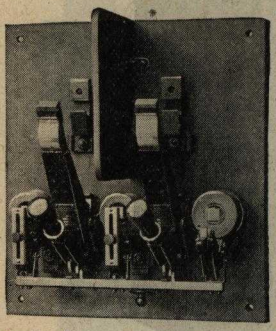
TYPE H STORAGE BATTERY CHARGING SWITCHES

Type H Automatic Reclosing Storage Battery Charging Switches are designed to protect storage batteries under charge against discharging, should the charging voltage fall below the voltage of the battery, and to provide a means for automatically resuming the charge when the line voltage rises to a point which will permit the battery to charge. These switches are entirely automatic in their operation, and can be depended upon to open at zero current and reclose when the charging voltage rises to the proper value for charging the battery. They are very substantially constructed, and suitable for any kind of service in connection with charging storage batteries. They are built in 50-ampere and 100-ampere capacities. The switch is provided with an adjustment so that it may be set to close at any desired value of charging voltage within limits of 1 and 1.5. It is furnished for any voltage range specified within these limits.

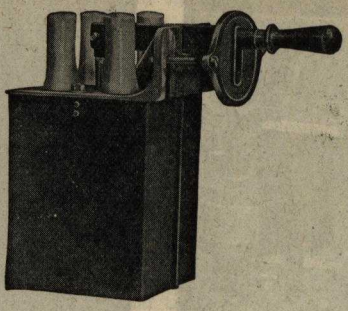
Trade No.	Rating Amperes	Price Each
144461	50	$25.00
144462	100	39.00

WESTINGHOUSE CIRCUIT BREAKERS

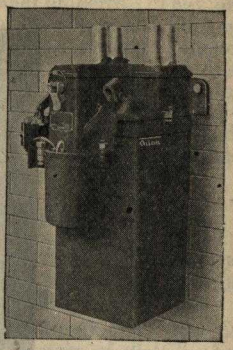
APPLICATIONS



Two-pole Front-connected Type CD Carbon Breaker with Barrier, Separate Closing Handles and Common Trip, One Under-voltage and Two Overload Tripping Coils 100 Amperes, 600 Volts



Two-pole Dust-proof Panel Mounting Type I Non-automatic Oil Circuit Breaker



Two-pole Electrically-operated Indoor Wall Mounting Type H Oil Circuit Breaker, Non-automatic, 100 Amperes, 2500 Volts

A circuit breaker is essentially a switch arranged to open automatically under certain predetermined conditions for the protection of motors and other apparatus. For this purpose circuit breakers are always provided with special means for disrupting considerable amounts of current such as they may be called upon to open under conditions of short circuit. A circuit breaker is also used for non-automatic operation where necessary to frequently open circuits involving larger amounts of power than can be properly handled by knife switches. The usual form of automatic operation for circuit breakers is overload only, this being standard on all Westinghouse automatic circuit breakers, but in addition, special automatic operating features can be supplied for opening on underload, over-voltage, under-voltage, reverse-current, and by shunt-tripping through an auxiliary circuit.

A carbon breaker as distinguished from an oil breaker is always used for direct current service. For alternating current service a carbon breaker is used in preference to an oil breaker when it is desirable to have the smallest possible device, for mounting on the front of a switchboard or to match up with other breakers. However, no carbon breaker should be directly exposed to the severe conditions present in cement or flour mills, plaster or furniture factories, or similar plants where acid fumes or much dirt are present. When carbon breakers are installed where dust or dirt are likely to accumulate, particular care should be taken to keep the contacts clean and bright. Breakers should be opened and cleaned regularly to insure good contact and thus avoid overheating.

Oil breakers are used only on alternating current, as their efficiency depends upon the oil breaking the arc at the zero point of the wave. They are considered safer than carbon breakers for alternating current service, owing to the arc being confined under the oil. They will give greater service without renewal of parts, and are therefore especially applicable for motor starting purposes.

The current ratings shown for all Westinghouse Circuit Breakers are maximum, based on the allowable temperature rise that is reached after a continuous run of approximately one hour at the rated current.

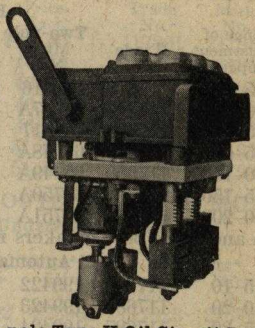
In selecting a breaker, it is recommended that the rated capacity should be at least as great as the maximum rated one-hour (or more) overload current of the apparatus that the switch or breaker will be required to control. If the circuit controlled is to be operated for one hour or more at greater than rated overload capacity, the switch or breaker should be selected accordingly.

WESTINGHOUSE OIL CIRCUIT BREAKERS

TYPE H—MANUALLY-OPERATED, SINGLE THROW



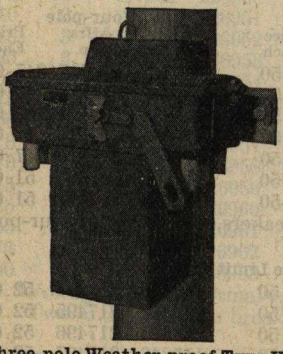
Three-pole Type H Oil Circuit Breaker Indoor Wall Mounting, Plain Automatic Overload or Plain Under-voltage Trip



Three-pole Type H Oil Circuit Breaker Indoor Wall Mounting, Full Automatic Overload Trip with Adjustable Inverse-time Limit 50-100 Amp, 750 Volts Open, with Tank Off



Three-pole Type H Oil Circuit Breaker Indoor Wall Mounting, Full Automatic Overload Trip and Adjustable Inverse-time Limit 5-100 Amp., 2500 Volts



Three-pole Weather-proof Type H Oil Ciruit Breaker, Outdoor Mounting, Under-voltage and Full Automatic Overload Trip with Adjustable Inverse-time Limit 5-100 Amp., 750 Volts

Type H Oil Circuit Breakers are small capacity manually-operated single-throw breakers for indoor use (dustproof wall mounting) and outdoor use (weatherproof, wall or pole mounting).

These breakers supply the need for a simple, reliable, and inexpensive oil circuit breaker for use in general industrial applications utilizing low voltages. They are particularly useful for controlling motor circuits and other loads of low power factor, for although the rated voltage is low, excessive arcing would occur even with low voltage when using an air-break switch at low power factor, thus making an oil circuit breaker advisable.

Due to the excessive moisture and drippings inherent in mines, the weatherproof breakers find ever-increasing uses as low capacity and low voltage breakers in such service.

Type H Oil Circuit Breakers can be used on direct current circuits of voltages up to 250 where the maximum short-circuit current that the breaker may be called upon to trip will not exceed 500 amperes.

The advantageous features of Type H Breakers are: compactness of form; ample contacts of the "butt" type; submersion and opening of all contacts under oil; quick opening of contacts; open position maintained by gravity; tanks removable without disturbing the operating mechanism or contacts, making inspection easy; self-contained multipole operating mechanism.

Instruction for Ordering

Mfrs. No. includes breaker complete with all features included under price except the necessary oil which should be specified as an extra item. Price includes the breaker complete as listed and the necessary oil and terminals.

Standard Type H Oil Circuit Breakers should be ordered by Mfrs. No. As a check against possible error it is advisable to state the current, voltage, and form of trip.

Special Type H Oil Circuit Breakers including auxiliaries, etc., should be ordered by the Mfrs. No. of the nearest standard breaker, as follows: "Similar to Mfrs. No. . . . except as follows":

Auxiliaries ordered as part of a complete breaker should be specified by Mfrs. No. and description as part of the circuit breaker item as indicated above under heading of "special breakers." Oil should be specified as a separate item.

WESTINGHOUSE OIL CIRCUIT BREAKERS

TYPE H—MANUALLY-OPERATED, SINGLE-THROW DUSTPROOF INDOOR WALL MOUNTING.

FOR VOLTAGE UP TO 750

Plain Automatic Overload Trip

Cap. Amps.	Range of Adjustment Amperes	Two-pole Trade No.	Two-pole Mfrs. No.	Two-pole Price Each	Three-pole Trade No.	Three-pole Mfrs. No.	Three-pole Price Each	Four-pole Trade No.	Four-pole Mfrs. No.	Four-pole Price Each
5	5–10	117678	199416	$25.00	117692	199418	$28.50	117706	199420	$35.50
10	10–20	117679	65747A	25.00	117693	65752A	28.50	117707	65757A	35.50
15	15–30	117680	199417	25.00	117694	199419	28.50	117708	199421	35.50
25	25–50	117681	65748A	25.00	117695	65753A	28.50	117709	65758A	35.50
50	50–100	117682	65749A	25.00	117696	65754A	28.50	117710	65759A	35.50
75	75–150	117683	65750A	27.00	117697	65755A	31.50	117711	65760A	39.50
100	100–200	117684	65751A	27.00	117698	65756A	31.50	117712	65761A	39.50

Two and three-pole breakers require 1½ gallons of oil; four-pole, 2 gallons.

Full Automatic Overload Trip and Inverse Time Limit

5	5–10	117685	199422	32.00	117699	199429	39.00	117713	199436	43.00
10	10–20	117686	199423	32.00	117700	199430	39.00	117714	199437	43.00
15	15–30	117687	199424	32.00	117701	199431	39.00	117715	199438	43.00
25	25–50	117688	199425	32.00	117702	199432	39.00	117716	199439	43.00
50	50–100	117689	199426	32.00	117703	199433	39.00	117717	199440	43.00
75	75–150	117690	199427	34.00	117704	199434	42.00	117718	199441	47.00
100	100–200	117691	199428	34.00	117705	199435	42.00	117719	199442	47.00

Two and three-pole breakers require 2 gallons of oil; four-pole, 2½ gallons.

Omission from above prices for non-automatic oil circuit breakers will be quoted on application.

Plain Undervoltage Trip

Cap. Amps.	No. of Poles	110 Volts* 25 Cycles Trade No.	110 Volts* 25 Cycles Mfrs. No.	110 Volts* 60 Cycles Trade No.	110 Volts* 60 Cycles Mfrs. No.	220 Volts* 25 Cycles Trade No.	220 Volts* 25 Cycles Mfrs. No.	220 Volts* 60 Cycles Trade No.	220 Volts* 60 Cycles Mfrs. No.	Price Each
25	2	117720	211858	117726	211870	117732	211861	117738	211873	$25.00
100	2	117721	211882	117727	211894	117733	211885	117739	211897	27.00
25	3	117722	211859	117728	211871	117734	211862	117740	211874	28.50
100	3	117723	211883	117729	211895	117735	211886	117741	211898	31.50
25	4	117724	211860	117730	211872	117736	211863	117742	211875	35.50
100	4	117725	211884	117731	211896	117737	211887	117743	211899	39.50
		440 Volts*				550 Volts*				
25	2	117744	211864	117750	211876	117756	211867	117762	211879	27.00
100	2	117745	211888	117751	211900	117757	211891	117763	211903	29.00
25	3	117746	211865	117752	211877	117758	211868	117764	211880	30.50
100	3	117747	211889	117753	211901	117759	211892	117765	211904	33.50
25	4	117748	211866	117754	211878	117760	211869	117766	211881	37.50
100	4	117749	211890	117755	211902	117761	211893	117767	211905	41.50

*Voltage listed is normal rating of undervoltage trip coil.

Two and three-pole breakers require 1½ gallons of oil; four-pole breakers, 2 gallons.

FOR VOLTAGE UP TO 2500

Full Automatic Overload Trip

Cap. Amps.	Range Adjustment Amperes	Two-pole Trade No.	Two-pole Mfrs. No.	Two-pole Price Each	Three-pole Trade No.	Three-pole Mfrs. No.	Three-pole Price Each	Four-pole Trade No.	Four-pole Mfrs. No.	Four-pole Price Each
5	5–10	117808	217501	$39.00	117822	217508	$42.50	117836	217515	$47.00
10	10–20	117809	217502	39.00	117823	217509	42.50	117837	217516	47.00
15	15–30	117810	217503	39.00	117824	217510	42.50	117838	217517	47.00
25	25–50	117811	217504	39.00	117825	217511	42.50	117839	217518	47.00
50	50–100	117812	217505	39.00	117826	217512	42.50	117840	217519	47.00
75	75–150	117813	217506	41.00	117827	217513	45.50	117841	217520	51.00
100	100–200	117814	217507	41.00	117828	217514	45.50	117842	217521	51.00

Two-pole breakers require 2½ gallons of oil; three-pole breakers, 2½ gallons; four-pole breakers, 3¼ gallons.

Full Automatic Overload Trip and Inverse Time Limit

5	5–10	117815	217480	40.50	117829	217487	47.50	117843	217494	52.00
10	10–20	117816	217481	40.50	117830	217488	47.50	117844	217495	52.00
15	15–30	117817	217482	40.50	117831	217489	47.50	117845	217496	52.00
25	25–50	117818	217483	40.50	117832	217490	47.50	117846	217497	52.00
50	50–100	117819	217484	40.50	117833	217491	47.50	117847	217498	52.00
75	75–150	117820	217485	42.50	117834	217492	50.50	117848	217499	56.00
100	100–200	117821	217486	42.50	117835	217493	50.50	117849	217500	56.00

Two-pole breakers require 2½ gallons of oil; three-pole breakers, 2½ gallons; four-pole breakers, 3¼ gallons.

WESTINGHOUSE OIL CIRCUIT BREAKERS

TYPE H—MANUALLY-OPERATED, SINGLE-THROW
WEATHERPROOF OUTDOOR WALL AND POLE MOUNTING

Full Automatic Overload Trip and Inverse Time Limit, For Voltage up to 750

Cap. Amps.	Range Adjustment Amperes	Two-pole Trade No.	Two-pole Mfrs. No.	Two-pole Price Each	Three-pole Trade No.	Three-pole Mfrs. No.	Three-pole Price Each	Four-pole Trade No.	Four-pole Mfrs. No.	Four-pole Price Each
5	5–10	117787	211917	$39.50	117794	211924	$46.50	117801	211931	$52.50
10	10–20	117788	211918	39.50	117795	211925	46.50	117802	211932	52.50
15	15–30	117789	211919	39.50	117796	211926	46.50	117803	211933	52.50
25	25–50	117790	211920	39.50	117797	211927	46.50	117804	211934	52.50
50	50–100	117791	211921	39.50	117798	211928	46.50	117805	211935	52.50
75	75–150	117792	211922	42.50	117799	211929	51.00	117806	211936	57.00
100	100–200	117793	211923	42.50	117800	211930	51.00	117807	211937	57.00

DUSTPROOF AND WEATHERPROOF INDOOR AND OUTDOOR WALL MOUNTING

Full Automatic with Inverse Time Limit and Undervoltage Trip

25 CYCLES

Cap. Amps.	No. of Poles	110 Volts* Trade No.	110 Volts* Mfrs. No.	220 Volts* Trade No.	220 Volts* Mfrs. No.	Price Each	440 Volts* Trade No.	440 Volts* Mfrs. No.	550 Volts* Trade No.	550 Volts* Mfrs. No.	Price Each
5	2	117860	226859	117881	226880	$43.00	117902	226901	117923	226922	$45.00
10	2	117861	226860	117882	226881	43.00	117903	226902	117924	226923	45.00
15	2	117862	226861	117883	226882	43.00	117904	226903	117925	226924	45.00
25	2	117863	226862	117884	226883	43.00	117905	226904	117926	226925	45.00
50	2	117864	226863	117885	226884	43.00	117906	226905	117927	226926	45.00
75	2	117865	226864	117886	226885	46.00	117907	226906	117928	226927	48.00
100	2	117866	226865	117887	226886	46.00	117908	226907	117929	226928	48.00
5	3	117867	226866	117888	226887	50.00	117909	226908	117930	226929	52.00
10	3	117868	226867	117889	226888	50.00	117910	226909	117931	226930	52.00
15	3	117869	226868	117890	226889	50.00	117911	226910	117932	226931	52.00
25	3	117870	226869	117891	226890	50.00	117912	226911	117933	226932	52.00
50	3	117871	226870	117892	226891	50.00	117913	226912	117934	226933	52.00
75	3	117872	226871	117893	226892	54.50	117914	226913	117935	226934	56.50
100	3	117873	226872	117894	226893	54.50	117915	226914	117936	226935	56.50
5	4	117874	226873	117895	226894	56.00	117916	226915	117937	226936	58.00
10	4	117875	226874	117896	226895	56.00	117917	226916	117938	226937	58.00
15	4	117876	226875	117897	226896	56.00	117918	226917	117939	226938	58.00
25	4	117877	226876	117898	226897	56.00	117919	226918	117940	226939	58.00
50	4	117878	226877	117899	226898	56.00	117920	226919	117941	226940	58.00
75	4	117879	226878	117900	226899	60.50	117921	226920	117942	226941	62.50
100	4	117880	226879	117901	226900	60.50	117922	226921	117943	226942	62.50

60 CYCLES

5	2	117944	226943	117965	226964	43.00	117986	226985	118007	227006	45.00
10	2	117945	226944	117966	226965	43.00	117987	226986	118008	227007	45.00
15	2	117946	226945	117967	226966	43.00	117988	226987	118009	227008	45.00
25	2	117947	226946	117968	226967	43.00	117989	226988	118010	227009	45.00
50	2	117948	226947	117969	226968	43.00	117990	226989	118011	227010	45.00
75	2	117949	226948	117970	226969	46.00	117991	226990	118012	227011	48.00
100	2	117950	226949	117971	226970	46.00	117992	226991	118013	227012	48.00
5	3	117951	226950	117972	226971	50.00	117993	226992	118014	227013	52.00
10	3	117952	226951	117973	226972	50.00	117994	226993	118015	227014	52.00
15	3	117953	226952	117974	226973	50.00	117995	226994	118016	227015	52.00
25	3	117954	226953	117975	226974	50.00	117996	226995	118017	227016	52.00
50	3	117955	226954	117976	226975	50.00	117997	226996	118018	227017	52.00
75	3	117956	226955	117977	226976	54.50	117998	226997	118019	227018	56.50
100	3	117957	226956	117978	226977	54.50	117999	226998	118020	227019	56.50
5	4	117958	226957	117979	226978	56.00	118000	226999	118021	227020	58.00
10	4	117959	226958	117980	226979	56.00	118001	227000	118022	227021	58.00
15	4	117960	226959	117981	226980	56.00	118002	227001	118023	227022	58.00
25	4	117961	226960	117982	226981	56.00	118003	227002	118024	227023	58.00
50	4	117962	226961	117983	226982	56.00	118004	227003	118025	227024	58.00
75	4	117963	226962	117984	226983	60.50	118005	227004	118026	227025	62.50
100	4	117964	226963	117985	226984	60.50	118006	227005	118027	227026	62.50

*Voltage listed is normal rating of undervoltage trip coil.

Two and three-pole breakers require 2 gallons of oil; four-pole breakers, 2½ gallons.

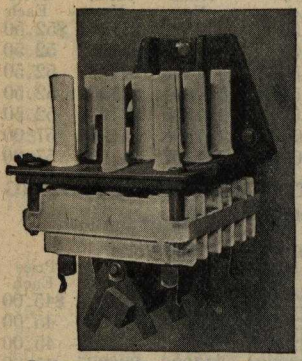
AUXILIARY PARTS

The following special parts can be supplied only when ordered complete with breaker, and the prices should be added to the prices of the standard breakers listed above.

Trade No.	Shunt Trip Description	Additional Price, Each
118034	Fitted to two-pole breakers	$4.50
118035	Fitted to three and four-pole breakers	7.00

WESTINGHOUSE CIRCUIT BREAKERS

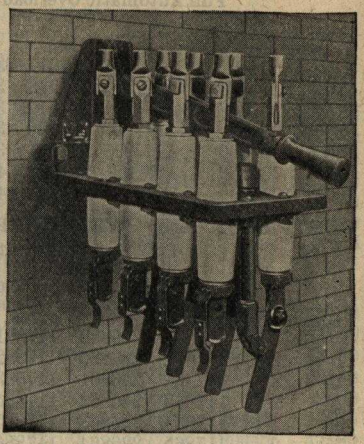
TYPE D, NON-AUTOMATIC, MANUALLY-OPERATED



Indoor, for Panel Mounting 200 Amp. 4500 V. Three-pole, Double-throw (Tank Removed, Porcelain Insulating Tubes Shown on Terminals)



Indoor for Panel Mounting 300 Amp., 1500 V. Three-pole, Single-throw



Indoor for Wall Mounting, 300 Amp. 7500 V., Four-pole, Single-throw (Tank Removed)

Type D circuit breakers are non-automatic, suitable for a wide range of uses. The direct wall mountings are adaptable particularly to motor installations on account of the facility with which they may be mounted on any support convenient to the motor operator; the construction is such that the switch may readily be mounted against a wall, post, or any vertical support. The remote-control wall or pipe mounting style allows switch to be mounted at a convenient point away from the switchboard and operated from the switchboard or other points, as desired.

The characteristic features of this type of breaker are: Knife blade contacts submerged in oil; live parts carried on insulating supports affording a high quality of permanent insulation between adjacent poles, and between the frame and live parts; small space required for mounting; accessibility of parts for purpose of inspection and repair; enclosure of all live metal parts; and low first cost.

INDOOR TYPE DIRECT CONTROL PANEL MOUNTING

Cap. Amps.	Max. Volts	No. of Poles	Single-throw Trade No.	Single-throw Mfrs. No.	Single-throw Gal. Oil Required	Single-throw Price Each	Double-throw Trade No.	Double-throw Mfrs. No.	Double-throw Gal. Oil Required	Double-throw Price Each
200	4500	2	047040	27736	1½	$28.00	047055	27751	2	$35.50
300	1500	2	117539	27737	2½	37.00	117545	27752	3½	46.00
300	7500	2	117540	203428	3	45.00	117546	203431	5	56.50
200	4500	3	047045	27741	2	34.00	047061	27756	3	41.50
300	1500	3	117541	27742	3	43.50	117547	27757	5	52.75
300	7500	3	117542	203429	3	55.00	117548	203432	5	69.00
200	4500	4	047050	27746	2½	41.00	047066	27761	3½	48.00
300	1500	4	117543	27747	4	52.50	117549	27762	6	62.25
300	7500	4	117544	203430	4	69.00	117550	203433	6	86.00

Double Two-pole Switches

Double two-pole switches are two two-pole switches, mounted one behind the other in the same case, each controlled by its own handle. This arrangement gives a very compact piece of apparatus for controlling two circuits when there is not room on the switchboard for two separate switches.

200	4500	2	117564	58650	2½	66.00	117565	58651	3½	88.00

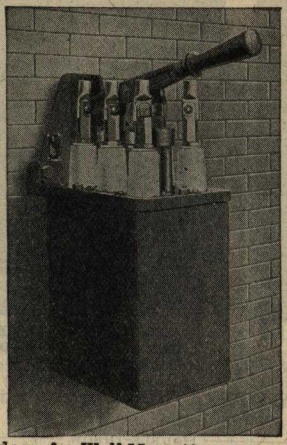
INDOOR TYPE DIRECT CONTROL WALL MOUNTING

200	4500	2	047071	27766	1½	28.00	047086	27781	2	35.50
300	1500	2	117551	27767	2½	37.00	117566	27782	3½	46.00
300	7500	2	117552	203434	3	45.00	117567	203437	5	56.50
200	4500	3	047076	27771	2	34.00	047091	27786	3	41.50
300	1500	3	117553	27772	3	43.50	117568	27787	5	52.75
300	7500	3	117554	203435	3	55.00	117569	203438	5	69.00
200	4500	4	047081	27776	2½	41.00	047096	27791	3½	48.00
300	1500	4	117555	27777	4	52.50	117570	27792	6	62.25
300	7500	4	117556	203436	4	69.00	117571	203439	6	86.00

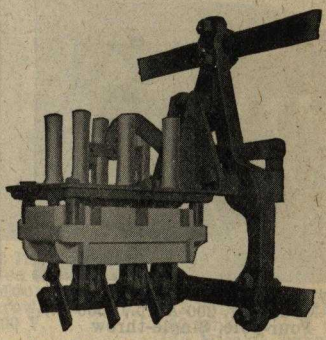
Number and price include switch complete, as listed.

WESTINGHOUSE OIL CIRCUIT-BREAKERS

TYPE D NON-AUTOMATIC, MANUALLY-OPERATED



Indoor, for Wall Mounting, 300-amp., 7500-volt, Three-pole, Single-throw



Indoor, for Pipe Mounting Remote Control 200-amp. 4500-volt, Three-pole Single-throw. Porcelain Insulating Tubes shown on Terminals

INDOOR TYPE, REMOTE CONTROL, WALL MOUNTING

Bell Cranks below Floor

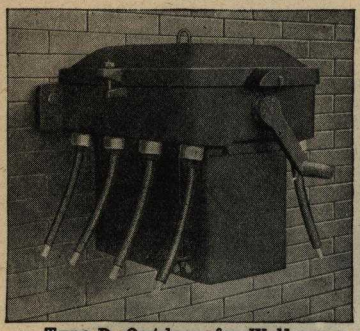
Cap. Amps.	Max. Voltage	No. of Poles	Single-throw Trade No.	Single-throw Mfrs. No.	Single-throw Gal. Oil Required	Single-throw Price Each	Double-throw Trade No.	Double-throw Mfrs. No.	Double-throw Gal. Oil Required	Double-throw Price Each
200	4500	2	117613	203410	1½	$35.00	117649	203413	2	$42.50
300	1500	2	117614	203416	2½	44.00	117650	203419	3½	53.00
300	7500	2	117615	203422	3	52.00	117651	203425	5	63.50
200	4500	3	117616	203411	2	41.00	117652	203414	3	48.50
300	1500	3	117617	203417	3	50.50	117653	203420	5	59.75
300	7500	3	117618	203423	3	62.00	117654	203426	5	76.00
200	4500	4	117619	203412	2½	48.00	117655	203415	3½	55.00
300	1500	4	117620	203418	4	59.50	117656	203421	6	69.25
300	7500	4	117621	203424	4	76.00	117657	203427	6	93.00
			Bell Cranks above Floor							
200	4500	2	117622	206000	1½	36.50	117658	206003	2	44.00
300	1500	2	117623	206006	2½	45.50	117659	206009	3½	54.50
300	7500	2	117624	206012	3	53.50	117660	206015	5	65.00
200	4500	3	117625	206001	2	42.50	117661	206004	3	50.00
300	1500	3	117626	206007	3	52.00	117662	206010	5	61.25
300	7500	3	117627	206013	3	63.50	117663	206016	5	77.50
200	4500	4	117628	206002	2½	49.50	117664	206005	3½	56.50
300	1500	4	117629	206008	4	61.00	117665	206011	6	70.75
300	7500	4	117630	206014	4	77.50	117666	206017	6	94.50

INDOOR TYPE, REMOTE CONTROL, PIPE MOUNTING

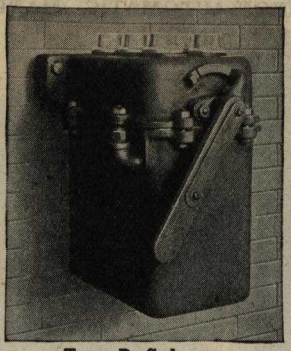
Bell Cranks below Floor

200	4500	2	117595	206018	1½	33.50	117631	206021	2	41.00
300	1500	2	117596	206024	2½	42.50	117632	206027	3½	51.50
300	7500	2	117597	206030	3	50.50	117633	206033	5	62.00
200	4500	3	117598	206019	2	39.50	117634	206022	3	47.00
300	1500	3	117599	206025	3	49.00	117635	206028	5	58.25
300	7500	3	117600	206031	3	60.50	117636	206034	5	74.50
200	4500	4	117601	206020	2½	46.50	117637	206023	3½	53.50
300	1500	4	117602	206026	4	58.00	117638	206029	6	67.75
300	7500	4	117603	206032	4	74.50	117639	206035	6	91.50
			Bell Cranks above Floor							
200	4500	2	117604	206036	1½	35.00	117640	206039	2	42.50
300	1500	2	117605	206042	2½	44.00	117641	206045	3½	53.00
300	7500	2	117606	206048	3	52.00	117642	206051	5	63.50
200	4500	3	117607	206037	2	41.00	117643	206040	3	48.50
300	1500	3	117608	206043	3	50.50	117644	206046	5	59.75
300	7500	3	117609	206049	3	62.00	117645	206052	5	76.00
200	4500	4	117610	206038	2½	48.00	117646	206041	3½	55.00
300	1500	4	117611	206044	4	59.50	117647	206047	6	69.25
300	7500	4	117612	206050	4	76.00	117648	206053	6	93.00

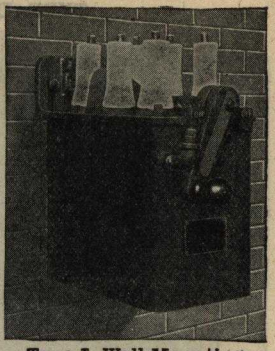
WESTINGHOUSE OIL CIRCUIT BREAKERS



Type D, Outdoor, for Wall or Pole Mounting, 200 Amp., 4500 V., Four-pole, Single-throw



Type D, Subway 200 Amp., 4500 V., Three-pole, Single-throw



Type I, Wall Mounting Three-pole, Dust-proof and Damp-proof

TYPE D, NON-AUTOMATIC, MANUALLY-OPERATED

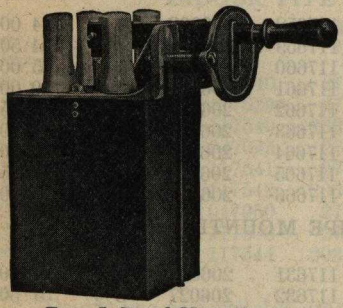
Outdoor Type, Pole Mounting

Cap. Amps.	Max. Voltage	No. of Poles	Single-throw Trade No.	Single-throw Mfrs. No.	Single-throw Gal. Oil Required	Single-throw Price Each	Double-throw Trade No.	Double-throw Mfrs. No.	Double-throw Gal. Oil Required	Double-throw Price Each
200	2500	1	117557	57930	1	27.50	.....	.....	...	.....
200	4500	2	117558	221943	1½	34.50	117572	221946	2½	49.00
200	4500	3	117559	221944	2½	47.00	117573	221947	3½	67.00
200	4500	4	117560	221945	3	56.50	117574	221948	4½	80.50
Outdoor Type, Subway Mounting										
200	4500	2	117561	194389	2	47.00	117575	194390	3	62.00
200	4500	3	117562	194391	2½	60.00	117576	194392	3½	84.00
200	4500	4	117563	194393	3½	79.00	117577	194394	5	102.00

Number and price includes switch complete without cable bushings.

Cable Bushings, for Use on Subway Mounting Switches

Trade No.	Mfrs. No.	Diam. of Hole Inches	Price Each	Trade No.	Mfrs. No.	Diam. of Hole Inches	Price Each
117578	219970	⅝	$1.30	117581	47969	1¼	$2.00
117579	47608	¾	1.50	117582	59932	1½	2.25
117580	60010	1	1.75	117583	83190	1	2.50



Type I, Panel Mounting Two-pole, Dust-proof

For single-pole switches other than listed, double-pole switches can be used with contacts in series, giving double break, or in parallel, giving double capacity, i. e., 400 amperes.

TYPE I, NON-AUTOMATIC, MANUALLY-OPERATED

For Capacities up to 60 Amperes, 4500 Volts A. C.

Type I Circuit Breakers are non-automatic, for controlling inductive loads of small capacity on alternating current circuits. The dust and damp-proof wall mounting are adapted particularly as service switches mounted in cellars, kiosks, and outdoor switch houses, where the switch is subjected to moisture but not exposed to the weather. Double-throw switches of this form are often used as service change-over switches on block signal systems.

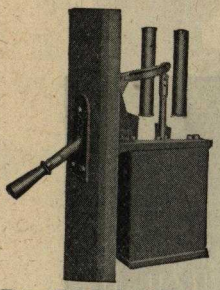
Features are similar to Type D, described on another page.

Trade No.	Mfrs. No.	No. of Poles	Gallons Oil Required	Price Each
Dust-proof, Panel Mounting, Single-throw				
138164	119371	2	1	$11.25
138165	123242	3	1½	16.25
138166	119372*	3	2	20.50
138167	123243	4	2½	21.50
Dust-proof, Wall Mounting, Single-throw				
138168	108099	2	1	11.25
138169	108100	3	1½	16.25
138170	108101	4	2½	21.50
Dust-proof and Damp-proof, Wall Mounting, Single-throw				
138171	226540	3	1½	29.50
138172	226542	Selector-Double-Two	2	29.50
Dust-proof and Damp-proof, Wall Mounting, Double-throw				
138173	226541	2	2	29.50

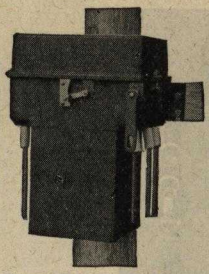
*Special switch for use on constant-current lighting panels.

WESTINGHOUSE TYPE F OIL CIRCUIT BREAKERS

FOR VOLTAGES UP TO 13,200



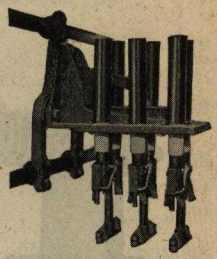
Type F-2 Indoor Manually operated Panel Mounting, Non-Automatic Single-Pole Single-Throw, 300 Amp. 132000 V. (Showing Micarta Tubes on Terminals)



Type F-1 W. P. Manually operated Automatic Series Trip with Inverse Time Limit. 3-Pole Single-Throw, 200 Amp. 4500 V.



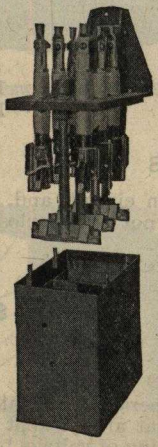
Type F-2 Indoor Manually operated Remote Control Wall Mounting, 3-Pole Single-Throw, 300 Amp. 7500 V.



Type F-1 Indoor Manually operated Remote Control Pipe Mounting, 3-Pole Single-Throw, 200 Amp., 4500 V. (Showing Micarta Tubes over Terminals)



Single-throw Cover Plate with Inverse Time Limit Dash Pots, Double Coil Automatic, Closed Position



Type F-1 Indoor Manually operated, 3-Pole Single Throw, 200 Amp., 4500 V. with Tank Lowered Away from Contacts, Showing Insulated Cell Lining in Tank

Type F Oil Circuit Breakers comprise a complete line of moderate capacity breakers, manually or electrically operated, for use indoors (panel and remote-control) in power stations, substations, etc.; outdoor (weatherproof); subways (waterproof); and in industrial applications (enclosed wall-mounting). Three forms of both the automatic and non-automatic breakers are built, the forms being designated as Types F-1, F-2 and F-3. Each form differs in its upturning capacity, maximum voltage and details of construction, and allows of various combinations of accessories.

Multiple breakers having a single mechanism and tank are supplied up to maximum capacities of 800 amperes. In addition, Type F-3 breakers, either manually or electrically operated, remote control, can be supplied up to 3000 amperes capacity by using three or four-pole standard units with the contacts connected in multiple for each pole. Type F-3 breaker frames are specially designed for this purpose.

The distinctive features of the Type F breakers are: Highly efficient form of wedge-and-finger type contacts; arcing contacts; submersion and opening of all contacts under oil; quick opening of contacts, assisted by arcing-tip springs; open position maintained by gravity; inability to hold full-automatic breaker in the closed position when an excessive overload or short circuit exists on the line; strong tanks and tank supports; tanks removable without disturbing the operating mechanism or contacts, making inspection easy; ample air space at top of tank to allow for gas expansion; insulating lining in tanks; isolation of poles by individual cells.

Methods of Mounting and Tripping

Switchboard mounting on panels or on pipe behind panel.

Remote manual control through bell cranks or by direct pull, with breaker on wall or pipe, in any position relative to switchboard.

Electrically operated with any form of auxiliary trip.

Single-pole single-tank units, combined in multiple form for wall or pipe-frame mounting.

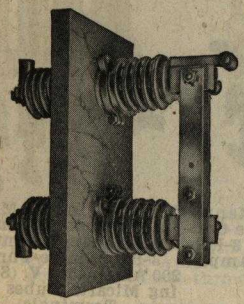
Tripping from series coils, direct-connected or through transformers, shunt coils, over-voltage coils, underload or under-voltage devices in many combinations.

Weather and dustproof series trip breakers with inverse time limit and enclosed undervoltage release.

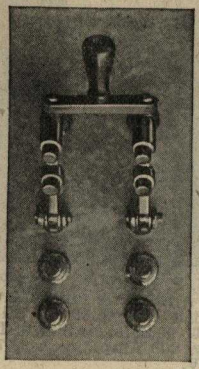
Subway breakers immersion proof, hand and electrically operated.

Special Bulletin Describing and Listing the Complete Line of Westinghouse Type F Oil Circuit Breakers Supplied on Request.

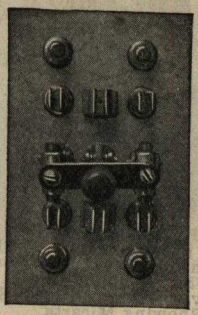
CONDIT SWITCHES



Disconnecting Switch
Back-Connected



Voltmeter and
Synchronizing Switch



Rheostat Control
Switch

DISCONNECTING SWITCHES

This type of disconnecting switch is used for disconnecting apparatus from live circuits and is also applicable to lightning arresters.

The current-carrying parts are mounted on porcelain pillars, the whole being supported on an insulating sub-base. The switch is operated by means of a hook on a wooden pole.

It is not designed to open current on live circuits.

Single-Pole, Front-Connected

Trade No.	Capacity		Price Each
	Amperes	Volts	
049665	300	5000	$20.00
049666	300	7500	28.00
049667	300	10000	28.00
049668	300	12500	28.00
049669	300	15000	28.00
049670	300	20000	50.00
049671	300	25000	50.00

Double-Pole, Front-Connected

049672	300	5000	50.00
049673	300	7500	80.00
049674	300	10000	80.00
049675	300	12500	80.00
049676	300	15000	80.00
049677	300	20000	100.00
049678	300	25000	100.00

VOLTMETER AND SYNCHRONIZING SWITCHES

This switch is designed so that when closed the synchronizer is in circuit, and, when thrown back into the clips, the voltmeter is in circuit. This switch will not remain closed on synchronizing side.

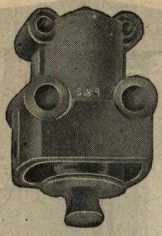
Trade No.		Price Each
049663	Standard finish, nickel	$24.00

RHEOSTAT CONTROL SWITCHES

These switches are designed to be used in connection with motor-operated rheostats, and are so arranged that the motor can be stopped instantly and the rheostat always kept under control of the operator, thereby avoiding the unnecessary raising or lowering of voltage beyond the required amount.

Trade No.		Price Each
049679	Standard finish, nickel. Three-pole, double-throw.	$50.00

PRIMARY CUT-OUTS AND SWITCHES



No. 139

P & S TRANSFORMER CUT-OUTS

Single-pole—30 Amperes, 2500 Volts

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043255	139	White glaze finish, complete with plug and lag screws..	30	188	$1.80
043256	139½	Black glazed finish, complete, with plug and lag screws..	30	188	1.50
043257	140	Plug only, for No. 139.....	10	22	.54
043258	141	Plug only, for No. 139½....	10	22	.50

The plugs of Nos. 139 and 139½ cut-outs engage contacts with a slight twist, making it impossible for plug to accidentally pull out.



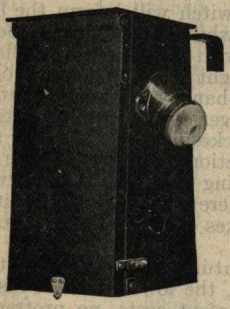
No. 1689

BRYANT TRANSFORMER CUT-OUTS

Single-pole—30 Amperes, 2500 Volts

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043252	1689	Porcelain cut-out complete, with plug.....	50	360	$2.00
043253	1690	Porcelain cut-out without plug.....	50	230	1.30
043254	1691	Porcelain plug only.....	50	170	.70

The above cut-out is finished in black enamel.
The fuse is 9 inches long.



Fuswitch, Closed View

MATTHEWS FUSWITCHES

When wires become short-circuited, a Matthews Fuswitch protecting the wire is designed to open the circuit in trouble by the fuse melting from overload, killing the section short-circuited. Matthews Fuswitches combine in one device the fuse block and the primary line disconnecting switch. The door is so arranged that it can be used for right or left installation.

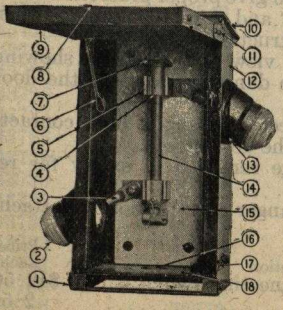
Made in two sizes and two types—Type BF and Type H, both furnished with wood boxes. Type BF has a composition top which makes it absolutely impervious to weather conditions.

Trade No.	Type	For Voltage	Max. Amps.	Shipping Wt., Lbs.	Price Less than 12	Price 12 to 24	Price 25 or More
42271	BF	Less than 6600	100 or less	25	$28.00	$26.00	$24.00
52864	H	6600 to 14200	Less than 75	110	87.00	82.80	78.60

Extra fuse blades for the Type BF cost $6.70 each for the Type H $6.00 each.

Type BF Matthews Fuswitch takes the place of what were formerly known as Types A, B and F.

The above prices include fuse cartridge, hangers, insulators and fuse wire for one charge.



Fuswitch, Open View

FISHER-CHASE FUSE AND DISCONNECTING SWITCHES

FOR ALL PRIMARY LINES

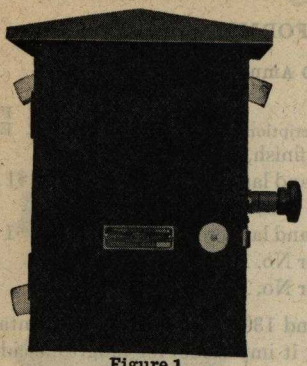
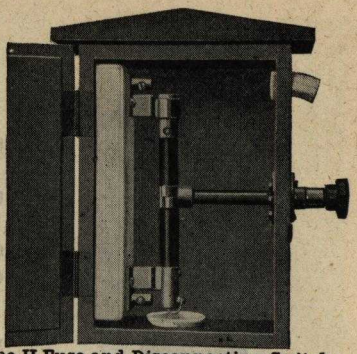


Figure 1



Type H Fuse and Disconnecting Switch

Fisher-Chase Fuse and Disconnecting Switches offer the greatest safety to linemen and constant protection to line equipment. One can be installed in 5 minutes with a pair of pliers. The cost of re-fusing is less than 3 cents and can be accomplished in a few seconds, with no small loose parts to handle at pole top.

These switches reduce service outage to a minimum. They are invaluable on all three-phase installations. They eliminate the necessity of temporarily withdrawing service from busy consumers in order to locate trouble. They meet all conditions successfully. They have been tested in daily actual service and under all kinds of conditions. The tell-tale in the bottom of the switch will inform the lineman from the ground which fuse is out. Being a good sized white disk with a black outline, a flashlight will show it up at night without pole climbing. Furnished for either right-hand or left-hand operation.

There is a special hanger constructed for attaching to cross arms in quickest time. There is also a disconnecting construction that enable safe disconnection and connecting from the outside with the door closed. And there is the advanced feature in construction that makes or breaks both contacts at the same instant.

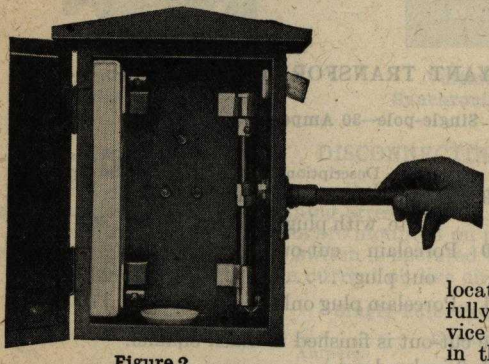


Figure 2

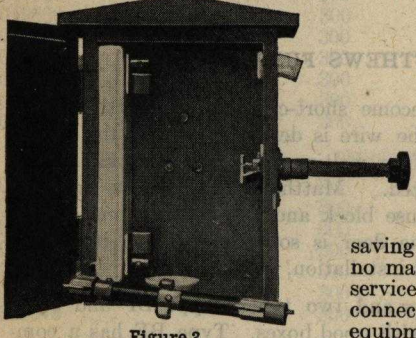


Figure 3

All the outstanding features of safety, protection, saving of time, labor and money, the low cost of re-fusing, no maintenance costs, no replacement costs, no protracted service outage, etc., make the Fisher-Chase Fuse and Disconnecting Switch the leader in this division of electrical equipment.

GUARANTEE.— Every Fisher-Chase Fuse and Disconnecting Switch is guaranteed to be free from imperfections in material and construction and to give proper protection on all primary lines up to 6600 volts and 1 to 100 amperes when installed in accordance with instructions.

Figure 1 illustrates the front view of the switch, showing how handle is safely out of the danger zone, with the door closed.

Figure 2 shows how the perfect breaking of both contacts is made from the outside with the door closed.

Figure 3 shows the cartridge removed in safety for re-fusing in a few seconds.

Figure 4 shows the special hanger construction for attaching to cross arms.

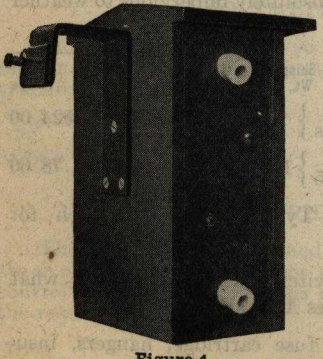
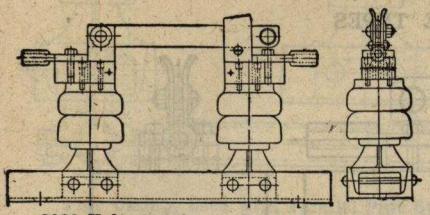


Figure 4

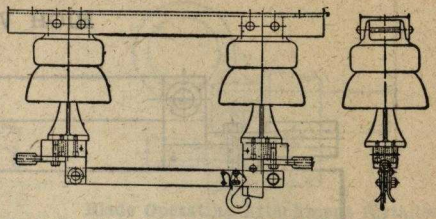
Trade No.	Description	Price Each
25248	Type H fuse and disconnecting switch...	$12.50
25249	Extra cartridges.....	2.50
25250	Fuse wire, per 100.....	3.00

GARTON-DANIELS DISCONNECTING SWITCHES

HIGH VOLTAGE TYPES



3000 Volt, 200 Amp., Type R Switch



13200 Volt, 200 Amp., Type RU Switch

All Type R Disconnecting Switches listed with the exception of Type RM are constructed with a base of standard channel iron. Iron pins are riveted to this base, and insulators cemented to these pins support iron caps, which in turn support the terminal blocks, terminals and switch proper. Each channel is provided with 9/16-inch holes at each end.

Switches are not furnished with switch locks, switch stops, etc., excepting Type RU which includes a switch lock as standard equipment.

Type R is for indoor service while Type RU of the underhung type is particularly for outdoor service.

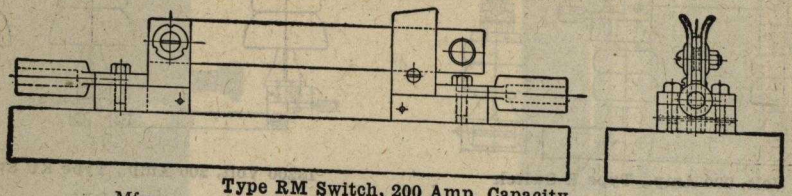
Type RM, illustrated on following page, has same switch structure as Type R, but is mounted on blue Vermont marble base and is for indoor service.

Trade No.	Mfrs. No.	Type	Voltage	Capacity Amperes	Price Each
143695	50539	R	0–3000	100	$11.50
143696	50540	R	0–3000	200	12.00
143697	50541	R	0–3000	300	14.00
143698	50542	R	0–3000	400	16.50
143699	50543	R	0–3000	500	20.00
143700	50544	R	0–3000	600	24.00
143701	50545	R	0–3000	800	30.00
143702	50546	R	0–3000	1000	36.00
143703	50547	R	0–3000	1200	43.00
143704	50566	R	3000–6600	100	12.50
143705	50567	R	3000–6600	200	13.00
143706	50568	R	3000–6600	300	15.00
143707	50569	R	3000–6600	400	17.50
143708	50570	R	3000–6600	500	21.00
143709	50571	R	3000–6600	600	25.00
143710	50572	R	3000–6600	800	31.00
143711	50580	R	6600–13200	100	14.00
143712	50581	R	6600–13200	200	15.00
143713	50582	R	6600–13200	300	17.00
143714	50583	R	6600–13200	400	20.00
143715	50584	R	6600–13200	500	24.00
143716	50585	R	6600–13200	600	29.00
143717	50592	R	13200–23000	100	21.50
143718	50593	R	13200–23000	200	22.50
143719	50594	R	13200–23000	300	24.00
143720	50598	R	23000–35000	200	32.00
143721	50548	RU	0–3000	100	15.50
143722	50549	RU	0–3000	200	16.00
143723	50550	RU	0–3000	300	18.00
143724	50551	RU	0–3000	400	20.50
143725	50552	RU	0–3000	500	24.00
143726	50553	RU	0–3000	600	28.00
143727	50554	RU	0–3000	800	34.00
143728	50555	RU	0–3000	1000	40.00
143729	50556	RU	0–3000	1200	47.00
143730	50573	RU	3000–6600	100	16.50
143731	50574	RU	3000–6600	200	17.00
143732	50575	RU	3000–6600	300	18.00
143733	50576	RU	3000–6600	400	21.50
143734	50577	RU	3000–6600	500	25.00
143735	50578	RU	3000–6600	600	29.00
143736	50579	RU	3000–6600	800	35.00

Ordering directions are the same as for choke coils on a preceding page.

GARTON-DANIELS DISCONNECTING SWITCHES AND FITTINGS

HIGH VOLTAGE TYPES



Type RM Switch, 200 Amp. Capacity

Trade No.	Mfrs. No.	Type	Voltage	Capacity Amperes	Price Each
143747	50586	RU	6600–13200	100	$18.00
143748	50587	RU	6600–13200	200	19.00
143749	50588	RU	6600–13200	300	21.00
143750	50589	RU	6600–13200	400	24.00
143751	50590	RU	6600–13200	500	28.00
143752	50591	RU	6600–13200	600	33.00
143753	50595	RU	13200–23000	100	25.50
143754	50596	RU	13200–23000	200	26.50
143755	50597	RU	13200–23000	300	28.00
143756	50599	RU	23000–35000	200	36.00
143757	50557	RM	0–2500	100	14.50
143758	50558	RM	0–2500	200	15.00
143759	50559	RM	0–2500	300	17.00
143760	50560	RM	0–2500	400	19.50
143761	50561	RM	0–2500	500	24.50
143762	50562	RM	0–2500	600	28.50
143763	50563	RM	0–2500	800	35.00
143764	50564	RM	0–2500	1000	42.00
143765	50565	RM	0–2500	1200	50.00

DISCONNECTING SWITCH FITTINGS

Malleable iron pipe clamps illustrated on the following page may be used on any Garton-Daniels Choke Coil or Disconnecting Switch, irrespective of voltage or capacity. They bolt directly to the channel base of either the coil or switch by means of a half-inch stud bolt, and may be used with either transverse or parallel piping. The prices given on the following page for these pipe clamps cover a set of two complete clamps.

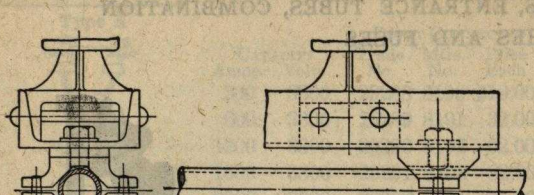
Garton-Daniels Switch Blade Operating Attachment provides an extra large hole which facilitates quick opening of the switch in an emergency; this being 1¾-inch instead of the standard ⅝-inch blade hole. Listed and illustrated on following page.

Garton-Daniels Switch Locks are constructed and mounted on switches, as shown in illustration on following page. With any tendency for the blade to be blown open, the catch wedges itself tightly in the slot of the wipes. The listing on following page covers the additional cost of having either of Types R or RM so equipped.

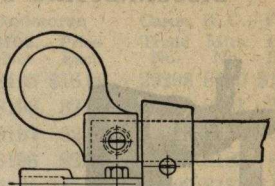
Garton-Daniels Disconnecting Switch Stops offer a means for readily preventing switch blades from being opened beyond a given angle. As seen from the illustration on the following page, the stop consists of a brass casting so designed that it may be mounted on one of the rear switch wipes. The back of the blade in opening strikes a lug cast on the stop and so the desired opening is secured. These stops are so designed that they may be mounted on the switch without extra machine work.

Garton-Daniels Switch Hooks consist of a well-seasoned wood pole fitted on the end with a metal ferrule and pin. This pin engages the blade in the hole provided for that purpose, and by this means the switches are opened and closed. Switch hooks in three standard lengths are listed on the following page.

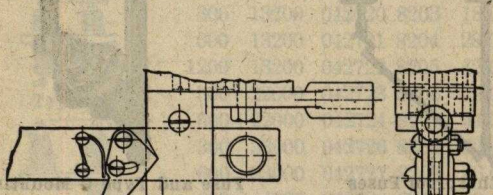
GARTON-DANIELS DISCONNECTING SWITCH FITTINGS



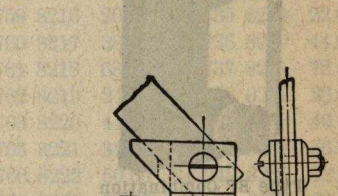
Pipe Clamp, Used with Parallel Pipe Support



Blade Operating Attachment Installed on 23000 Volt, 200 Amp. Type R Switch



Lock Installed on 200-amp., 3000-volt Type RU Switch

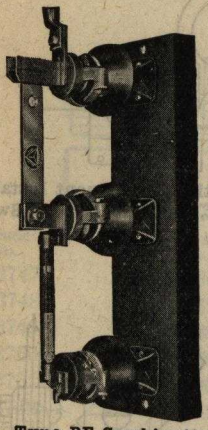


135° Stop Installed on 200-amp., 3000-volt Type R Switch

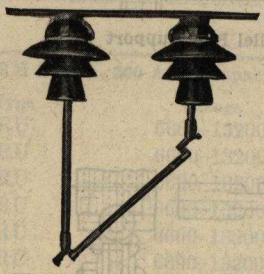
Trade No.	Mfrs. No.	Description	Price Each
143776	50608	Clamp for ¾-inch pipe, per set of two	$1.00
143777	50609	Clamp for 1-inch pipe, per set of two	1.25
143778	50610	Clamp for 1¼-inch pipe, per set of two	1.60
143779	50611	Clamp for 1½-inch pipe, per set of two	2.00
143780	50600	Switch blade operating attachment for 100 and 200-amp. switches	1.40
143781	50601	Switch blade operating attachment for 300-amp. switches	1.60
143782	50602	Switch blade operating attachment for 400-amp. switches	1.90
143783	50603	Switch blade operating attachment for 500-amp. switches	2.20
143784	50604	Switch blade operating attachment for 600-amp. switches	2.50
143785	50605	Switch blade operating attachment for 800-amp. switches	3.00
143786	50606	Switch blade operating attachment for 1000-amp. switches	3.50
143787	50607	Switch blade operating attachment for 1200-amp. switches	4.00
143788	50612	Switch lock installed on Type R disconnecting switches of 100, 200 or 300-amp. capacity, add to regular price of switch	4.00
143789	50613	Switch lock installed on Type R disconnecting switches of 400, 500, 600, 800, 1000 or 1200-amp. capacity, add to regular price of switch	4.00
143790	50614	90 deg. stop for 100-amp. switches	.80
143791	50615	90 deg. stop for 200-amp. switches	1.00
143792	50616	90 deg. stop for 300-amp. switches	1.25
143793	50617	90 deg. stop for 400-amp. switches	1.50
143794	50618	90 deg. stop for 500-amp. switches	1.75
143795	50619	90 deg. stop for 600-amp. switches	2.00
143796	50620	90 deg. stop for 800-amp. switches	1.50
143797	50621	90 deg. stop for 1000-amp. switches	1.75
143798	50622	90 deg. stop for 1200-amp. switches	2.00
143799	50623	135 deg. stop for 100-amp. switches	.85
143800	50624	135 deg. stop for 200-amp. switches	1.05
143801	50625	135 deg. stop for 300-amp. switches	1.30
143802	50626	135 deg. stop for 400-amp. switches	1.55
143803	50627	135 deg. stop for 500-amp. switches	1.80
143804	50628	135 deg. stop for 600-amp. switches	2.10
143805	50629	135 deg. stop for 800-amp. switches	1.55
143806	50630	135 deg. stop for 1000-amp. switches	1.80
143807	50631	135 deg. stop for 1200-amp. switches	2.10
143808	50418	Switch hook, any voltage, 4 feet long	3.00
143809	51419	Switch hook, any voltage, 8 feet long	4.00
143810	50420	Switch hook, any voltage, 12 feet long	5.00

DELTA-STAR SPECIALTIES

DISCONNECTING SWITCHES, ENTRANCE TUBES, COMBINATION SWITCHES AND FUSES



Type BF Combination Switch and S & C Fuse



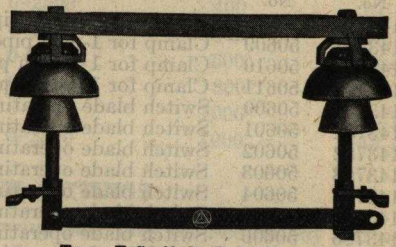
Weatherproof Fuses 6600–66000 Volts Type F Mounting



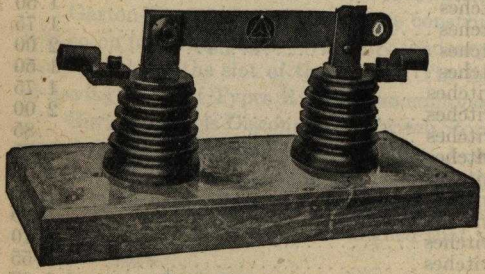
Fuse and Type G Mounting For Use on Poles or Walls



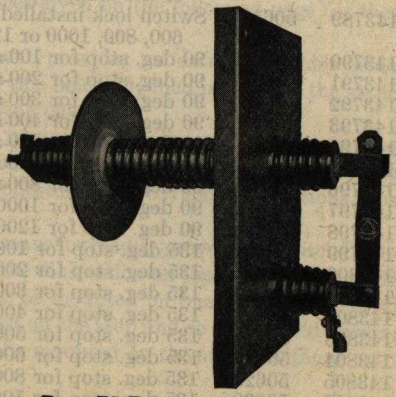
Type B Switch, Steel Base 6600–66000 Volts



Type F Switch, Pole Mounting Locked Blade Type



Type C Switch (B. V. Marble Base) 6600–66000 Volts



Type ES Entrance Tube and Switch (B. V. Marble Base) 6600–44000 Volts

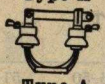
Complete technical bulletin sent upon request.

DELTA-STAR DISCONNECTING SWITCHES

HIGH TENSION



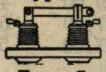
Type K



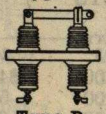
Type A



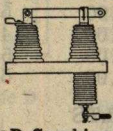
Type B



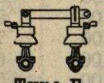
Type C



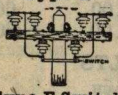
Type D



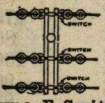
Type D Combination



Type E



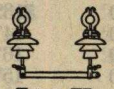
Type F Switch Installed



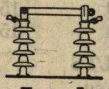
Type F Switch Installed Plan View



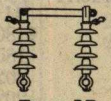
Type FB



Type FP



Type L



Type LP



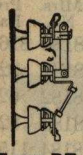
Type LI

Capacity Amps.	Capacity Volts	Front Connected Trade No.	Front Connected Mfrs. No.	Front Connected Price Each	Back Connected Trade No.	Back Connected Mfrs. No.	Back Connected Price Each	Comb. B. C.—F. C. Trade No.	Comb. B. C.—F. C. Mfrs. No.	Comb. B. C.—F. C. Price Each
300	3300	29288	8190	$16.00	29293	8195	$16.00	29298	8180	$16.00
600	3300	29289	8191	32.00	29294	8196	32.00	29299	8181	32.00
1200	3300	29290	8192	62.00	29295	8197	62.00	29300	8182	62.00
1600	3300	29291	8193	82.00	29296	8198	82.00	29301	8183	82.00
2000	3300	29292	8194	115.00	29297	8199	115.00	29302	8184	115.00
		Type A			Type B			Type C		
300	6600	042717	8200	14.00	042756	8213	16.00	042732	8226	18.00
600	6600	042718	8201	24.00	042757	8214	32.00	042733	8227	34.00
1200	6600	042719	8202	34.00	042758	8215	62.00	042734	8228	66.00
300	13200	042720	8203	18.00	042759	8216	20.00	042735	8229	22.00
600	13200	042721	8204	28.00	042760	8217	38.00	042736	8230	44.00
1200	13200	042722	8205	42.00	042761	8218	68.00	042737	8231	72.00
300	22000	042723	8206	22.00	042762	8219	24.00	042738	8232	26.00
600	22000	042724	8207	34.00	042763	8220	44.00	042739	8233	46.00
300	33000	042726	8208	32.00	042765	8221	34.00	042741	8234	36.00
600	33000	042727	8209	46.00	042766	8222	50.00	042742	8235	52.00
300	44000	042729	8210	48.00	042768	8223	72.00	29307	8236	62.00
100	66000	29303	8211	55.00	29305	8224	80.00	.....	....	.....
300	66000	29304	8212	60.00	29306	8225	90.00	.....	....	.....
		Type D			Type D Combination			Type E		
300	6600	042771	8237	40.00	042744	8248	30.00	042783	8259	17.00
600	6600	042772	8238	60.00	042745	8249	46.00	042784	8260	33.00
1200	6600	042773	8239	100.00	042746	8250	84.00	042785	8261	64.00
300	13200	042774	8240	44.00	042747	8251	32.00	042786	8262	22.00
600	13200	042775	8241	70.00	042748	8252	54.00	042787	8263	40.00
1200	13200	042776	8242	110.00	042749	8253	90.00	042788	8264	72.00
300	22000	042777	8243	60.00	042750	8254	40.00	042789	8265	28.00
600	22000	042778	8244	80.00	042751	8255	62.00	042790	8266	48.00
300	33000	042780	8245	72.00	042753	8256	54.00	042792	8267	38.00
600	33000	042781	8246	94.00	042754	8257	74.00	042793	8268	54.00
300	44000	29308	8247	104.00	29309	8258	84.00	042795	8269	74.00
100	66000	.....	....	.....	.....	....	.....	29310	8270	94.00
300	66000	.....	....	.....	.....	....	.....	29311	8271	100.00
		Type F			Type FB			Type FP		
300	6600	042669	8272	20.00	29314	8285	24.00	29327	8298	22.00
600	6600	042670	8273	36.00	29315	8286	40.00	29328	8299	38.00
1200	6600	042671	8274	70.00	29316	8287	75.00	29329	8300	72.00
300	13200	042672	8275	24.00	29317	8288	29.00	29330	8301	26.00
600	13200	042673	8276	45.00	29318	8289	50.00	29331	8302	47.00
1200	13200	042674	8277	75.00	29319	8290	80.00	29332	8303	77.00
300	22000	042675	8278	30.00	29320	8291	35.00	29333	8304	32.00
600	22000	042676	8279	50.00	29321	8292	55.00	29334	8305	52.00
300	33000	042802	8280	50.00	29322	8293	55.00	29335	8306	52.00
600	33000	042803	8281	66.00	29323	8294	70.00	29336	8307	68.00
300	44000	042805	8282	80.00	29324	8295	85.00	29337	8308	82.00
100	66000	29312	8283	90.00	29325	8296	96.00	29338	8309	92.00
300	66000	29313	8284	95.00	29326	8297	100.00	29339	8310	97.00
		Type L			Type LP			Type LI		
100	66000	29340	8319	100.00	29342	8323	100.00	29344	8321	100.00
100	110000	29341	8320	125.00	29343	8324	125.00	29345	8322	125.00

NOTE.—Type LI is for inverted pipe mounting, but can be supplied with steel base.

Complete technical bulletin sent upon request.

DELTA-STAR
COMBINATION DISCONNECTING SWITCHES AND S & C FUSES



Type BF

FOR POTENTIALS NOT EXCEEDING 6600 VOLTS

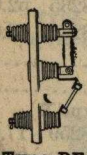
Trade No.	Mfrs. No.	Type	Price, Each Fuse Ampere Capacity 1–5	6–10	11–25	26–50	51–100
29722	8650	BF	$30.00	$31.00	$33.00	$36.00	$44.00
29723	8651	CF	34.00	35.00	37.00	40.00	58.00
29724	8652	DF	45.00	46.00	48.00	52.00	59.00
29725	8653	DCF	40.00	41.00	43.00	47.00	43.00
29726	8654	EF	32.00	33.00	35.00	39.00	46.00
29727	8655	FBF	40.00	41.00	43.00	47.00	54.00
29728	8656	GF	40.00	41.00	43.00	47.00	54.00



Type CF

FOR POTENTIALS NOT EXCEEDING 13200 VOLTS

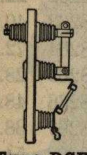
Trade No.	Mfrs. No.	Type	Price, Each Fuse Ampere Capacity 1–5	6–10	11–25	26–50
29729	8657	BF	$38.00	$39.00	$43.00	$46.00
29730	8658	CF	43.00	44.00	48.00	51.00
29731	8659	DF	60.00	61.00	65.00	68.00
29732	8660	DCF	50.00	51.00	55.00	58.00
29733	8661	EF	41.00	42.00	46.00	48.00
29734	8662	FBF	50.00	51.00	55.00	58.00
29735	8663	GF	50.00	51.00	55.00	58.00



Type DF

FOR POTENTIALS NOT EXCEEDING 22000 VOLTS

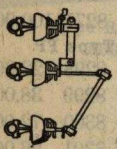
Trade No.	Mfrs. No.	Type	1–5	6–10	11–25	26–50
29736	8664	BF	44.00	45.00	49.00	52.00
29737	8665	CF	50.00	51.00	55.00	58.00
29738	8666	DF	68.00	69.00	73.00	76.00
29739	8667	DCF	58.00	59.00	63.00	66.00
29740	8668	EF	50.00	51.00	55.00	58.00
29741	8669	FBF	58.00	59.00	63.00	66.00
29742	8670	GF	58.00	59.00	63.00	66.00



Type DCF

FOR POTENTIALS NOT EXCEEDING 33000 VOLTS

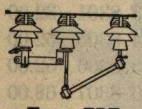
Trade No.	Mfrs. No.	Type	Price, Each Fuse Ampere Capacity 1–5	6–10	11–35
29743	8671	BF	$63.00	$66.00	$79.00
29744	8672	CF	70.00	73.00	86.00
27745	8673	DF	90.00	93.00	106.00
29746	8674	DCF	80.00	83.00	96.00
29747	8675	EF	67.00	70.00	83.00
29748	8676	FBF	80.00	83.00	96.00
29749	8677	GF	80.00	83.00	96.00



Type EF

FOR POTENTIALS NOT EXCEEDING 44000 VOLTS

Trade No.	Mfrs. No.	Type	Price, Each Fuse Ampere Capacity 1–5	6–10	11–25
29750	8678	BF	$110.00	$114.00	$132.00
29751	8679	CF	125.00	129.00	147.00
29752	8680	DF	145.00	149.00	167.00
29753	8681	DCF	135.00	139.00	157.00
29754	8682	EF	104.00	108.00	126.00
29755	8683	FBF	135.00	139.00	157.00
29756	8684	GF	135.00	139.00	157.00



Type FBF

FOR POTENTIALS NOT EXCEEDING 66000 VOLTS

Trade No.	Mfrs. No.	Type	Price, Each Fuse Ampere Capacity 1–5	6–10	11–20
29757	8685	BF	$147.00	$153.00	$180.00
29758	8686	EF	152.00	158.00	185.00
29759	8687	FBF	169.00	175.00	202.00
29760	8688	GF	169.00	175.00	202.00
29761	8689	SF	200 00	206.00	233.00
29762	8690	SPF	200.00	206.00	233.00



Type GF

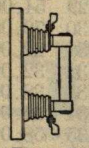
Always specify ampere capacity when ordering.

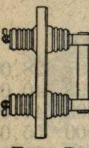
Complete technical bulletin sent upon request.

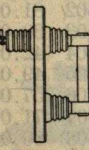
DELTA-STAR
HIGH POTENTIAL S & C FUSES WITH MOUNTINGS

POWER SERVICE

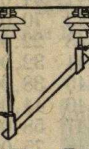

Type B

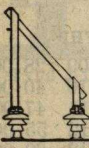

Type C


Type D


Type D Combination


Type E


Type F


Type FF


Type G Fused Switch

FOR POTENTIALS NOT EXCEEDING 6600 VOLTS

Trade No.	Mfrs. No.	Type	Price, Each Ampere Capacity 1–5	6–10	11–25	26–50	51–100
29801	8100	B	$17.00	$18.00	$20.00	$23.00	$31.00
29802	8101	C	19.00	20.00	22.00	25.00	33.00
29803	8102	D	30.00	31.00	33.00	37.00	44.00
29804	8103	D Com.	25.00	26.00	28.00	32.00	39.00
29805	8104	E	18.00	19.00	21.00	25.00	32.00
29806	8105	F**	25.00	26.00	28.00	32.00	39.00
29807	8106	FF	25.00	26.00	28.00	32.00	39.00
29808	8107	G	25.00	26.00	28.00	32.00	39.00
		FOR POTENTIALS NOT EXCEEDING 13200 VOLTS					
29809	8108	B	22.00	23.00	27.00	30.00	.....
29810	8109	C	25.00	26.00	30.00	33.00	.....
29811	8110	D	42.00	43.00	47.00	50.00	.....
29812	8111	D Com.	32.00	33.00	37.00	40.00	.....
29813	8112	E	23.00	24.00	28.00	31.00	.....
29814	8113	F**	32.00	33.00	37.00	40.00	.....
29815	8114	FF	32.00	33.00	37.00	40.00	.....
29816	8115	G	32.00	33.00	37.00	40.00	.....
		FOR POTENTIALS NOT EXCEEDING 22000 VOLTS					
29817	8116	B	24.00	25.00	29.00	32.00	.....
29818	8117	C	29.00	30.00	34.00	37.00	.....
29819	8118	D	47.00	48.00	52.00	55.00	.....
29820	8119	D Com.	37.00	38.00	42.00	45.00	.....
29821	8120	E	25.00	26.00	30.00	33.00	.....
29822	8121	F**	37.00	38.00	42.00	45.00	.....
29823	8122	FF	37.00	38.00	42.00	45.00	.....
29824	8123	G	37.00	38.00	42.00	45.00	.....
		FOR POTENTIALS NOT EXCEEDING 33000 VOLTS					
29825	8124	B	36.00	39.00	52.00	.....	.....
29826	8125	C	41.00	44.00	57.00	.....	.....
29827	8126	D	61.00	64.00	77.00	.....	.....
29828	8127	D Com.	51.00	54.00	67.00	.....	.....
29829	8128	E	37.00	40.00	53.00	.....	.....
29830	8129	F**	51.00	54.00	67.00	.....	.....
29831	8130	FF	51.00	54.00	67.00	.....	.....
29832	8131	G	51.00	54.00	67.00	.....	.....
		FOR POTENTIALS NOT EXCEEDING 44000 VOLTS					
29833	8132	B	53.00	57.00	75.00	.....	.....
29834	8133	C	58.00	62.00	80.00	.....	.....
29835	8134	D	78.00	82.00	100.00	.....	.....
29836	8135	D Com.	68.00	72.00	90.00	.....	.....
29837	8136	E	54.00	58.00	76.00	.....	.....
29838	8137	F**	68.00	72.00	90.00	.....	.....
29839	8138	FF	68.00	72.00	90.00	.....	.....
29840	8139	G	68.00	72.00	90.00	.....	.....
		FOR POTENTIALS NOT EXCEEDING 66000 VOLTS					
29841	8140	B	82.00	88.00	*115.00	.....	.....
29842	8141	E	83.00	89.00	*116.00	.....	.....
29843	8142	F**	97.00	103.00	*130.00	.....	.....
29844	8143	FF	97.00	103.00	*130.00	.....	.....
29845	8144	G	97.00	103.00	*130.00	.....	.....
29846	8145	S†	127.00	133.00	*160.00	.....	.....
29847	8146	SS†	127.00	133.00	*160.00	.....	.....
29848	8147	SP†	128.00	134.00	*161.00	.....	.....

When placing orders specify ampere capacity of fuse desired.

Prices on 88000 and 110000-volt fuses quoted upon application. Made with suspension type insulators.

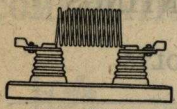
*Capacity of fuse, 11 to 20 amperes.

**When desired the Type F inverted mounting can be supplied for 1¼-inch pipe mounting at same price.

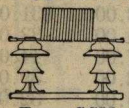
†Type S mountings are similar to Type F, except that suspension form insulators are used. Type SP is for pipe mounting.

DELTA-STAR HIGH TENSION CHOKE COILS

CYLINDER FORM COILS



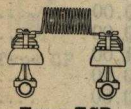
Type BCM



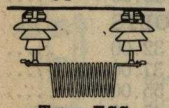
Type CCM



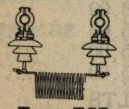
Type BCS



Type ECP



Type FCS



Type FCP

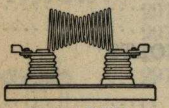
Capacity Amps.	Volts	Type BCM Trade No.	Mfrs. No.	Price Each	Type CCM Trade No.	Mfrs. No.	Price Each	Type BCS Trade No.	Mfrs. No.	Price Each
100	6600	042837	8381	$26.00	29579	8405	$28.00	29590	8425	$20.00
100	13200	042838	8382	36.00	29580	8406	39.00	29591	8426	30.00
100	22000	042839	8383	40.00	29581	8407	45.00	29592	8427	34.00
100	33000	042840	8384	46.00	29582	8408	51.00	29593	8428	40.00
100	44000	042841	8385	60.00	29583	8409	65.00	29594	8429	54.00
100	66000	29548	8386	76.00	.....	....	.....	29595	8430	70.00
200	6600	042842	8387	28.00	29584	8410	31.00	29596	8431	22.00
200	13200	042843	8388	40.00	29585	8411	43.00	29597	8432	32.00
200	22000	042844	8389	44.00	29586	8412	49.00	29598	8433	38.00
200	33000	042845	8390	50.00	29587	8413	55.00	29599	8434	44.00
200	44000	042846	8391	66.00	29588	8414	71.00	29600	8435	58.00
200	66000	29549	8392	80.00	.....	....	.....	29601	8436	75.00

		Type ECP			Type FCS			Type FCP		
100	6600	29602	8449	21.00	29614	8473	27.00	29628	8497	28.00
100	13200	29603	8450	31.00	29615	8474	39.00	29629	8498	40.00
100	22000	29604	8451	35.00	29616	8475	46.00	29630	8499	47.00
100	33000	29605	8452	41.00	29617	8476	54.00	29631	8500	55.00
100	44000	29606	8453	55.00	29618	8477	68.00	29632	8501	69.00
100	66000	29607	8454	71.00	29619	8478	80.00	29633	8502	81.00
200	6600	29608	8455	23.00	29620	8479	29.00	29634	8503	30.00
200	13200	29609	8456	33.00	29621	8480	41.00	29635	8504	42.00
200	22000	29610	8457	39.00	29622	8481	48.00	29636	8505	49.00
200	33000	29611	8458	45.00	29625	8482	56.00	29637	8506	57.00
200	44000	29612	8459	59.00	29626	8483	70.00	29638	8507	71.00
200	66000	29613	8460	75.00	29627	8484	85.00	29639	8508	86.00

HOUR GLASS FORM COILS



Type BHM



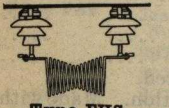
Type CHM



Type BHS



Type EHP



Type FHS



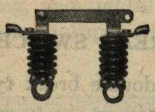
Type FHP

		Type BHM			Type CHM			Type BHS		
100	6600	29640	8393	26.00	29652	8415	28.00	29662	8437	20.00
100	13200	29641	8394	36.00	29653	8416	39.00	29663	8438	30.00
100	22000	29642	8395	40.00	29654	8417	45.00	29664	8439	34.00
100	33000	29643	8396	46.00	29655	8418	51.00	29665	8440	40.00
100	44000	29644	8397	60.00	29656	8419	65.00	29666	8441	54.00
100	66000	29645	8398	76.00	.....	....	.....	29667	8442	70.00
200	6600	29646	8399	28.00	29657	8420	31.00	29668	8443	22.00
200	13200	29647	8400	40.00	29658	8421	43.00	29669	8444	32.00
200	22000	29648	8401	44.00	29659	8422	49.00	29670	8445	38.00
200	33000	29649	8402	50.00	29660	8423	55.00	29671	8446	44.00
200	44000	29650	8403	66.00	29661	8424	71.00	29672	8447	58.00
200	66000	29651	8404	80.00	.....	....	.....	29673	8448	75.00

		Type EHP			Type FHS			Type FHP		
100	6600	29674	8461	21.00	29686	8485	27.00	29698	8509	28.00
100	13200	29675	8462	31.00	29687	8486	39.00	29699	8510	40.00
100	22000	29676	8463	35.00	29688	8487	46.00	29700	8511	47.00
100	33000	29677	8464	41.00	29689	8488	54.00	29701	8512	55.00
100	44000	29678	8465	55.00	29690	8489	68.00	29702	8513	69.00
100	66000	29679	8466	71.00	29691	8490	80.00	29703	8514	81.00
200	6600	29680	8467	23.00	29692	8491	29.00	29704	8515	30.00
200	13200	29681	8468	33.00	29693	8492	41.00	29705	8516	42.00
200	22000	29682	8469	39.00	29694	8493	48.00	29706	8517	49.00
200	33000	29683	8470	45.00	29695	8494	56.00	29707	8518	57.00
200	44000	29684	8471	59.00	29696	8495	70.00	29708	8519	71.00
200	66000	29685	8472	75.00	29697	8496	85.00	29709	8520	86.00

Types BCM, CCM, BHM, and CHM have B. V. marble bases.
Types BCS, FCS, BHS, and FHS have steel bases.
Types ECP, FCP, EHP, and FHP have pipe supports.
Complete technical bulletin sent upon request.

DELTA-STAR INDOOR FORM UNIT TYPE DISCONNECTING SWITCHES



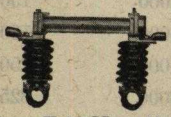
Type U-14 Switch



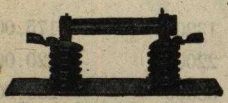
Type J-14 Switch

SINGLE POLE FRONT CONNECTED DISCONNECTING SWITCHES

Capacity Volts	Capacity Amps.	Type U-14 Trade No.	Type U-14 Price Each	Type J-14 Trade No.	Type J-14 Price Each
6600	300	135107	$14.00	135140	$15.00
6600	600	135108	21.00	135141	20.00
6600	800	135109	28.00	135142	30.00
13200	300	135110	17.00	135143	18.00
13200	600	135111	24.00	135144	24.00
13200	800	135112	31.00	135145	34.00
22000	300	135113	24.00	135146	28.00
22000	600	135114	34.00	135147	35.00
22000	800	135115	41.00	135148	44.00



Type U-11 Mounting



Type J-11 Mounting

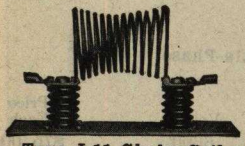
SINGLE POLE FRONT CONNECTED FUSE MOUNTINGS

Capacity Volts	Capacity Amps.	Type U-11 Trade No.	Type U-11 Price Each	Type J-11 Trade No.	Type J-11 Price Each
6600	0– 10	135116	$11.00	135401	$12.00
6600	11– 25	135117	11.00	135402	12.00
6600	26– 50	135118	12.00	135403	13.00
6600	51–100	135119	13.00	135404	14.00
6600	101–200	135120	14.00	135405	15.00
13200	0– 10	135121	14.00	135406	16.00
13200	11– 25	135122	14.00	135407	16.00
13200	26– 50	135123	15.00	135408	17.00
13200	51–100	135124	16.00	135409	18.00
13200	101–200	135125	17.00	135410	19.00
22000	0– 10	135126	19.00	135411	25.00
22000	11– 25	135127	19.00	135412	25.00
22000	26– 50	135128	20.00	135413	26.00
22000	51–100	135129	21.00	135414	27.00
22000	101–200	135130	22.00	135415	28.00

NOTE: Prices do not include fuses which are listed below.



Type U-11 Choke Coil



Type J-11 Choke Coil

SINGLE POLE FRONT CONNECTED CHOKE COILS

Capacity Volts	Capacity Amps.	Type U-11 Trade No.	Type U-11 Price Each	Type J-11 Trade No.	Type J-11 Price Each
6600	100	135131	$27.00	135416	$27.00
6600	200	135132	32.00	135417	32.00
6600	300	135133	37.00	135418	37.00
13200	100	135134	33.00	135419	35.00
13200	200	135135	38.00	135420	40.00
13200	300	135136	43.00	135421	45.00
22000	100	135137	43.00	135422	45.00
22000	200	135138	48.00	135423	50.00
22000	300	135139	53.00	135424	55.00

S & C CARBON-TETRACHLORIDE FUSES ONLY

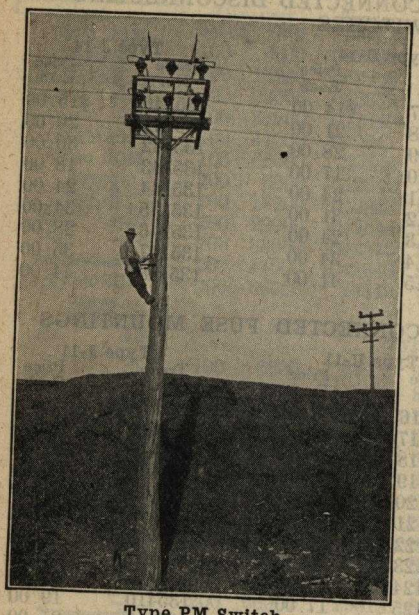
For Unit Type Mountings

Rated Volts	Fuse Centers Inches	Pot. Trans.	Capacity, Amperes 1 to 5	6 to 10	11 to 25	26 to 50	51 to 100	101–200
6600	8	$ 6.00	$ 7.00	$ 8.00	$10.00	$14.00	$22.00	$24.00
13200	11½	7.00	9.00	11.00	16.00	21.00	30.00	36.00
22000	11½	7.00	9.00	11.00	16.00	21.00	30.00	36.00
33000	15	12.00	15.00	19.00	36.00	52.00	80.00	.....
44000	18	18.00	24.00	30.00	56.00	76.00	.....	.....
66000	24	28.00	36.00	44.00	80.00	100.00	.....	.....
88000	30	50.00	56.00	70.00	100.00	.....	.....	.....
110000	36	72.00	80.00	100.00	.....	.....	.....	.....

When ordering fuses, give exact ampere rating of fuse.

DELTA-STAR POLE TOP SWITCHES

FOR OPENING LOADED CIRCUITS



Type PM Switch
33000-Volt Installation

TYPE PM POLE TOP AIR BREAK SWITCHES

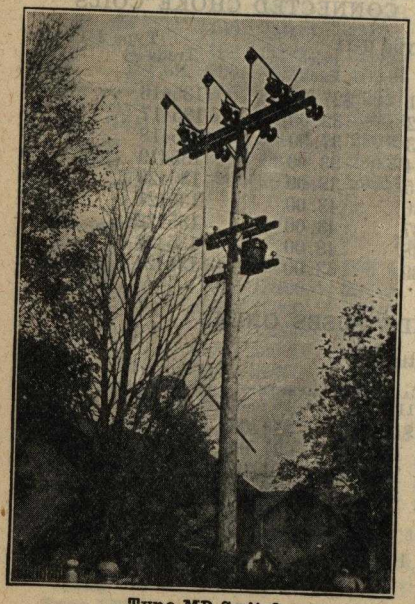
Type PM switches are of the double break type, have non-freezing underwipe contacts and can be used on main lines or to control outdoor substations.

Two-Pole, Single-Phase

Trade No.	Mfrs. No.	Volts	Price Each
86781	10780	13200	$120.00
86782	10781	22000	150.00
86783	10782	33000	160.00
86784	10783	44000	250.00
86785	10784	66000	325.00

Three-Pole, Three-Phase

86786	10785	13200	175.00
86787	10786	22000	220.00
86788	10787	33000	230.00
86789	10788	44000	350.00
86790	10789	66000	450.00



Type MB Switch
22000-Volt Installation

TYPE MB POLE TOP AIR BREAK SWITCHES

Type MB switches are of the vertically operating single break type. They can be used on main lines, as sectionalizing switches or to control outdoor substations.

Two-Pole, Single-Phase

Trade No.	Mfrs. No.	Volts	Price Each
86791	10004	6600	$75.00
86792	10005	13200	85.00
86793	10006	22000	120.00

Three-Pole, Three-Phase

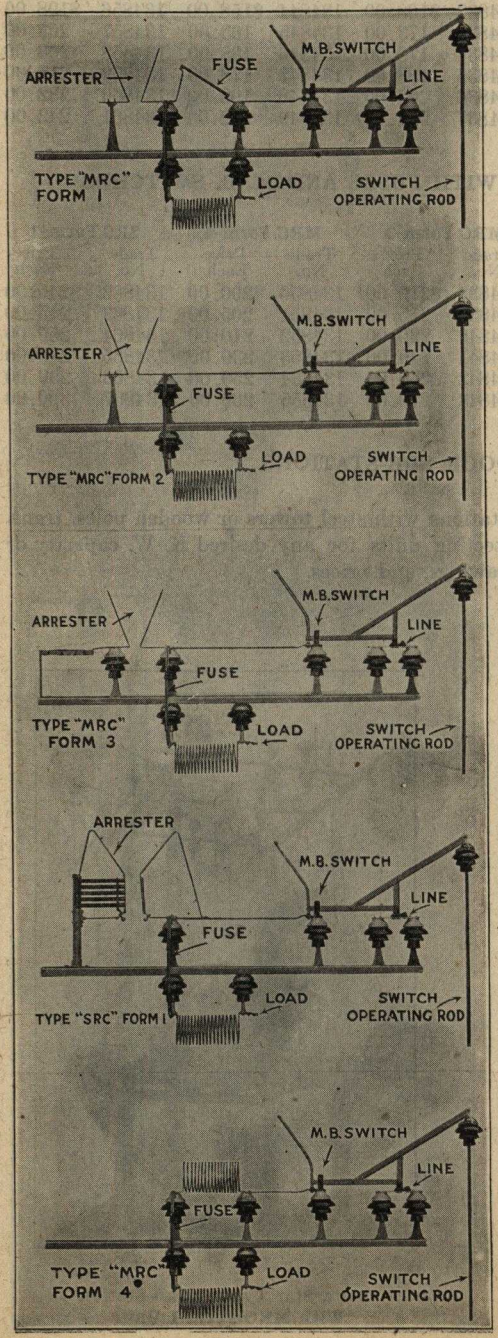
86794	10008	6600	110.00
86795	10009	13200	120.00
86796	10010	22000	175.00

Both types will open loaded circuits.

Bulletins furnishing complete description will be furnished on request.

DELTA-STAR OUTDOOR SUB-STATION UNITS

The outdoor sub-station units, listed on the following page, are complete with switching, fusing, and lightning arrester equipment for controlling and opening loaded circuits. Each unit is equipped with a steel channel base suitable for wooden pole or steel tower sub-stations.



NUMBER OF UNITS — Two units are required for single-phase service, three units for three-phase service.

SWITCHES — The switches are mechanically interlocked, all phases being simultaneously opened and closed with an operating mechanism supplied with the equipment.

FUSES — The carbon-tetrachloride fuses have quick opening characteristics and high rupturing capacity. The prices include fuses of ampere capacities indicated.

DESIGN — The sub-station units are of the same general type, employing the single break per phase MB switch with various forms of lightning arresters.

MRC FORM-1 — This unit is equipped with simple horn arresters and limiting fuse.

MRC FORM-2 — Same as Form-1 except that fuse is not in series with horn arrester.

MRC FORM-3 — Same as Form-2 except that horn arrester has limiting resistance in ground circuit.

SRC FORM-1 — Same as MRC Form-3 except that high speed sphere gap arrester is used.

MRC FORM-4 — Horn arrester is omitted and has double choke coil protection.

DELTA-STAR OUTDOOR SUB-STATION UNITS

13200-VOLT SINGLE-POLE UNITS WITH FUSES AND M. B. SWITCHES

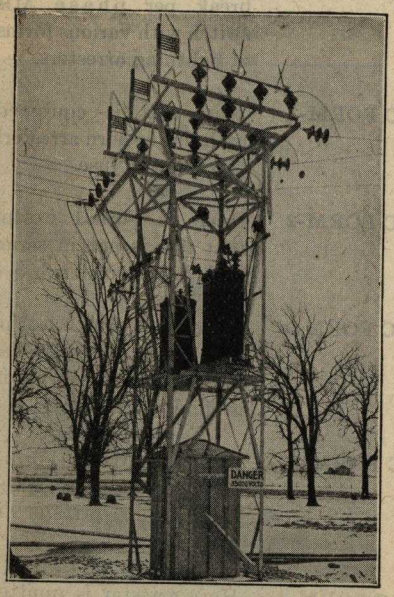
Cap. Fuses Amps.	MRC Form-1 Trade No.	MRC Form-1 Price Each	MRC Form-2 Trade No.	MRC Form-2 Price Each	MRC Form-3 Trade No.	MRC Form-3 Price Each	MRC Form-4 Trade No.	MRC Form-4 Price Each	SRC Form-1 Trade No.	SRC Form-1 Price Each
1–5	86935	$118.00	134820	$118.00	134832	$168.00	134844	$158.00	134856	$198.00
6–10	86937	123.00	134821	123.00	134833	173.00	134845	163.00	134857	203.00
11–25	86939	128.00	134822	128.00	134834	178.00	134846	168.00	134858	208.00
26–50	86941	138.00	134823	138.00	134835	188.00	134847	178.00	134859	218.00
51–100	86943	152.00	134824	152.00	134836	202.00	134848	192.00	134860	232.00
101–200	134818	162.00	134825	162.00	134837	212.00	134849	202.00	134861	242.00

22000-VOLT SINGLE-POLE UNITS WITH FUSES AND M. B. SWITCHES

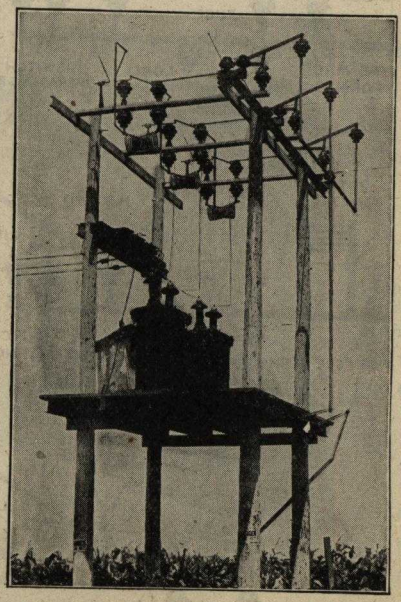
Cap. Fuses Amps.	MRC Form-1 Trade No.	MRC Form-1 Price Each	MRC Form-2 Trade No.	MRC Form-2 Price Each	MRC Form-3 Trade No.	MRC Form-3 Price Each	MRC Form-4 Trade No.	MRC Form-4 Price Each	SRC Form-1 Trade No.	SRC Form-1 Price Each
1–5	86936	$150.00	134826	$150.00	134838	$210.00	134850	$200.00	134862	$240.00
6–10	86938	155.00	134827	155.00	134839	215.00	134851	205.00	134863	245.00
11–25	86940	160.00	134828	160.00	134840	220.00	134852	210.00	134864	250.00
26–50	86942	180.00	134829	180.00	134841	240.00	134853	230.00	134865	270.00
51–100	86944	200.00	134830	200.00	134842	260.00	134854	250.00	134866	290.00
101–200	134819	210.00	134831	210.00	134843	270.00	134855	260.00	134867	300.00

COMPLETE OUTDOOR SUB-STATIONS

We can furnish complete outdoor sub-stations with steel towers or wooden poles, transformers and Delta-Star switching and protecting units for any desired K. W. capacity or voltage. Write for complete specifications, drawings, and prices.



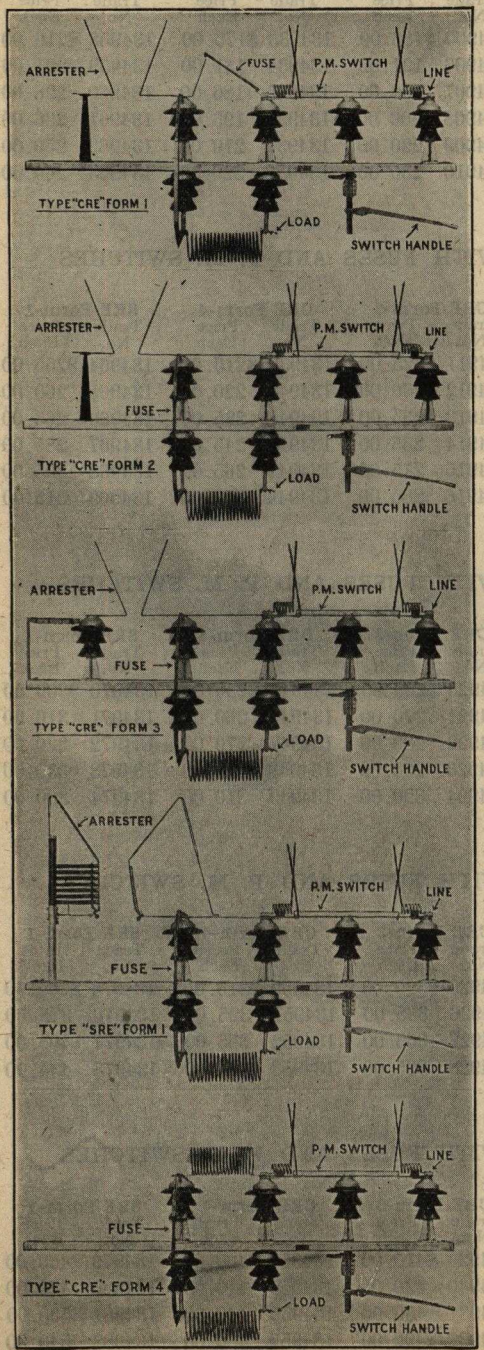
Delta-Star Type SD Sub-Station
With SRE Form-1 Units



Delta-Star Type D Sub-Station
With MRC Form-1 Units

DELTA-STAR OUTDOOR SUB-STATION UNITS

The outdoor sub-station units, listed on the following page, are complete with switching, fusing and lightning arrester equipment for controlling and opening loaded circuit. Each unit is equipped with a steel channel base suitable for wooden pole or steel tower sub-stations.



NUMBER OF UNITS — Two units are required for single-phase service, three units for three-phase service.

SWITCHES — The switches are mechanically interlocked, all phases being simultaneously opened and closed with an operating mechanism supplied with the equipment.

FUSES — The carbon-tetrachloride fuses have quick opening characteristics and high rupturing capacity. The prices include fuses of ampere capacities indicated.

DESIGN — The sub-station units are of the same general type, employing the double break per phase PM switch with various forms of lightning arresters.

CRE FORM-1 — This unit is equipped with simple horn arresters and limiting fuse.

CRE FORM-2 — Same as Form-1 except that fuse is not in series with horn arrester.

CRE FORM-3 — Same as Form-2 except that horn arrester has limiting resistance in ground circuit.

SRE FORM-1 — Same as CRE Form-3 except high-speed sphere gap arrester is used.

CRE FORM-4 — Horn arrester is omitted and has double choke coil protection.

DELTA-STAR OUTDOOR SUB-STATION UNITS

13200-VOLT SINGLE-POLE UNITS WITH FUSES AND P. M. SWITCHES

Cap. Fuses Amps.	CRE Form-1 Trade No.	CRE Form-1 Price Each	CRE Form-2 Trade No.	CRE Form-2 Price Each	CRE Form-3 Trade No.	CRE Form-3 Price Each	CRE Form-4 Trade No.	CRE Form-4 Price Each	SRE Form-1 Trade No.	SRE Form-1 Price Each
1–5	86945	$136.00	134880	$136.00	134905	$186.00	134933	$176.00	134958	$216.00
6–10	86950	141.00	134881	141.00	134906	191.00	134934	181.00	134959	221.00
11–25	86955	146.00	134882	146.00	134907	196.00	134935	186.00	134960	226.00
26–50	86960	156.00	134883	156.00	134908	206.00	134936	196.00	134961	236.00
51–100	86965	170.00	134884	170.00	134909	220.00	134937	210.00	134962	250.00
101–200	134917	180.00	134885	180.00	134910	230.00	134938	220.00	134963	260.00

22000-VOLT SINGLE-POLE UNITS WITH FUSES AND P. M. SWITCHES

Cap. Fuses Amps.	CRE Form-1 Trade No.	CRE Form-1 Price Each	CRE Form-2 Trade No.	CRE Form-2 Price Each	CRE Form-3 Trade No.	CRE Form-3 Price Each	CRE Form-4 Trade No.	CRE Form-4 Price Each	SRE Form-1 Trade No.	SRE Form-1 Price Each
1–5	86946	$165.00	134886	$165.00	134911	$225.00	134939	$215.00	134964	$255.00
6–10	86951	170.00	134887	170.00	134912	230.00	134940	220.00	134965	260.00
11–25	86956	175.00	134888	175.00	134913	235.00	134941	225.00	134966	265.00
26–50	86961	195.00	134889	195.00	134914	255.00	134942	245.00	134967	285.00
51–100	86966	215.00	134890	215.00	134915	275.00	134943	265.00	134968	305.00
101–200	134918	225.00	134891	225.00	134916	285.00	134944	275.00	134969	315.00

33000-VOLT SINGLE-POLE UNITS WITH FUSES AND P. M. SWITCHES

Cap. Fuses Amps.	CRE Form-1 Trade No.	CRE Form-1 Price Each	CRE Form-2 Trade No.	CRE Form-2 Price Each	CRE Form-3 Trade No.	CRE Form-3 Price Each	CRE Form-4 Trade No.	CRE Form-4 Price Each	SRE Form-1 Trade No.	SRE Form-1 Price Each
1–5	86947	$190.00	134892	$190.00	134920	$260.00	134945	$250.00	134970	$300.00
6–10	86952	200.00	134893	200.00	134921	270.00	134946	260.00	134971	310.00
11–25	86957	210.00	134894	210.00	134922	280.00	134947	270.00	134972	320.00
26–50	86962	220.00	134895	220.00	134923	290.00	134948	280.00	134973	330.00
51–100	134919	250.00	134896	250.00	134924	320.00	134949	310.00	134974	360.00

44000-VOLT SINGLE-POLE UNITS WITH FUSES AND P. M. SWITCHES

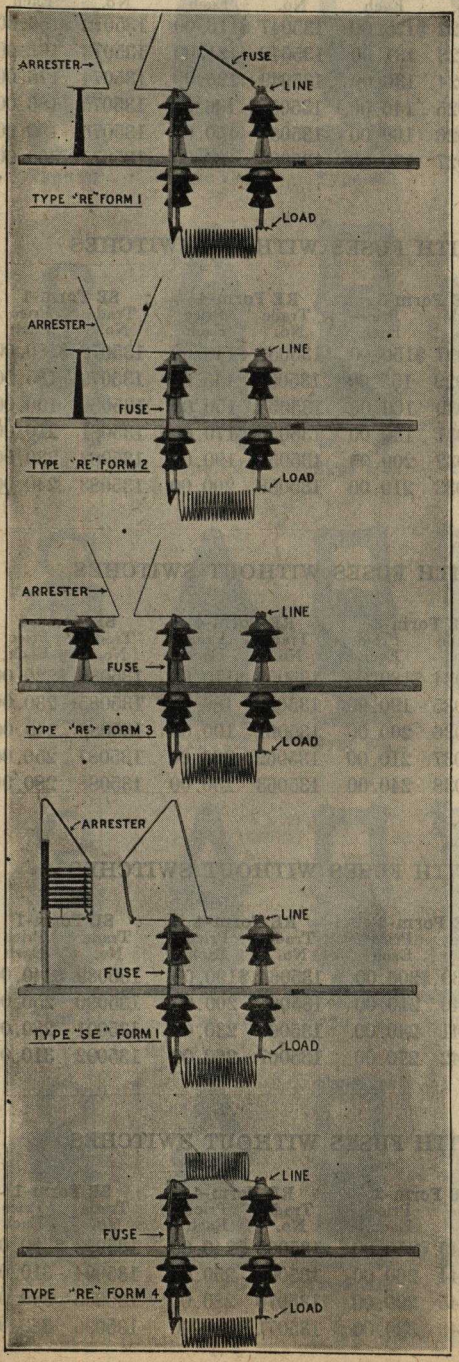
Cap. Fuses Amps.	CRE Form-1 Trade No.	CRE Form-1 Price Each	CRE Form-2 Trade No.	CRE Form-2 Price Each	CRE Form-3 Trade No.	CRE Form-3 Price Each	CRE Form-4 Trade No.	CRE Form-4 Price Each	SRE Form-1 Trade No.	SRE Form-1 Price Each
1–5	86948	$245.00	134897	$245.00	134925	$325.00	134950	$315.00	134975	$365.00
6–10	86953	255.00	134898	255.00	134926	335.00	134951	325.00	134976	375.00
11–25	86958	285.00	134899	285.00	134927	365.00	134952	355.00	134977	405.00
26–50	86963	315.00	134900	315.00	134928	395.00	134953	385.00	134978	435.00

66000-VOLT SINGLE-POLE UNITS WITH FUSES AND P. M. SWITCHES

Cap. Fuses Amps.	CRE Form-1 Trade No.	CRE Form-1 Price Each	CRE Form-2 Trade No.	CRE Form-2 Price Each	CRE Form-3 Trade No.	CRE Form-3 Price Each	CRE Form-4 Trade No.	CRE Form-4 Price Each	SRE Form-1 Trade No.	SRE Form-1 Price Each
1–5	86949	$320.00	134901	$320.00	134929	$410.00	134954	$400.00	134979	$460.00
6–10	86954	330.00	134902	330.00	134930	420.00	134955	410.00	134980	470.00
11–25	86959	360.00	134903	360.00	134931	450.00	134956	440.00	134981	500.00
26–50	86964	400.00	134904	400.00	134932	490.00	134957	480.00	134982	540.00

DELTA-STAR OUTDOOR SUB-STATION UNITS

The outdoor sub-station units listed on the following page are complete with fusing and lightning arrester equipment, but without switches which can be of the separately mounted type. Each unit is equipped with a steel channel base suitable for wooden pole or steel tower sub-stations.



NUMBER OF UNITS — Two units are required for single-phase service, three units for three-phase service.

FUSES — The carbon tetrachloride fuses have quick opening characteristics and high rupturing capacity. The prices include fuses of ampere capacities indicated.

DESIGN — The sub-station units are of the same general type with various forms of lightning arresters.

RE FORM-1 — This unit is equipped with simple horn arresters and limiting fuses.

RE FORM-2 — Same as Form-1 except that fuse is not in series with horn arrester.

RE FORM-3 — Same as Form-2 except that horn arrester has limiting resistance in ground circuit.

SE FORM-1 — Same as RE Form-3 except that high-speed sphere gap arrester is used.

RE FORM-4 — Horn arrester is omitted and has double choke coil protection.

DELTA-STAR OUTDOOR SUB-STATION UNITS

13200-VOLT SINGLE-POLE UNITS WITH FUSES WITHOUT SWITCHES

Cap. Fuses Amps.	RE Form-1 Trade No.	RE Form-1 Price Each	RE Form-2 Trade No.	RE Form-2 Price Each	RE Form-3 Trade No.	RE Form-3 Price Each	RE Form-4 Trade No.	RE Form-4 Price Each	SE Form-1 Trade No.	SE Form-1 Price Each
1–5	86967	$76.00	134997	$76.00	135022	$126.00	135047	$116.00	135072	$156.00
6–10	86972	81.00	134998	81.00	135023	131.00	135048	121.00	135073	161.00
11–25	86977	86.00	134999	86.00	135024	136.00	135049	126.00	135074	176.00
26–50	86982	96.00	135000	96.00	135025	146.00	135050	136.00	135075	186.00
51–100	86987	110.00	135001	110.00	135026	160.00	135051	150.00	135076	190.00
101–200	134994	120.00	135002	120.00	135027	170.00	135052	160.00	135077	200.00

22000-VOLT SINGLE-POLE UNITS WITH FUSES WITHOUT SWITCHES

Cap. Fuses Amps.	RE Form-1 Trade No.	RE Form-1 Price Each	RE Form-2 Trade No.	RE Form-2 Price Each	RE Form-3 Trade No.	RE Form-3 Price Each	RE Form-4 Trade No.	RE Form-4 Price Each	SE Form-1 Trade No.	SE Form-1 Price Each
1–5	86968	$ 90.00	135003	$ 90.00	135097	$150.00	135053	$140.00	135078	$180.00
6–10	86973	95.00	135004	95.00	135029	155.00	135054	145.00	135079	185.00
11–25	86978	100.00	135005	100.00	135030	160.00	135055	150.00	135080	190.00
26–50	86983	120.00	135006	120.00	135031	180.00	135056	170.00	135081	210.00
51–100	86988	140.00	135007	140.00	135032	200.00	135057	190.00	135082	230.00
101–200	134995	150.00	135008	150.00	135033	210.00	135058	200.00	135083	240.00

33000-VOLT SINGLE-POLE UNITS WITH FUSES WITHOUT SWITCHES

Cap. Fuses Amps.	RE Form-1 Trade No.	RE Form-1 Price Each	RE Form-2 Trade No.	RE Form-2 Price Each	RE Form-3 Trade No.	RE Form-3 Price Each	RE Form-4 Trade No.	RE Form-4 Price Each	SE Form-1 Trade No.	SE Form-1 Price Each
1–5	86969	$110.00	135009	$110.00	135034	$180.00	135059	$170.00	135084	$220.00
6–10	86974	120.00	135010	120.00	135035	190.00	135060	180.00	135085	230.00
11–25	86979	130.00	135011	130.00	135036	200.00	135061	190.00	135086	240.00
26–50	86984	140.00	135012	140.00	135037	210.00	135062	200.00	135087	250.00
51–100	134996	170.00	135013	170.00	135038	240.00	135063	230.00	135088	280.00

44000-VOLT SINGLE-POLE UNITS WITH FUSES WITHOUT SWITCHES

Cap. Fuses Amps.	RE Form-1 Trade No.	RE Form-1 Price Each	RE Form-2 Trade No.	RE Form-2 Price Each	RE Form-3 Trade No.	RE Form-3 Price Each	RE Form-4 Trade No.	RE Form-4 Price Each	SE Form-1 Trade No.	SE Form-1 Price Each
1–5	86970	$120.00	135014	$120.00	135039	$200.00	135064	$190.00	135089	$240.00
6–10	86975	130.00	135015	130.00	135040	210.00	135065	200.00	135090	250.00
11–25	86980	160.00	135016	160.00	135041	240.00	135066	230.00	135091	280.00
26–50	86985	190.00	135017	190.00	135042	270.00	135067	260.00	135092	310.00

66000-VOLT SINGLE-POLE UNITS WITH FUSES WITHOUT SWITCHES

Cap. Fuses Amps.	RE Form-1 Trade No.	RE Form-1 Price Each	RE Form-2 Trade No.	RE Form-2 Price Each	RE Form-3 Trade No.	RE Form-3 Price Each	RE Form-4 Trade No.	RE Form-4 Price Each	SE Form-1 Trade No.	SE Form-1 Price Each
1–5	86971	$160.00	135018	$160.00	135043	$250.00	135068	$240.00	135093	$300.00
6–10	86976	170.00	135019	170.00	135044	260.00	135069	250.00	135094	310.00
11–25	86981	200.00	135020	200.00	135045	290.00	135070	280.00	135095	340.00
26–50	86986	240.00	135021	240.00	135046	330.00	135071	320.00	135096	380.00

DELTA-STAR UNIT TYPE BUS BAR SUPPORTS

A TYPE FOR EVERY PURPOSE


Type RP


Type VP


Type WP


Type IP


Type HP


Type TP

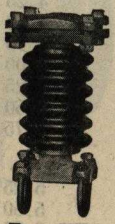

Type BP


Type RU

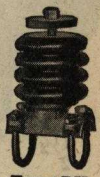

Type VU


Type WU


Type IU


Type HU


Type TU


Type BU


Type RS


Type VS


Type WS


Type IS


Type HS


Type TS


Type BS


Type RL

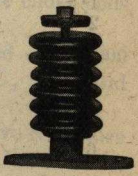

Type VL


Type WL


Type IL


Type HL


Type TL


Type BL


Type RK


Type VK


Type WK


Type IK


Type HK


Type TK


Type BK

See following page for prices.

DELTA-STAR UNIT TYPE BUS BAR SUPPORTS

Prices given below are for Type P unit only. For Type U add 50 cents to list. Type S same price as Type P For Type L, add 25 cents to list. For Type K, add 75 cents to list.
For illustrations, see previous page.

TYPE RP

*Bus Bar Dimens., In.	6600 Volts Trade No.	6600 Volts Price Each	13200 Volts Trade No.	13200 Volts Price Each	22000 Volts Trade No.	22000 Volts Price Each
up to ¾	86528	$4.50	86534	$6.00	86540	$8.00
¾ to 1	86529	4.50	86535	6.00	86541	8.00
1 to 1½	86530	4.75	86536	6.25	86542	8.25
1½ to 2	86531	5.00	86537	6.50	86543	8.50
2 to 2½	86532	5.25	86538	6.75	86544	8.75
2½ to 3	86533	5.50	86539	7.00	86545	9.00

TYPE VP

1½	86546	4.00	86554	5.50	86562	7.50
2	86547	4.25	86555	5.75	86563	7.75
2½	86548	4.50	86556	6.00	86564	8.00
3	86549	4.75	86557	6.25	86565	8.25
3½	86550	5.00	86558	6.50	86566	8.50
4	86551	5.25	86559	6.75	86567	8.75
5	86552	5.50	86560	7.00	86568	9.00
6	86553	5.75	86561	7.25	86569	9.25

TYPE WP

1½	86570	5.25	86578	6.75	86586	8.75
2	86571	5.50	86579	7.00	86587	9.00
2½	86572	5.75	86580	7.25	86588	9.25
3	86573	6.00	86581	7.50	86589	9.50
3½	86574	6.25	86582	7.75	86590	9.75
4	86575	6.50	86583	8.00	86591	10.00
5	86576	6.75	86584	8.25	86592	10.25
6	86577	7.00	86585	8.50	86593	10.50

TYPE IP

1½	86594	4.75	86602	6.25	86610	8.25
2	86595	5.00	86603	6.50	86611	8.50
2½	86596	5.25	86604	6.75	86612	8.75
3	86597	5.50	86605	7.00	86613	9.00
3½	86598	5.75	86606	7.25	86614	9.25
4	86599	6.00	86607	7.50	86615	9.50
5	86600	6.25	86608	7.75	86616	9.75
6	86601	6.50	86609	8.00	86617	10.00

TYPE HP

1½	86618	5.25	86626	6.75	86634	8.75
2	86619	5.50	86627	7.00	86635	9.00
2½	86620	5.75	86628	7.25	86636	9.25
3	86621	6.00	86629	7.50	86637	9.50
3½	86622	6.25	86630	7.75	86638	9.75
4	86623	6.50	86631	8.00	86639	10.00
5	86624	6.75	86632	8.25	86640	10.25
6	86625	7.00	86633	8.50	86641	10.50

TYPE TP

1½	86642	3.50	86650	5.00	86658	7.00
2	86643	3.75	86651	5.25	86659	7.25
2½	86644	4.00	86652	5.50	86660	7.50
3	86645	4.25	86653	5.75	86661	7.75
3½	86646	4.50	86654	6.00	86662	8.00
4	86647	4.75	86655	6.25	86663	8.25
5	86648	5.00	86656	6.50	86664	8.50
6	86649	5.25	86657	6.75	86665	8.75

TYPE BP

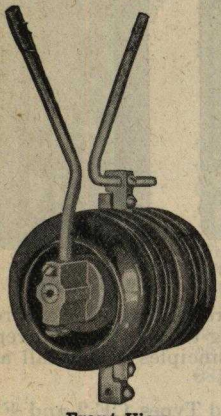
1½ to 6	86666	3.50	86667	5.00	86668	7.00

*Dimensions given on Type RP are for round bus bar; on Types VP, WP and TP, for height of bus bar; and Types IP, HP and BP, for width of bus bar.
For complete information, ask for technical Bulletin No. 8.

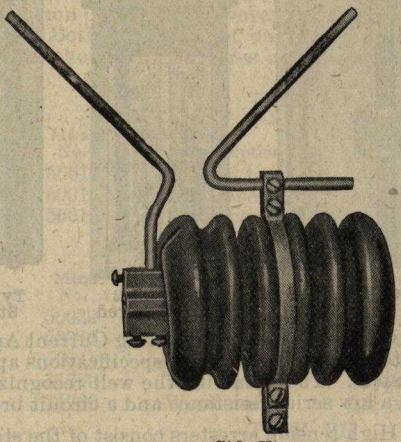
PEIRCE UNIVERSAL LIGHTNING ARRESTERS

For Distribution Systems—For Line or Station

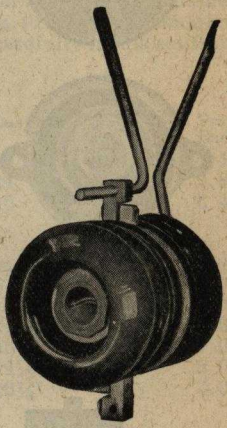
500 to 13200-volt Circuits



Front View



Side View



Rear View

There are 3 elements, absolutely essential to the success of a lightning arrester or electrical safety valve, combined in the Universal: The choke coil which strains out all foreign current of abnormal frequency without causing any appreciable impedance of the line current; the air gap which, placed near the choke coil between the line and the ground, passes off all excess voltage and foreign current; the horn air gap which breaks the arc and prevents the escape of line current after the foreign current has been spilled off the line.

The split sleeve and two set screws clamp the universal arrester securely on the line wire and form a good electrical connection for the live horn.

The horn gap can be adjusted to suit the circuit voltage. The grounding wire is fastened by a set screw to the lower end of one of the split bands which support the grounded horn.

The choke coil is a 4-inch length of iron pipe through which the line wire passes. The pipe is clamped inside the insulator.

The insulator is the highest grade wet process high tension porcelain. It is 6 inches long by 4¼ inches in diameter. The grooves are well designed to give large creeping surface. Through the center hole of the insulator runs an iron pipe, which is one of the most effective choke coils possible to design. All other parts of the arrester are of brass.

Arresters are made in 2 sizes, one taking wires from No. 6 to No. 0000 solid or No. 000 stranded the other taking wires and cables from 250000 c.m. to 500000 c.m. D.C., up to and including 13200.

On grounded neutral systems of 6600 volts and over it may be necessary to have resistance in the ground connection. Before using the lightning arrester on such systems, it would be advisable to consult with us regarding the proper resistance to use.

The gauge for the adjustment of the horn gap and a complete instruction sheet are sent with each arrester.

The use of a driven pipe or rod extending into the earth at least 4 feet, or deeper, if necessary to strike permanent moisture, is recommended for the ground. Do not under any circumstances use a water pipe ground, as this would give a short circuit when two arresters discharge simultaneously.

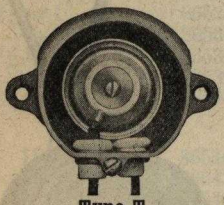
Each arrester, with gauge, instruction sheet and extra bushings to accommodate various sizes of wire, is packed in a heavy corrugated cardboard box.

Trade No.	Mfrs. No.	Description	Weight Pounds	Price Each
148238	3500	No. 6 to No. 0000 solid, or No. 000 stranded	7	$3.50
148239	3505	250000 to 500000 c.m.	7	4.00

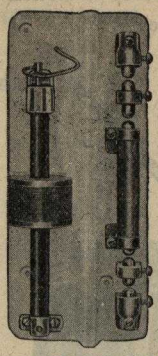
GARTON-DANIELS LIGHTNING ARRESTERS

ALTERNATING CURRENT

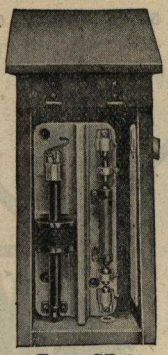




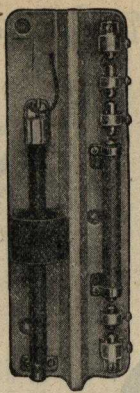
Type T



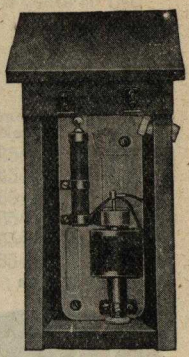
Type CE-2 Station



Type CE-2 Wood Covered

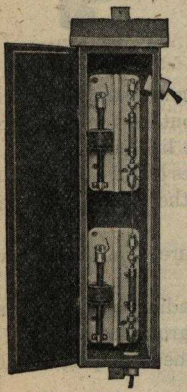


Type F-2 Station



Type FH Wood Covered

Garton-Daniels Alternating Current Arresters are furnished according to practically the same specifications applying to the direct current arresters. They combine the well recognized principles of a small air gap, a low series resistance and a circuit breaker.



Type CE-2 5000 V., Wood

High tension arresters consist of the standard Types CE-2 and F-2 units connected in series. The advantages of the single units, therefore, apply just as strongly to these higher voltage types. Arresters for station use are mounted on heavy impregnated oak frames, and are furnished complete with insulators. Pole arresters are furnished in well-made wood covers and are also furnished complete with insulating supports for attaching to pole or other suitable supporting means.

Trade No.	Mfrs. No.	Type	Voltages of Circuit	Description	Dimensions Inches	Weight Pounds	Price Each
049001	300	T	0– 350	Iron covered	3½ x 3½	2⅝	$3.00
049002	50014	DF	0– 350	Station type	8½ x 3 x 3	2¾	6.40
049003	50016	DF	0– 350	Iron covered	12½ x 6 x 4	11⅛	7.80
049004	50015	DF	0– 350	Wood covered	13½ x 7 x 6	6¾	6.40
049005	50017	FH	350– 1200	Station type	10½ x 3⅝ x 3	4¾	7.00
049006	50018	FH	350– 1200	Iron covered	14⅛ x 6½ x 4½	15¾	8.20
049007	50019	FH	350– 1200	Wood covered	14½ x 7 x 6¼	8¾	7.00
049008	50020	CE	1200– 2500	Station type	14 x 3½ x 3¾	6¾	8.80
049009	50021	CE	1200– 2500	Iron covered	16⅞ x 6 x 5	21	10.00
049010	50022	CE	1200– 2500	Wood covered	19 x 7½ x 7¼	12½	8.80
11971	50088	CE-2	1200– 2500	Station type	11 x 4¾ x 3⅛	8	8.80
11972	50089	CE-2	1200– 2500	Wood covered	18 x 8¼ x 6¼	13½	8.80
11973	50329	F-28	*2500–3ph.Y	Station type	14⅜ x 4¾ x 3⅛	11½	10.00
11974	50330	F-28	*2500–3ph.Y	Wood covered	20½ x 8¼ x 6¼	15¾	10.00
049011	50091	F-2	2500– 3500	Station type	14⅜ x 4¾ x 3⅛	11½	10.00
049012	50092	F-2	2500– 3500	Wood covered	20½ x 8¼ x 6¼	15¾	10.00
049013	50093	CE-2	3500– 5000	Station type	34 x 8 x 6⅞	26½	18.60
049014	50094	CE-2	3500– 5000	Wood covered	33 x13 x15½	49	18.60
049015	50095	F-2	5000– 6600	Station type	39¾ x 8 x17½	41	23.80
049016	50096	F-2	5000– 6600	Wood covered	38 x13 x15½	55	23.80
11975	50442	F-28	†6600–S. P.	Station type	56½ x 8 x17½	58	39.10
11976	50443	F-28	†6600–S. P.	Wood Covered	56⅝ x13 x15⅛	69	39.10
049017	50097	CE-2	6600– 7500	Station type	48 x 8 x17½	46	36.40
049018	50098	CE-2	6600– 7500	Wood covered	49 x13 x15½	59	36.40
049019	50099	F-2	7500– 8500	Station type	56½ x 8 x17½	58	39.10
049020	50100	F-2	7500– 8500	Wood covered	56⅝ x13 x15½	69	39.10
049021	50101	F-2	8500–10000	Station type	73 x 8 x18	71	48.60
049022	50102	F-2	8500–10000	Wood covered	71 x13 x15½	93	48.60
049023	50103	F-2	10000–12500	Station type	89 x 8 x18	89	60.90
049024	50104	F-2	10000–12500	Wood covered	87½ x13 x15½	116	60.90
049025	50105	F-2	12500–15000	Station type	106 x 8 x18	106	73.90
049026	50106	F-2	12500–15000	Wood covered	104 x13 x15½	139	73.90
049027	50107	F-2	15000–17500	Station type	122 x 8 x18	123	89.00
049028	50108	F-2	17500–20000	Station type	139 x 8 x18	140	100.00

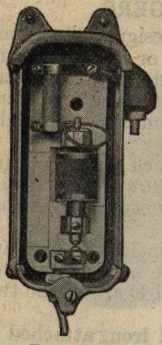
*Grounded neutral. †Railway circuit.



Type CE-2 7500 V., Station

GARTON-DANIELS LIGHTNING ARRESTERS

DIRECT CURRENT



Type DF
Iron Covered

Direct current arresters, station type, are furnished with highly polished and lacquered metal work. Pole or car arresters have a dipped metal finish, but aside from this are the same as the station type. Pole and car arresters are furnished in either wooden or iron covers, as required. Iron covers are, however, not furnished on arresters for voltages above 750. Both covers are of our standard design, fitted with insulated bushings for the leading-in wires and the arrester carefully insulated from the cover.

TYPE DF
0–350 Volts

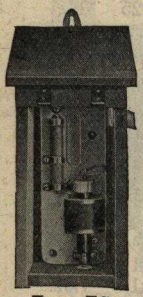
Trade No.	Mfrs. No.	Description	Dimensions Inches	Wt. Lbs.	Price Each
081072	50014	Station type	8½x3x3	2¾	$6.40
081073	50016	Iron covered	12½x6x4	11⅛	7.80
081074	50015	Wood covered	13½x7x6	6¾	6.40

TYPE EG
350–750 Volts

Trade No.	Mfrs. No.	Description	Dimensions Inches	Wt. Lbs.	Price Each
081075	50039	Station type	9⅞x35⅛x3	4½	$7.00
081076	50040	Iron covered	13½x6½x4½	13½	8.00
081077	50041	Wood covered	14½x7 x6¼	8½	7.00
081078	11779	Iron car	13½x6½x4½	13½	8.00
081079	11780	Wood car	14 x7 x6¼	8½	7.00

TYPE EH
750–1300 Volts

Trade No.	Mfrs. No.	Description	Dimensions Inches	Wt. Lbs.	Price Each
35318	50338	Station type	19⅜x 4 x37⅞	11½	$14.00
35319	50339	Wood car	21½x10½x6¾	21	14.00
35320	50400	Wood covered	25¼x 8⅜x7¾	21½	14.00



Type EG
Wood Covered

TYPE EI
1300–1500 Volts

Trade No.	Mfrs. No.	Description	Dimensions Inches	Wt. Lbs.	Price Each
46876	50401	Station type	19⅜x 4 x37⅞	11½	$16.00
46877	50402	Wood car	21½x10½x6¾	21	16.00
46878	50403	Wood covered	25¼x 8⅜x7¾	21½	16.00

TYPE EJ
1500–1800 Volts

46879	50404	Station type	19⅜x 4 x37⅞	11½	17.00
46880	50405	Wood car	21½x10½x6¾	21	17.00
46881	50406	Wood covered	25¼x 8⅜x7¾	21½	17.00

TYPE EK
1800–2400 Volts

Trade No.	Mfrs. No.	Description	Dimensions Inches	Wt. Lbs.	Price Each
35321	50426	Station type	49x 8x17½	45	$32.00
35322	50427	Wood covered	49x13x15½	58	32.00

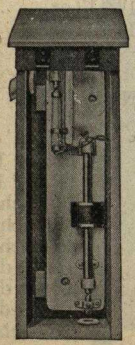
ARC CIRCUIT ARRESTERS

Direct Current

Trade No.	Mfrs. No.	Type	Voltage of Circuit	Description	Wt. Lbs.	Price Each
081080	50077	BD	0–4000	Station type	6¾	$8.80
081081	50078	BD	0–4000	Wood covered	12½	8.80
35316	50073	BD	4000–6000	Station type	20	22.00
35317	50074	BD	4000–6000	Wood covered	26½	22.00

Alternating Current

35307	50067	Panel board	0–2500	14x27 in.	43	42.00
35308	50068	Panel board	2500–5000	30x27 in.	90	66.00
35309	50020	CE	0–2500	Station type	6¾	8.80
35310	50021	CE	0–2500	Iron covered	21	10.00
35311	50022	CE	0–2500	Wood covered	12½	8.80
35312	50091	F-2	2500–3500	Station type	11½	10.00
35313	50092	F-2	2500–3500	Wood covered	15¾	10.00
35314	50093	CE-2	3500–5000	Station type	26½	18.60
35315	50094	CE-2	3500–5000	Wood covered	49	18.60



Type EH
Wood Covered

The above are standard types of arc circuit lightning arresters. They will meet practically all standard conditions. Arresters for higher voltages or for special conditions can be furnished to order.

GARTON-DANIELS ARRESTER HANGERS AND GROUND FITTINGS

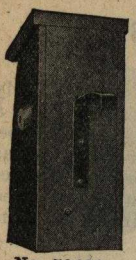
LIGHTNING ARRESTER HANGERS

Lightning arrester cross-arm hangers are designed to support single unit lightning arresters from either one or two cross-arms. Fitted with these hangers, they are easy and cheap to install, have strong, rigid supporting means and when so hung make a better appearance than the non-uniform schemes used in lightning arrester installation.

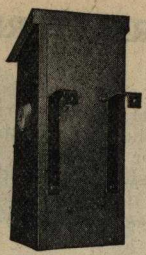
Supports A and D are made from 1½x$\frac{3}{32}$-inch strap iron, and are designed especially for attaching lightweight arresters, such as Types DF, FH and EG from either one or between two cross-arms.

Supports B, C and E are made from 1x$\frac{3}{32}$-inch strap iron, and are suitable for use with any single unit type of G-D Arrester. Style B is of the single-arm type; Styles C and E are of the two-arm type.

All supports are made of hot galvanized iron, attached to arrester box by suitable screws. Styles A, B and C are regularly furnished for 3½-inch cross-arm; this regular size is also suitable for 3¼-inch arms. Styles C, D and E are regularly drilled for arms installed on 24-inch centers; this standard drilling only is carried in stock. Special drillings will be furnished to order. All hangers are furnished complete with necessary screws and ready to be attached to box.

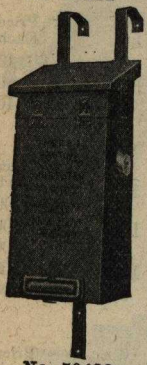


No. 50421

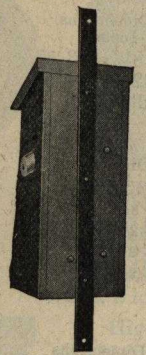


No. 50422

Trade No.	Mfrs. No.	Style	Price Each
104706	50421	A	$0.40
104707	50422	B	.60
104708	50423	C	.70
104709	50424	D	$0.40
104710	50425	E	.50



No. 50423



No. 50424

LIGHTNING ARRESTER GROUND FITTINGS



No. 50425



No. 50079



No. 50080



No. 50081



No. 50431

Trade No.	Mfrs. No.	Description	Dimens. Inches	Net Wt.	Price Each
		For ¾-inch Pipe			
35332	50079	Brass cap for No. 4 or 6 solid	1x1¾x1½	5 oz.	$0.45
104691	50428	Brass cap for No. 0 cable or solid	1x2x1½	6 oz.	.45
104692	50429	Brass cap, for ¼-in. cable	1x2x1½	6 oz.	.45
35333	50080	Brass coupling, for No. 4 or 6 solid	1⅝x1¾x1⅜	5 oz.	.40
104693	50430	Brass coupling for No. 0 cable or solid.....	1⅝x2x1⅜	6 oz.	.40
35334	50081	Mall. point, external type	3½x1 7/16x1 7/16	8 oz.	.45
104694	50431	Mall. point, internal type	2¾x1x1	7 oz.	.40
104695	42292	Galv. pipe tee.....	Std. ¾	10 oz.	.15
104696	50440	Galv. pipe coupling...	Std. ¾	5 oz.	.15
35335	50082	Gray iron plate....	12x12x¾	9 lbs.	1.20
		For 1-inch Pipe			
104697	50432	Brass cap, for No. 4 or 6 solid	1x2 1/16x1¾	6 oz.	.55
104698	50433	Brass cap, for No. 0 cable or solid	1x2¼x1¾	7 oz.	.55
104699	50434	Brass cap, for ¼-in. cable	1x2¼x1¾	7 oz.	.55
104700	50435	Brass coupling, for No. 4 or 6 solid	1 11/16x2 1/16x1¾	8 oz.	.50
104701	50436	Brass coupling, for No. 0 cable or solid.....	1 11/16x2 3/16x1¾	8 oz.	.50
104702	50437	Mall. point, external type	3¾x1 11/16x1 11/16	13 oz.	.55
104703	50438	Mall. point, internal type	3¼x1⅜x1⅜	11 oz.	.50
104704	50439	Galv. pipe tee.....	Std. 1	15 oz.	.20
104705	50441	Galv. pipe coupling...	Std. 1	8 oz.	.20

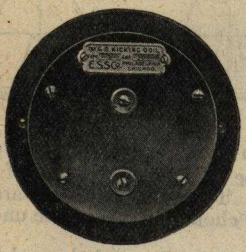
BONDS, CONNECTORS, POLE BANDS AND GROUND WIRE DISCONNECTORS

Trade No.	Mfrs. No.	Description	Price
104711	35	Type P-4 A bond, No. 0 B. & S. cable, ½-inch terminal	$66.00 per 100
104712	36	Type O-5 A bond, No. 0 B. & S. solid, ½-inch terminal	56.00 per 100
104713	12346	Cylindrical wire connector for No. 4 or 6 B. & S. solid..	.09 each
104714	12344	Cylindrical wire connector for No. 0 B. & S. solid.....	.14 each
104715	12342	Cylindrical wire connector for No. 0 B. & S. cable.....	.25 each
104716	50331	*Iron pole band for 6⅝-inch pole.....	13.00 per doz.
104717	50332	*Iron pole band for 7⅝-inch pole.....	13.00 per doz.
104718	50333	*Iron pole band for 8⅝-inch pole.....	13.00 per doz.
104719	50444	Ground wire disconnector for No. 4 or 6 B. & S. solid..	1.25 each

*Pole bands include pole band brackets for attaching to our regular wood or iron covers.

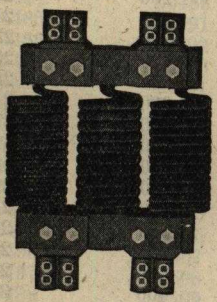
GARTON-DANIELS CHOKE COILS

LOW VOLTAGE TYPES

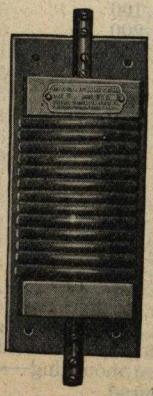


Type S

Choke coils regularly carried in stock are listed below. Coils of higher ampere capacity than these will be furnished to order. In ordering, always give the following information: Mfrs. No., capacity in amperes, size of wire or cable for which terminals are to be provided, number and size of terminals on each end when ordering Type AMF coils, mounting, standard or special.



Type AMF

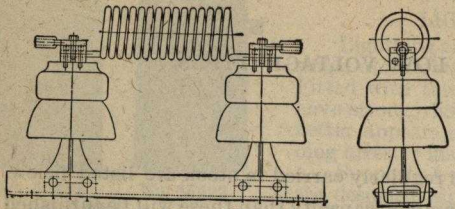


Car Choke Coil

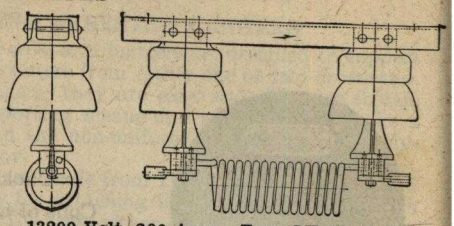
Trade No.	Mfrs. No.	Type	Cap. Amps.	Dimensions Inches	Weight Pounds	Price Each
081082	50042	S	10	6⅝x2½	4	$3.60
081083	50043	S	20	6⅝x2½	4	4.80
081084	50044	S	30	6⅝x2½	4	5.76
081085	50045	S	40	6⅝x2½	4	6.72
081086	50046	S	50	8⅛x3 7/16	9¼	8.00
081087	50047	S	100	8⅛x3 7/16	9¼	8.50
081088	50048	S	125	8⅛x3 7/16	9¼	9.00
081089	50049	S	175	9⅝x3 9/16	16¼	10.00
081090	50050	S	225	9⅝x3 9/16	16¼	10.50
081091	50051	S	260	9⅝x3 9/16	16¼	11.00
081092	50052	AF	50	10½x4⅜x5	8½	9.90
081093	50053	AF	125	10½x4⅜x5	8½	11.00
081094	50054	AF	160	12 x5 x5	11	11.50
081095	50055	AF	200	12 x5 x5	11½	11.90
081096	50056	AF	250	12 x5 x5	12¼	12.10
081097	50057	AF	325	5x15½x4⅝	15½	13.20
081098	50058	AF	400	5x16 x4 11/16	18¾	18.70
081099	50059	AF	500	5x16⅜x4 15/16	21¼	27.50
081100	50060	AMF	600	10x17 x4⅝	33¾	29.70
081101	50061	AMF	800	10x18½x4 11/16	37¾	35.20
081102	50062	AMF	1000	10x20⅞x4 15/16	48¾	49.50
081103	50063	AMF	1200	12x22 x4⅝	65½	55.00
081104	50064	AMF	1500	12x22 x4 15/16	72	67.10
081105	50065	AMF	1600	14x23 x4 11/16	89¾	74.80
081106	50066	AMF	2000	14x23 x4 15/16	102	105.60
081107	11781	Car	75	10½x4⅜x4¾	8¾	7.00
081108	11782	Car	125	10½x4⅜x4¾	10	7.75
081109	11783	Car	150	10½x4⅜x5	10¾	8.50
081110	11784	Car	175	10½x4⅜x5	11½	9.25
081111	11785	Car	200	10½x4⅜x5	12¼	10.00

GARTON-DANIELS CHOKE COILS

HIGH VOLTAGE TYPES



13200 Volt, 200 Amp. Type L Choke Coil



13200 Volt, 200 Amp. Type LU Choke Coil

Type L choke coils are designed for indoor service. The Type LU choke coils are of the underhung type and are designed particularly for outdoor service. Type H choke coils are of the well known hour glass type and are for indoor service. Type HU choke coils are of the underhung type and are designed particularly for outdoor service.

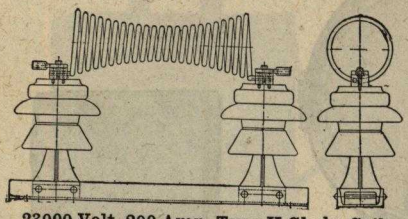
All types of choke coils listed in the following pages are made with a base of channel iron into which iron pins are riveted and insulators cemented to these pins support iron caps, which in turn support the terminal blocks and coil proper. Channel bases in all types are drilled with ⅝-inch holes in each end; the coil may so be mounted on any flat supporting member by bolts or lags; or by the use of pipe clamps on a following page, they may be supported by piping.

Trade No.	Mfrs. No.	Type	Voltage	Capacity Amperes	Price Each
126422	50445	L	0–3000	50	$17.00
126423	50446	L	0–3000	100	18.00
126424	50447	L	0–3000	150	19.00
126425	50448	L	0–3000	200	20.00
126426	50449	L	0–3000	250	21.00
126427	50450	L	0–3000	300	23.00
126428	50451	L	0–3000	400	25.00
126429	50452	L	0–3000	500	28.00
126430	50453	L	0–3000	600	31.00
126431	50454	L	0–3000	800	37.00
126432	50455	L	0–3000	1000	52.00
126433	50456	L	0–3000	1200	58.00
126434	50469	L	3000–6600	50	22.00
126435	50470	L	3000–6600	100	24.00
126436	50471	L	3000–6600	150	25.00
126437	50472	L	3000–6600	200	26.00
126438	50473	L	3000–6600	300	28.00
126439	50474	L	3000–6600	400	30.00
126440	50475	L	3000–6600	500	33.00
126441	50476	L	3000–6600	600	36.00
126442	50477	L	3000–6600	800	40.00
126443	50487	L	6600–13200	100	30.00
126444	50488	L	6600–13200	200	33.00
126445	50489	L	6600–13200	300	36.00
126446	50490	L	6600–13200	400	39.00
126447	50495	L	13200–23000	100	35.00
126448	50496	L	13200–23000	200	38.00
126449	50497	L	13200–23000	300	41.00
126450	50501	L	23000–35000	100	40.00
126451	50502	L	23000–35000	200	45.00
126452	50457	LU	0–3000	50	17.00
126453	50458	LU	0–3000	100	18.00
126454	50459	LU	0–3000	150	19.00
126455	50460	LU	0–3000	200	20.00
126456	50461	LU	0–3000	250	21.00
126457	50462	LU	0–3000	300	23.00
126458	50463	LU	0–3000	400	25.00
126459	50464	LU	0–3000	500	28.00
126460	50465	LU	0–3000	600	31.00
126461	50466	LU	0–3000	800	37.00
126462	50467	LU	0–3000	1000	52.00
126463	50468	LU	0–3000	1200	58.00

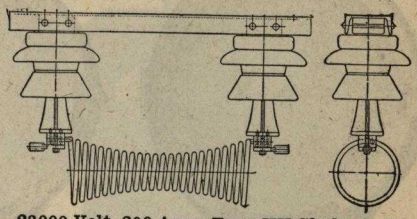
In ordering choke coils and disconnecting switches it is necessary to give the following information in order that the coils may exactly meet requirements. Mfrs. No.; voltage; capacity in amperes; size of wire or cable for which terminals are to be provided; number and size of terminals on each end when ordering Type AMF and high voltage coils; mounting—standard or special, and drillings in base, if other than standard drillings are required.

GARTON-DANIELS CHOKE COILS

HIGH VOLTAGE TYPES



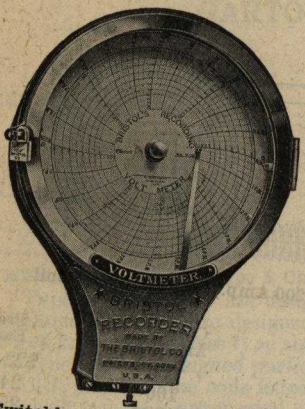
23000 Volt, 200 Amp. Type H Choke Coil



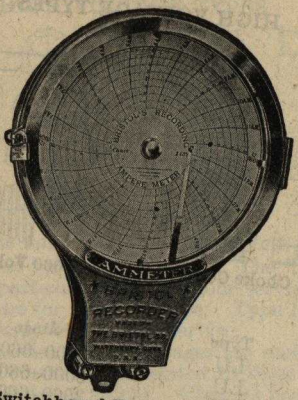
23000 Volt, 200 Amp. Type HU Choke Coil

Trade No.	Mfrs. No.	Type	Voltage	Capacity Amperes	Price Each
126476	50478	LU	3000–6600	50	$22.00
126477	50479	LU	3000–6600	100	24.00
126478	50480	LU	3000–6600	150	25.00
126479	50481	LU	3000–6600	200	26.00
126480	50482	LU	3000–6600	300	28.00
126481	50483	LU	3000–6600	400	30.00
126482	50484	LU	3000–6600	500	33.00
126483	50485	LU	3000–6600	600	36.00
126484	50486	LU	3000–6600	800	40.00
126485	50491	LU	6600–13200	100	30.00
126486	50492	LU	6600–13200	200	33.00
126487	50493	LU	6600–13200	300	36.00
126488	50494	LU	6600–13200	400	39.00
126489	50498	LU	13200–23000	100	35.00
126490	50499	LU	13200–23000	200	38.00
126491	50500	LU	13200–23000	300	41.00
126492	50503	LU	23000–35000	100	40.00
126493	50504	LU	23000–35000	200	45.00
126494	50505	H	0–6600	50	24.00
126495	50506	H	0–6600	100	26.00
126496	50507	H	0–6600	150	27.00
126497	50508	H	0–6600	200	28.00
126498	50509	H	0–6600	300	30.00
126499	50510	H	0–6600	400	33.00
126500	50511	H	0–6600	500	36.00
126501	50519	H	6600–13200	50	32.00
126502	50520	H	6600–13200	100	35.00
126503	50521	H	6600–13200	200	38.00
126504	50522	H	6600–13200	300	39.00
126505	50523	H	6600–13200	400	42.00
126506	50529	H	13200–23000	100	37.00
126507	50530	H	13200–23000	200	41.00
126508	50531	H	13200–23000	300	44.00
126509	50535	H	23000–35000	100	43.00
126510	50536	H	23000–35000	200	48.00
126511	50512	HU	0–6600	50	24.00
126512	50513	HU	0–6600	100	26.00
126513	50514	HU	0–6600	150	27.00
126514	50515	HU	0–6600	200	28.00
126515	50516	HU	0–6600	300	30.00
126516	50517	HU	0–6600	400	33.00
126517	50518	HU	0–6600	500	36.00
126518	50524	HU	6600–13200	50	32.00
126519	50525	HU	6600–13200	100	35.00
126520	50526	HU	6600–13200	200	38.00
126521	50527	HU	6600–13200	300	39.00
126522	50528	HU	6600–13200	400	42.00
126523	50532	HU	13200–23000	100	37.00
126524	50533	HU	13200–23000	200	41.00
126525	50534	HU	13200–23000	300	44.00
126526	50537	HU	23000–35000	100	43.00
126527	50538	HU	23000–35000	200	48.00

BRISTOL RECORDING INSTRUMENTS



Switchboard Type Recording Voltmeter, 8-inch Chart
Model 510



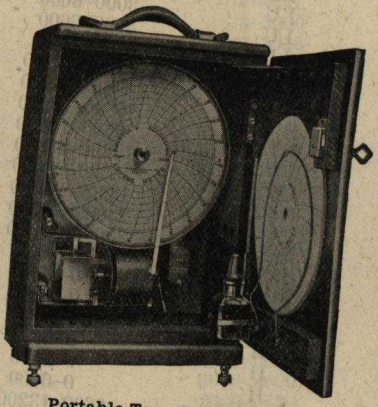
Switchboard Type Recording Ammeter, 8-inch Chart
Model 610



Switchboard Type Recording Wattmeter, 8-inch Chart
Model 735



Round Form Recording Voltmeter, 6-inch Chart
Model 553



Portable Type Recording Ammeter, 8-inch Chart
Model 612



For Unbalanced Polyphase System, Recording Ammeter
8-inch Chart, Model 635

BRISTOL RECORDING INSTRUMENT CHARTS

Trade No.	Description	Price per 100
056782	Special 6-inch charts, graduated to order, extra, net	$13.00
056783	Special 8-inch charts, graduated to order, extra, net	15.00
056784	Special 12-inch charts, graduated to order, extra, net	20.00
056785	Additional charts, 8-inch or 6-inch	.75
056786	Additional charts, 8-inch or 6-inch (copying ink)	.85
056781	Additional charts, 8-inch or 6-inch (7-day, two colors)	1.25
056787	Additional charts, 12-inch	1.50
056788	Additional charts, 12-inch (7-day, two colors)	2.00

Bristol Charts are packed in boxes containing 100, 200, 300 and 500. When placing orders for charts, order by the hundred or multiple thereof.

BRISTOL RECORDING INSTRUMENT INK

Trade No.	Size of Bottle	Price Each	Trade No.	Size of Bottle	Price Each
056790	1-ounce	$0.25	056793	1-pint	$3.50
056791	4-ounce	.60	056794	1-quart	6.00
056792	½-pint	1.00	.....	.....	....

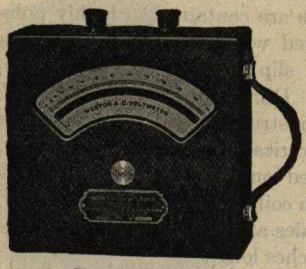
Combination Rubber Stopper and Glass Filler

Trade No.		Price Each
056795	.....	$0.05

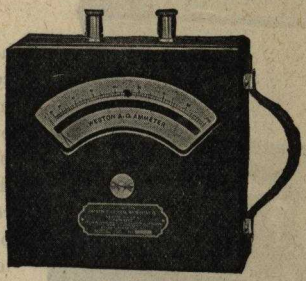
WESTON PORTABLE INSTRUMENTS

FOR ALTERNATING CURRENT

MODEL 155



Voltmeter



Ammeter

These instruments may be used on circuits of any frequency from 15 to 140 cycles per second without sensible error in their indications.

The various ranges of voltmeters listed are all self-contained. They include instruments adapted to a full scale deflection with 75 volts, to instruments to give a full scale deflection with 750 volts. For use with higher voltages multipliers or transformers must be used.

The ammeters listed may be used on circuits having a difference in potential of 2300 volts. For higher ranges or voltages transformers must be used.

VOLTMETERS

Trade No.	Range in Volts	Dimensions, Inches: Length	Width	Depth	Price Each
06951	75	7	7 1/8	3 1/4	$18.50
06952	125	7	7 1/8	3 1/4	18.50
06953	150	7	7 1/8	3 1/4	18.75
06954	300	7	7 1/8	3 1/4	22.50
06955	500	7 3/4	8 3/4	4	26.50
06956	600	7 3/4	8 3/4	4	27.50
06957	750	7 3/4	8 3/4	4	30.00

All the above ranges of voltmeters are provided with self-contained resistances.

AMMETERS

06958	1	7	7 1/8	3 1/4	17.75
06959	2	7	7 1/8	3 1/4	17.50
06960	3	7	7 1/8	3 1/4	17.00
06961	5	7	7 1/8	3 1/4	17.00
06962	10	7	7 1/8	3 1/4	17.00
06963	15	7	7 1/8	3 1/4	17.00
06964	25	7	7 1/8	3 1/4	17.00
06965	50	7	7 1/8	3 1/4	17.50
06966	75	7	7 1/8	3 1/4	17.50
06967	100	7	7 1/8	3 1/4	17.50
06968	150	7	7 1/8	3 1/4	18.00
06969	200	7	7 1/8	3 1/4	18.50
06970	250	7	7 1/8	3 1/4	18.75
06971	300	7	7 1/8	3 1/4	19.00
052636	400	7	7 1/8	3 1/4	21.00
052637	500	7	7 1/8	3 1/4	23.00

High-potential current transformers must be used for the measurement of all alternating currents greater than 500 amperes.

MIL-AMMETERS

06972	75	7	7 1/8	3 1/4	17.75
06973	150	7	7 1/8	3 1/4	17.75
06974	250	7	7 1/8	3 1/4	17.75
06975	500	7	7 1/8	3 1/4	17.75
06976	750	7	7 1/8	3 1/4	17.75

LEATHER CASES

Trade No.	Description	Price Each
06977	For ammeters, mil-ammeters and voltmeters to 300 volts	$4.25
06978	For voltmeters with range from 300 to 750 volts	5.25
41551	For ammeters with range of 400 and 500 amperes	4.25

WESTON PORTABLE INSTRUMENTS

For Alternating and Direct Current

WATTMETERS—MODEL 329—POLYPHASE



These instruments are contained in highly polished mahogany boxes, provided with carrying handles, locks, and covers equipped with slip hinges. The weight is approximately 17½ pounds. Dimensions are 9½x10½x8 1/16 inches over all. This form of instrument really consists of two single-phase wattmeters, electrically independent, but having their movable coils mounted on a common shaft, so that they rotate together. Each coil, however, moves in its own system of field coils. The scales are uniform throughout their entire length, and are 5¼ inches long.

In general, the indications may be relied upon to within ½ of 1 per cent of full scale value on either direct current circuits or on alternating current circuits of any frequency up to 133 cycles per second and of any wave form.

Trade No.	Amperes Normal Series	Amperes Normal Multiple	Amperes Maximum Series	Amperes Maximum Multiple	*Watt Ranges Field Coils in Series	*Watt Ranges Field Coils in Multiple	No. of Scale Lines	Price Each
Normal 100/50, Maximum 150/65 Volts								
131543	1	2	2	4	200/100	400/200	100	$110.00
131544	2.5	5	5	10	500/250	1000/500	100	110.00
131545	5	10	10	20	1/.5 K.W.	2/1 K.W.	100	110.00
131546	10	20	20	40	2/1 K.W.	4/2 K.W.	100	115.00
Normal 150/75, Maximum 250/125 Volts								
131547	1	2	2	4	300/150	600/300	150	110.00
131548	2.5	5	5	10	750/375	1500/750	150	110.00
131549	5	10	10	20	1.5/.75 K.W.	3/1.5 K.W.	150	110.00
131550	10	20	20	40	3/1.5 K.W.	6/3 K.W.	150	115.00
Normal 200/100, Maximum 300/150 Volts								
131551	1	2	2	4	400/200	800/400	100	115.00
131552	2.5	5	5	10	1/.5 K.W.	2/1 K.W.	100	115.00
131553	5	10	10	20	2/1 K.W.	4/2 K.W.	100	115.00
131554	10	20	20	40	4/2 K.W.	8/4 K.W.	100	120.00
Normal 300/150, Maximum 450/250 Volts								
131555	1	2	2	4	600/300	1200/600	120	115.00
131556	2.5	5	5	10	1.5/.75 K.W.	3/1.5 K.W.	150	115.00
131557	5	10	10	20	3/1.5 K.W.	6/3 K.W.	150	115.00
131558	10	20	20	40	6/3 K.W.	12/6 K.W.	120	120.00
Normal 500/100, Maximum 600/150 Volts								
131559	1	2	2	4	1000/200	2000/400	100	125.00
131560	2.5	5	5	10	2500/500	5000/1000	100	125.00
131561	5	10	10	20	5/1 K.W.	10/2 K.W.	100	125.00
131562	10	20	20	40	10/2 K.W.	20/4 K.W.	100	130.00
Normal 600/150, Maximum 675/250 Volts								
131563	1	2	2	4	1200/300	2400/600	120	127.50
131564	2.5	5	5	10	3/.75 K.W.	6/1.5 K.W.	150	127.50
131565	5	10	10	20	6/1.5 K.W.	12/3 K.W.	150	127.50
131566	10	20	20	40	12/3 K.W.	24/6 K.W.	120	132.50
Normal 600/300, Maximum 675/450 Volts								
131567	1	2	2	4	1.2.6 K.W.	2.4/1.2 K.W.	120	127.50
131568	2.5	5	5	10	3/1.5 K.W.	6/3 K.W.	150	127.50
131569	5	10	10	20	6/3 K.W.	12/6 K.W.	120	127.50
131570	10	20	20	40	12/6 K.W.	24/12 K.W.	120	132.50
Normal 750/150, Maximum 750/250 Volts								
131571	1	2	2	4	1500/300	3000/600	150	130.00
131572	2.5	5	5	10	3750/750	7500/1500	150	130.00
131573	5	10	10	20	7.5/1.5 K.W.	15/3 K.W.	150	130.00
131574	10	20	20	40	15/3 K.W.	30/6 K.W.	150	135.00
Normal 750/300, Maximum 750/450 Volts								
131575	1	2	2	4	1500/600	3000/1200	150	130.00
131576	2.5	5	5	10	3750/1500	7500/3000	150	130.00
131577	5	10	10	20	7.5/3 K.W.	15/6 K.W.	150	130.00
131578	10	20	20	40	15/6 K.W.	30/12 K.W.	150	135.00

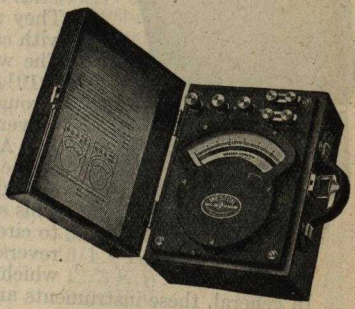
*Ranges not marked K.W. read in watts.

WESTON PORTABLE INSTRUMENTS

FOR ALTERNATING AND DIRECT CURRENT



Voltmeter, Model 341



Ammeter, Model 370

These instruments are electro-dynamometer meters and may be used with equal accuracy on either alternating current or direct current circuits.

They are contained in highly polished mahogany boxes, provided with carrying handles, locks and covers equipped with slip hinges. The weight is approximately 11 pounds, and the dimensions are 8x10¼x5¾ inches over all.

Owing to the principle of operation, these instruments cannot be made with a uniform scale, but the upper two-thirds of the scale is remarkably uniform. The length of the scale is 5¼ inches.

The scales are accurately hand calibrated to each cardinal division by direct comparison with standards, and the intermediate steps are subdivided with great care.

VOLTMETERS—MODEL 341

Single Range

Trade No	Range Volts	Approx. Resistance Ohms	Price Each	Trade No.	Range Volts	Approx. Resistance Ohms	Price Each
131401	1	2	$65.00	131409	15	100	$62.50
131402	1.5	3	65.00	131410	30	470	60.00
131403	2	4	65.00	131411	75	1180	60.00
131404	3	6	65.00	131412	120	2700	60.00
131405	5	18	65.00	131413	150	3300	60.00
131406	7.5	50	62.50	131414	300	6700	62.50
131407	10	66	62.50	131415	600	20000	67.50
131408	12	80	62.50	131416	750	25000	70.00

Double Range

131417	5–1	10–2	70.00	131424	150–75	3300– 1650	65.00
131418	15–1.5	30–3	70.00	131425	300–150	6700– 3350	67.50
131419	3–1.5	6–3	70.00	131426	600–150	20000– 5000	72.50
131420	6–3	21–10.5	70.00	131427	600–300	20000–10000	72.50
131421	15–7.5	100–50	67.50	131428	750–150	25000– 5000	75.00
131422	30–15	300–150	67.50	131429	750–300	25000–10000	75.00
131423	120–60	2700–1350	65.00	.....	.....	.....	.....

AMMETERS—MODEL 370

Milliammeters—Single Range

Trade No.	Range Milliamps.	Approx. Resistance Ohms	Price Each	Trade No.	Range Milliamps.	Approx. Resistance Ohms	Price Each
131430	15	1400	67.50	131436	150	19.5	67.50
131431	20	720	67.50	131437	200	7.5	67.50
131432	30	350	67.50	131438	300	3.2	67.50
131433	50	167	67.50	131439	500	1.2	67.50
131434	75	50	67.50	131440	750	.9	67.50
131435	100	26.5	67.50	.....	...	...	.....

Ammeters—Double Range

Trade No.	Range Amps.	Price Each	Trade No.	Range Amps.	Price Each
131441	2–1	75.00	131443	10–5	75.00
131442	5–2½	75.00	.....	....	.....

WESTON PORTABLE INSTRUMENTS

For Alternating and Direct Current

WATTMETERS—MODEL 310—SINGLE-PHASE



These instruments represent the latest development in electro-dynamometer wattmeters and embody many characteristics hitherto considered unattainable in instruments of this class. They are contained in highly polished mahogany boxes, provided with carrying handles, locks, and covers equipped with slip hinges. The weight is approximately 11 pounds and the dimensions are 8x10¼x5¾ over all. The scales are 5¼ inches long, uniform throughout their entire length, and are provided with mirrors to prevent parallax errors.

A reversing switch is provided by means of which the direction of the current through the movable coil may be changed without changing the direction through the rest of the potential circuit. This switch will be found very useful in connecting the wattmeter to circuits in which the polarity is not known. In addition to the reversing switch, a locking contact key is provided, by means of which the potential circuit may be opened.

In general, these instruments are guaranteed to an accuracy of ¼ of 1 per cent of full scale value for use on either direct current circuits or alternating current circuits of any frequency to 133 cycles per second and of any wave form. Each instrument is accompanied by a certificate, giving its electrical characteristics, general instructions for use, and diagram showing the correct binding posts to be employed for the various ranges.

Double ranges for both the current and voltage circuits are provided. These ranges are controlled by means of independent binding posts.

It will be noted from the table following that these instruments can be furnished with self-contained potential ranges up to 750 volts. For higher ranges, the use of potential transformers is recommended.

Multipliers with Y connected resistors, arranged so that the pressure circuit of single-phase wattmeters may be properly connected for use on 3-phase balanced systems, can be furnished. Prices on request.

MODEL 310 SINGLE-PHASE WATTMETERS

Trade No.	Amperes: Normal Series	Amperes: Normal Multiple	Amperes: Maximum Series	Amperes: Maximum Multiple	*Watt Ranges: Field Coils in Series	*Watt Ranges: Field Coils in Multiple	No. of Scale Lines	Price Each
					Normal 100/50, Maximum 150/75 Volts			
131451	1	2	2	4	100/50	200/100	100	$70.00
131452	2.5	5	5	10	250/125	500/250	125	70.00
131453	5	10	10	20	500/250	1000/500	100	70.00
131454	10	20	20	40	1/.5 K.W.	2/1 K.W.	100	70.00
131455	20	40	40	80	2/1 K.W.	4/2 K.W.	100	75.00
131456	30	60	60	120	3/1.5 K.W.	6/3 K.W.	150	75.00
131457	50	100	75	150	5/2.5 K.W.	10/5 K.W.	100	75.00
					Normal 150/75, Maximum 250/125 Volts			
131458	1	2	2	4	150/75	300/150	150	70.00
131459	2.5	5	5	10	375/187.5	750/375	150	70.00
131460	5	10	10	20	750/375	1500/750	150	70.00
131461	10	20	20	40	1.5/.75 K.W.	3/1.5 K.W.	150	70.00
131462	20	40	40	80	3/1.5 K.W.	6/3 K.W.	150	75.00
131463	30	60	60	120	5/2.5 K.W.	10/5 K.W.	100	75.00
131464	50	100	75	150	7.5/3.75 K.W.	15/7.5 K.W.	150	75.00
					Normal 200/100, Maximum 300/150 Volts			
131465	1	2	2	4	200/100	400/200	100	75.00
131466	2.5	5	5	10	500/250	1000/500	100	75.00
131467	5	10	10	20	1/.5 K.W.	2/1 K.W.	100	75.00
131468	10	20	20	40	2/1 K.W.	4/2 K.W.	100	75.00
131469	20	40	40	80	4/2 K.W.	8/4 K.W.	100	80.00
131470	30	60	60	120	6/3 K.W.	12/6 K.W.	120	80.00
131471	50	100	75	150	10/5 K.W.	20/10 K.W.	100	80.00
					Normal 300/150, Maximum 450/250 Volts			
131472	1	2	2	4	300/150	600/300	150	75.00
131473	2.5	5	5	10	750/375	1500/750	150	75.00
131474	5	10	10	20	1.5/.75 K.W.	3/1.5 K.W.	150	75.00
131475	10	20	20	40	3/1.5 K.W.	6/3 K.W.	150	75.00
131476	20	40	40	80	6/3 K.W.	12/6 K.W.	120	80.00
131477	30	60	60	120	10/5 K.W.	20/10 K.W.	100	80.00
131478	50	100	75	150	15/7.5 K.W.	30/15 K.W.	150	80.00

*Ranges not marked K.W. read in watts.

WESTON PORTABLE INSTRUMENTS

FOR ALTERNATING AND DIRECT CURRENT

WATTMETERS—MODEL 310—SINGLE PHASE

Normal 500/100, Maximum 600/150 Volts

Trade No.	Amperes Normal Series	Amperes Normal Multiple	Amperes Maximum Series	Amperes Maximum Multiple	*Watt Ranges Field Coils in Series	*Watt Ranges Field Coils in Multiple	No. of Scale Lines	Price Each
131490	1	2	2	4	500/100	1000/200	100	$85.00
131491	2.5	5	5	10	1250/250	2500/500	125	85.00
131492	5	10	10	20	2500/500	5000/1000	100	85.00
131493	10	20	20	40	5/1 K.W.	10/2 K.W.	100	85.00
131494	20	40	40	80	10/2 K.W.	20/4 K.W.	100	90.00
131495	30	60	60	120	15/3 K.W.	30/6 K.W.	150	90.00
131496	50	100	75	150	25/5 K.W.	50/10 K.W.	100	90.00
					Normal 600/150, Maximum 675/250 Volts			
131497	1	2	2	4	600/150	1200/300	150	87.50
131498	2.5	5	5	10	1500/375	3000/750	150	87.50
131499	5	10	10	20	3/.75 K.W.	6/1.5 K.W.	150	87.50
131500	10	20	20	40	6/1.5 K.W.	12/3 K.W.	150	87.50
131501	20	40	40	80	12/3 K.W.	24/6 K.W.	120	92.50
131502	30	60	60	120	20/5 K.W.	40/10 K.W.	100	92.50
131503	50	100	75	150	30/7.5 K.W.	60/15 K.W.	150	92.50
					Normal 600/300, Maximum 675/450 Volts			
131504	1	2	2	4	600/300	1200/600	120	87.50
131505	2.5	5	5	10	1.5/.75 K.W.	3/1.5 K.W.	150	87.50
131506	5	10	10	20	3/1.5 K.W.	6/3 K.W.	150	87.50
131507	10	20	20	40	6/3 K.W.	12/6 K.W.	120	87.50
131508	20	40	40	80	12/6 K.W.	24/12 K.W.	120	92.50
131509	30	60	60	120	20/10 K.W.	40/20 K.W.	100	92.50
131510	50	100	75	150	30/15 K.W.	60/30 K.W.	150	92.50
					Normal 750/150, Maximum 750/250 Volts			
131511	1	2	2	4	750/150	1500/300	150	90.00
131512	2.5	5	5	10	1875/375	3750/750	150	90.00
131513	5	10	10	20	3750/750	7500/1500	150	90.00
131514	10	20	20	40	7.5/1.5 K.W.	15/3 K.W.	150	90.00
131515	20	40	40	80	15/3 K.W.	30/6 K.W.	150	95.00
131516	30	60	60	120	25/5 K.W.	50/10 K.W.	100	95.00
131517	50	100	75	150	37.5/7.5 K.W.	75/15 K.W.	150	95.00
					Normal 750/300, Maximum 750/450 Volts			
131518	1	2	2	4	750/300	1500/600	150	90.00
131519	2.5	5	5	10	2000/800	4000/1600	160	90.00
131520	5	10	10	20	3750/1500	7500/3000	150	90.00
131521	10	20	20	40	7.5/3 K.W.	15/6 K.W.	150	90.00
131522	20	40	40	80	15/6 K.W.	30/12 K.W.	150	95.00
131523	30	60	60	120	25/10 K.W.	50/20 K.W.	100	95.00
131524	50	100	75	150	37.5/15 K.W.	75/30 K.W.	150	95.00

* Ranges not marked K.W. read in watts.

SPECIAL MODEL 310 WATTMETERS FOR VERY LOW POWER FACTORS

For measurements in circuits where the power factor is very low, such as core losses in transformers, a special line of Weston Wattmeters has been designed, giving full scale deflection for 20 per cent power factor; that is, the scale value in watts is 20 per cent of the number of volt amperes applied. All wattmeters of this type, except the 1 and 0.5 ampere, are compensated for the power consumed in their potential circuits. A switch is provided by which the instrument may be used with or without this compensation.

The scales are uniform and the instruments have the same general characteristics as the regular model.

Maximum Volts 150/75

Trade No.	Maximum Capacity, Amperes Fields in Series	Maximum Capacity, Amperes Fields in Multiple	Watt Ranges Fields in Series	Watt Ranges Fields in Multiple	No. of Scale Lines	Price Each
131525	0.5	1	15/7.5	30/15	150	†$80.00
131526	1	2	30/15	60/30	150	†80.00
131527	2.5	5	75/37.5	150/75	150	80.00
131528	5	10	150/75	300/150	150	80.00
131529	10	20	300/150	600/300	150	85.00
131530	20	40	600/300	1200/600	120	85.00
131531	50	100	1500/750	3000/1500	150	85.00

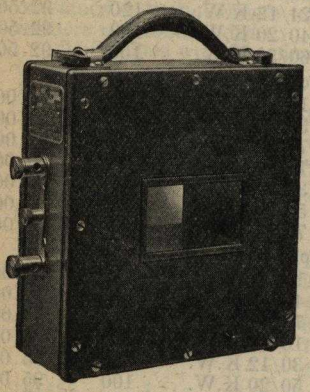
†These ranges are not compensated and are useful for special conditions only.

WESTON PORTABLE CURRENT AND POTENTIAL TRANSFORMERS

For Use With Portable Alternating Current Instruments



Model 312



Model 313



Model 311

PORTABLE CURRENT TRANSFORMERS

Two forms of Weston Portable Current Transformers are made. One of these forms is a self-contained type; both the primary and secondary windings constituting an integral part of the structure. This type is designated Model 312.

In the other form the secondary winding alone is an integral part of the structure, and the primary winding is inserted in the transformer by the user at the time of making a measurement. This form is therefore known as the inserted primary type, and designated Model 313.

The cores of these models are rectangular in shape and are constructed of thin laminations of special iron alloy punched from solid sheet, so that there are no joints in the magnetic circuit.

Model 312

This type is made in three current capacities, each having three ranges. The primary winding is wound over the secondary, insulated from it, and consists of four sections of insulated copper strips wound side by side in independent spirals in planes perpendicular to the core. The sections can be connected in series, in series-multiple, or all in multiple to obtain the various ratios. To facilitate the changes in ratio, the terminals of the windings are connected to contact blocks forming a plug switch mounted on the insulated top.

Secondary, 5 amperes. Test, 10000 volts for one minute. Capacity, 25 volt-amperes. Frequency, 25 to 133 cycles.

Trade No.	Ratio	Price Each
131590	10– 20– 40 amperes to 5 amperes	$55.00
131591	25– 50–100 amperes to 5 amperes	55.00
131592	50–100–200 amperes to 5 amperes	55.00

Model 313

This type is designed for the measurement of currents in excess of 200 amperes. It consists of a core wound with the secondary winding only, enclosed in a wooden case provided with an opening through which the primary, made of a cable or busbar, may be passed by the user. This type of transformer is much more universally useful for higher range measurements than the self-contained type for the reason that the ratio may be changed at will to suit the conditions of measurement.

Secondary, 5 amperes. Test, 10000 volts for one minute. Capacity, 25 volt-amperes. Frequency, 25 to 133 cycles.

Trade No.	Ratio with One Turn	Size Opening Inches	Price Each
131593	1200 amperes to 5 amperes	2x3 7/16	$42.50
131594	1800 amperes to 5 amperes	2x3 7/16	45.00
131595	2400 amperes to 5 amperes	2x4 7/16	47.50

PORTABLE POTENTIAL TRANSFORMERS

Model 311

Made in three voltage capacities, each having a double-voltage range. The double-range feature is obtained by having the primary winding made in two similar sections, which can be connected in series or in multiple by means of links conveniently located on the insulating top of the transformer case.

Secondary, 110 volts. Capacity, 15 volt-amperes. Frequency, 25 to 133 cycles.

Trade No.	Ratio	Price Each
131596	2200–1100 volts to 110 volts	$50.00
131597	1100– 550 volts to 110 volts	47.50
131598	440– 220 volts to 110 volts	45.00

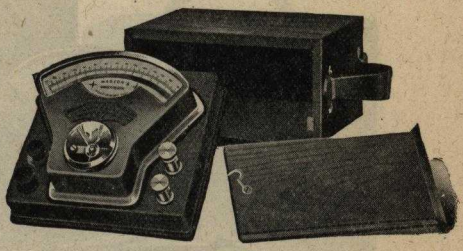
WESTON PORTABLE INSTRUMENTS

FOR DIRECT CURRENT

MODEL 1



Voltmeter



Volt-ammeter

VOLTMETERS

Single Scale, without Contact Key

Trade No.	Range in Volts	No. of Scale Divisions	Value of Each Scale Division in Volts	Readable to in Volts	Price Each
021203	0–150	150	1	1/10	$55.00

Single Scale, with Contact Key

021204	0–150	150	1	1/10	57.50
021205	0–300	150	2	1/5	65.00
021206	0–450	150	3	1/3	65.00
021207	0–600	150	5	1/2	65.00
021208	0–750	150	5	1/2	70.00

Double Scale, with Contact Key

021210	0–150	150	1	1/10	75.00
	0– 3	150	1/50	1/500	
021211	0–150	150	1	1/10	75.00
	0– 15	150	1/10	1/100	
021212	0–300	150	2	1/5	77.50
	0–150	150	1	1/10	
021213	0–600	150	4	1/2	80.00
	0–150	150	1	1/10	
021214	0–750	150	5	1/2	80.00
	0–150	150	1	1/10	
021215	0–600	150	4	1/2	80.00
	0–300	150	2	1/5	

AMMETERS

Single Scale

Trade No.	Range in Amperes	No. of Scale Divisions	Value of Each Scale Division in Amperes	Readable to in Amperes	Price Each
021216	5	100	1/20	1/200	$65.00
021217	15	150	1/10	1/100	65.00
021218	25	100	1/4	1/40	65.00
021219	50	100	1/2	1/20	65.00
021220	100	100	1	1/10	70.00
021221	150	150	1	1/10	75.00
021222	200	100	2	1/5	80.00
021223	250	125	2	1/5	80.00
021224	300	150	2	1/5	80.00
021225	400	80	5	1/2	90.00
021226	500	100	5	1/2	90.00

VOLT-AMMETERS

Trade No.	Range in Volts	Range in Amperes	No. of Scale Divisions	Value of Each Scale Division in Amperes	Readable to in Amperes	Price Each
021227	0–150	0–1.5	150	1/100	1/1000	$75.00
021228	0–150	0–3.0	150	1/50	1/500	75.00

LEATHER CARRYING CASES

For Model 1 Instruments

Trade No.		Price Each
021229	Price, when ordered, instead of wooden case	$3.50
021230	Price, when ordered, in addition to wooden case	4.00

WESTON PORTABLE INSTRUMENTS

FOR DIRECT CURRENT



Milli-Voltmeter

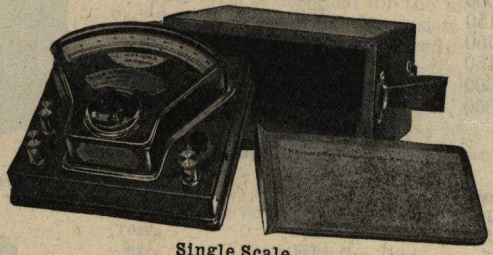
PORTABLE MILLI-VOLTMETERS

Model 1

Trade No.	Mfrs. No.		Price Each
063171	1	Range, 0 to 20 milli-volts, 100 divisions, each representing .2 of a milli-volt, readable to .02 of a milli-volt	$50.00
063172	2	Range, 10 to 0 to 10 milli-volts, zero center, 100 divisions, each representing .2 of a milli-volt, readable to .02 of a milli-volt.	50.00
063173	3	Double range, 10 to 0 to 10 and 100 to 0 to 100 milli-volts, zero center, 100 divisions, supplied with contact key, by the use of which either range may be employed	55.00
063174	4	Double range, 0 to 20 and 0 to 200 milli-volts, three binding posts, 100 divisions, each representing either .2 of a milli-volt or 2 milli-volts, according to range used	55.00

These instruments may be arranged for use with alloy shunts for ampere measurements at an additional cost of $5.00.

PORTABLE MIL-AMMETERS



Single Scale

Trade No.	Mfrs. No.	Range in Mil-Amperes	No. of Scale Divisions	Value of Each Scale Division in Mil-Amperes	Readable to in Mil-Ammeter	Price Each
063175	0	150	150	1	1/10	$50.00
063176	1	300	150	2	1/5	50.00
063177	2	600	150	4	2/5	50.00
063178	3	1000	100	10	1	50.00
063179	4	1500	150	10	1	55.00
			Double Scale			
063180	5	500 / 50	100	5 / 1/2	1/20	60.00
063181	6	500 / 10	100	5 / 1/10	1/100	60.00
063182	7	500 / 10	100	5 / 1/10	1/100	75.00

No. 7 has same range and capacity as No. 6, but is supplied with a small resistance box or multiplier, having two coils. When this is connected in series with the instrument binding posts marked 10, the lower scale may be read directly in volts, a full scale deflection being secured with 10 or 100 volts, according to the coil of the multiplier used.

WESTON PORTABLE INSTRUMENTS

FOR DIRECT CURRENT

MODEL 45



Voltmeter



Ammeter

The movement in the Model Type No. 45 instrument is completely enclosed in an iron case, which protects it from stray magnetic fields, securely fastened in a wooden carrying box. This box is provided with a hinged cover, which protects the scale and binding posts. Ammeters, having a maximum range of 25 amperes or less, are provided with self-contained shunts. Higher ranges are adjusted to external station type shunts.

VOLTMETERS

Trade No.	Ranges in Volts	Value of Each Scale Division in Volts	Price Each
625	0– 3	.02	$25.00
626	0– 5	.05	25.00
627	0– 15	.1	25.00
628	0–150	1	29.50
629	0–300	2	32.50
630	0–600	5	35.00
631	0–750	5	37.00

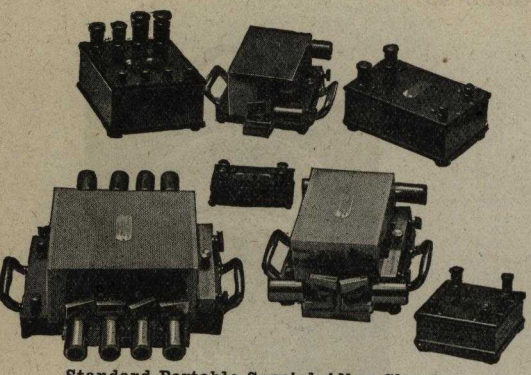
Double scale voltmeters can be furnished when desired. Add $5.00 to the above prices.

AMMETERS

Trade No.	Ranges in Amperes	Value of Each Scale Division in Amperes	Price Each
632	0– 5	.05	$25.00
633	0– 15	.1	25.00
634	0– 25	.2	25.00
635	0– 50	.5	25.50
637	0–100	1	26.50
638	0–150	1	27.00
639	0–200	2	28.00
640	0–250	2	28.25
641	0–300	2	28.25
642	0–400	5	28.50
643	0–500	5	29.50

WESTON PORTABLE INSTRUMENTS

FOR DIRECT CURRENT



Standard Portable Special Alloy Shunts

MILLIVOLTMETERS, MODEL 1

With Shunts for Ampere Measurements

These millivoltmeters, in connection with Weston Patent Alloy Shunts, read directly in amperes. Shunts of different sizes can be adjusted to the same instrument and it can, therefore, be used to measure a current of 2000 amperes with the same degree of accuracy as a current of 1 ampere. The combination of millivoltmeter and shunt is practically compensated for temperature and is correct within ⅕ of 1 per cent. If, at any time, the user of this combination desires to employ additional ranges to those for which the instrument is already adjusted, it is simply necessary to purchase additional shunts of the ranges required, thus saving the expense of an additional instrument. The scales of the instrument can be divided into 100, 120 or 150 divisions. In selecting shunts of different range for use in connection with one instrument, it should be considered that the higher ranges must be even multiples of the lower one in order to suit the same scale on the instrument.

These shunts can be supplied in two or more ranges combined in one case, as indicated in price list below.

MILLIVOLTMETERS

Trade No.		Price Each
085304	Standard portable millivoltmeters	$50.00

SHUNTS

With Single Range

Trade No.	Range in Amperes	Price Each	Trade No.	Range in Amperes	Price Each	Trade No.	Range in Amperes	Price Each
085305	1	$10.00	085313	75	$25.00	085321	600	$55.00
085306	3	12.50	085314	100	30.00	085322	750	60.00
085307	5	15.00	085315	150	32.50	085323	800	65.00
085308	10	15.00	085316	200	35.00	085324	1000	80.00
085309	15	15.00	085317	250	37.50	085325	1500	130.00
085310	25	17.50	085318	300	40.00	085326	2000	175.00
085311	30	20.00	085319	400	45.00	.....	....	.....
085312	50	22.50	085320	500	50.00	.....	....	.....

With Two Ranges Combined in One Case

085327	5 and 1	20.00	085335	100 and 10	40.00	085343	400 and 200	65.00
085328	10 and 1	22.50	085336	150 and 15	42.50	085344	500 and 50	62.50
085329	15 and 1.5	25.00	085337	150 and 30	45.00	085345	500 and 100	65.00
085330	15 and 3	25.00	085338	200 and 20	47.50	085346	500 and 200	65.00
085331	30 and 3	25.00	085339	300 and 15	52.50	085347	600 and 60	65.00
085332	40 and 4	27.50	085340	300 and 30	55.00	085348	600 and 300	80.00
085333	50 and 5	30.00	085341	300 and 150	60.00	085349	750 and 300	90.00
085334	75 and 15	35.00	085342	400 and 40	60.00	085350	1000 and 500	140.00

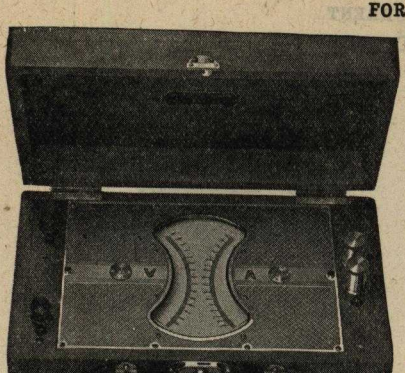
With Three or More Ranges Combined in One Case

085351	15–3–0.75	30.00	085359	75–15–1.5	42.50	085367	150–75–15–1.5	65.00
085352	15–3–1.5	30.00	085360	100–10–1	45.00	085368	150–75–15–1.5–0.75	70.00
085353	30–15–1.5	35.00	085361	100–20–2	45.00	085369	200–20–2	55.00
085354	30–15–3	35.00	085362	100–50–20–2	60.00	085370	200–100–10	60.00
085355	30–15–7.5–1.5	47.50	085363	100-50-20-10-5-1	70.00	085371	300–15–1.5	60.00
085356	50–5–0.5	40.00	085364	150–15–1.5	50.00	085372	300–30–3	60.00
085357	50–10–1	40.00	085365	150-15-1.5-.15	60.00	085373	300–75–15	65.00
085358	50-20-5-0.5	55.00	085366	150–75–15	55.00	.....	.....	.....

Above prices include adjustment between millivoltmeter and shunts.

WESTON INSTRUMENTS

FOR DIRECT CURRENT



MODEL 56 PORTABLE DUPLEX INSTRUMENTS

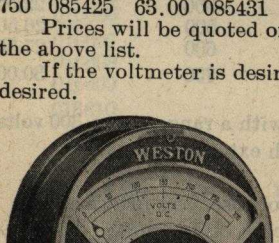
These duplex instruments consist of a voltmeter and an ammeter combined in one case. The case is of highly finished natural cherry. All connections are made by means of binding posts inside of the case. These posts are plainly marked, showing their polarity and to which side of the instrument they are connected. Regularly supplied with a single-range voltmeter and a single-range ammeter; they will be supplied, however, with either two voltmeter movements or two ammeter movements of like or different ranges, if so desired. The voltmeter side may be obtained with a double range at a slight increase in cost. The ammeter is furnished only in single ranges up to 100 amperes with a self-contained shunt, but if multiple or higher ranges are desired they can be obtained by the use of external shunts. Suitable for all ordinary testing in which a greater degree of accuracy than 1 per cent is not desired.

Range, Amperes	5 Amps.		15 Amps.		25 Amps.		50 Amps.		100 Amps.		150 Amps.	
Range Volts	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
75	085384	$45.00	085390	$45.00	085396	$45.00	085402	$45.00	085408	$45.00	085414	$45.00
150	085385	47.50	085391	47.50	085397	47.50	085403	47.50	085409	47.50	085415	47.50
300	085386	50.00	085392	50.00	085398	50.00	085404	50.00	085410	50.00	085416	50.00
450	085387	52.50	085393	52.50	085399	52.50	082405	52.50	085411	52.50	085417	52.50
600	085388	55.00	085394	55.00	085400	55.00	082406	55.00	085412	55.00	085418	55.00
750	085389	60.00	085395	60.00	085401	60.00	085407	60.00	085413	60.00	085419	60.00

	200 Amps.		250 Amps.		300 Amps.		400 Amps.		500 Amps.			
75	085420	48.00	085426	48.00	085432	48.25	085438	48.50	085444	49.00	.....	.....
150	085421	50.50	085427	50.50	085433	50.75	085439	51.00	085445	52.00	.....	.....
300	085422	53.00	085428	53.00	085434	53.25	085440	53.50	085446	54.50	.....	.....
450	085423	55.50	085429	55.50	085435	55.75	085441	56.00	085447	57.00	.....	.....
600	085424	58.00	085430	58.00	085436	58.25	085442	58.50	085448	59.50	.....	.....
750	085425	63.00	085431	63.00	085437	63.25	085443	63.50	085449	64.50	.....	.....

Prices will be quoted on application for ranges or combinations of ranges not included in the above list.

If the voltmeter is desired with a double range, add $3.00 to list price of highest range desired.



Model 251, Voltmeter



Model 251 Ammeter

MODEL 251 SWITCHBOARD INSTRUMENTS

For use on exciter panels and other direct current panels, which may form a part of an alternating current switchboard, a special form of permanent magnet moving coil instrument has been developed. These instruments are mounted in sheet metal cases having the same design and base and front dimensions as the Weston A. C. Wattmeters, etc. The scales are drawn to harmonize with those used on the A. C. soft iron voltmeters.

Voltmeters

Trade No.	Range Volts	Price Each	Trade No.	Range Volts	Price Each
085450	125	$28.25	085453	300	$32.50
085451	150	29.50	085454	600	35.00
085452	250	31.50	085455	750	37.00

Ammeters

Trade No.	Range Amperes	Price Each	Trade No.	Range Amperes	Price Each
085456	5	$25.00	085464	200	$28.00
085457	10	25.00	085465	250	28.25
085458	15	25.00	085466	300	28.25
085459	25	25.00	085467	400	28.50
085460	50	25.50	085468	500	29.50
085461	75	26.00	085469	600	30.50
085462	100	26.50	085470	750	31.50
085463	150	27.00	.....	...	.....

Dimensions

Diameter of case, 9⅝ inches; depth of case, 3⅞ inches; length of scale arc, 6⅝ inches.

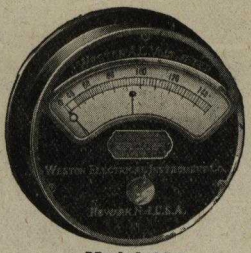
WESTON SWITCHBOARD INSTRUMENTS

FOR ALTERNATING CURRENT

MODELS 151 AND 156



Model 151



Model 156

The case of each ammeter is provided with a "ground terminal," which must, in order to ensure safety to the user, be connected to earth when the potential difference of circuits exceeds 200 volts. When properly erected, the ammeters are perfectly safe for use on circuits operating on a potential difference of 2300 volts, but must be used with transformers on circuits of higher potential difference.

Transformers must be used on all circuits carrying over 500 amperes, and we recommend a value of 5 amperes for the secondary, and will calibrate the instrument the value of the primary so that the instrument will be direct reading.

AMMETERS

Model 151

Trade No.	Range Amperes	Price Each
06850	1	$17.75
06851	2	17.50
06852	3	17.00
06853	5	17.00
06854	10	17.00
06855	15	17.00
06856	25	17.00
06857	50	17.50
06858	75	17.50
06859	100	17.50
06860	150	18.00
06861	200	18.50
06862	250	18.75
06863	300	19.00
06864	400	19.50
06865	500	20.00

AMMETERS

Model 156

06873	1	14.00
06874	2	13.75
06875	3	13.50
06876	5	13.50
06877	10	13.50
06878	15	13.50
06879	25	13.50
06880	50	13.75
06881	75	13.75
06882	100	13.75
06883	150	14.25
06884	200	14.75
06885	250	15.00
06886	300	15.50
06887	400	16.50
06888	500	17.50

VOLTMETERS

Model 151

Trade No.	Range Volts	Price Each
06866	75	$18.50
06867	125	18.50
06868	150	18.75
06869	300	22.50
06870	500	26.50
06871	600	27.50
06872	750	30.00

Voltmeters with a range above 300 volts are provided with external resistances.

Diameter of case, 9.56 inches.
Depth of case, 3.15 inches.
Length of scale arc, 6.5 inches.

VOLTMETERS

Model 156

06889	75	14.50
06890	125	14.50
06891	150	14.75
06892	300	18.50
06893	500	19.50
06894	600	21.00
06895	750	23.50

Voltmeters with a range above 150 volts are provided with external resistances.

Diameter of case, 7.25 inches.
Depth of case, 3.15 inches.
Length of scale arc, 5.25 inches.

WESTON ROUND PATTERN STATION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 24



Regular Type



Flush Type

Diameter of front, 6⅝ inches; diameter of flanged base, 7¼ inches; total depth, 4 inches; length of scale, 5 1/16 inches; weight, 9 pounds; weight packed, 15 pounds; packing case, 10x10x11 inches.

VOLTMETERS

Regular Type Trade No.	Flush Type Trade No.	Range in Volts	Value of Each Scale Division in Volts	Price Each
016598	016611	0– 3	.05	$15.50
016599	016612	0– 5	.1	15.50
016600	016613	0– 6	.1	15.75
016601	016614	0– 10	.2	16.00
016602	016615	0– 15	.2	16.00
016603	016616	0– 25	.5	16.00
016604	016617	0– 50	1.	16.00
016605	016618	0– 80	2.	16.00
016606	016619	0–130	2.	16.50
016607	016620	0–150	2.	17.00
016608	016621	0–250	5.	19.50
016609	016622	0–300	5.	20.50
016610	016623	0–600	10.	26.50

SELF-CONTAINED AMMETERS

Regular Type Trade No.	Flush Type Trade No.	Range in Amperes	Value of Each Scale Division in Amperes	Price Each
016624	016635	0– 1	.02	$15.00
016625	016636	0– 5	.1	15.00
016626	016637	0– 10	.2	15.00
016627	016638	0– 15	.2	15.50
016628	016639	0– 25	.5	15.50
016629	016640	0– 50	1.	15.75
016630	016641	0– 80	2.	15.75
016631	016642	0–100	2.	16.00
016632	016643	0–130	2.	16.50
016633	016644	0–150	2.	16.50
016634	016645	0–200	5.	17.00

If desired, the above ammeters will be furnished with external shunts instead of self-contained, as listed.

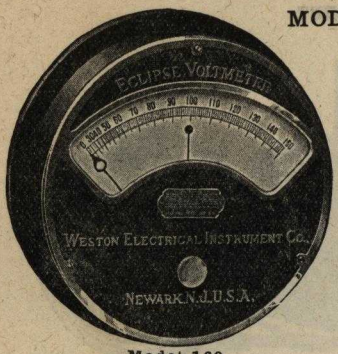
The above prices are for No. 11 dull black japan finish.

The prices given above are for standard ranges, the ammeters being self-contained in all ranges named, but both voltmeters and ammeters can be made to any range on order, and the ammeters can be had with either contained or detached shunts, up to 200 amperes, but higher ranges will be furnished with detached shunts. Prices for ranges other than those listed will be quoted upon application.

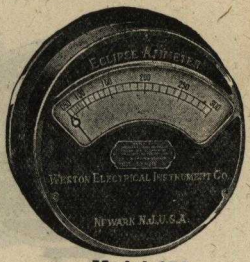
WESTON ECLIPSE SWITCHBOARD INSTRUMENTS

FOR DIRECT CURRENT

MODELS 160 AND 159



Model 160



Model 159

These instruments are intended for use as ammeters and voltmeters on direct current switchboards. They are of "soft iron" or "electro-magnetic type," but in their electrical and mechanical characteristics they are so far in advance of all preceding forms of soft-iron instruments, as to mark a new epoch in that type of instrument. They are so much better than most permanent magnet instruments, and they possess the advantage of being much lower in price.

In sensitiveness, or power to promptly respond to minute changes in potential difference, or to minute changes in current strength, they also closely approach the Weston permanent magnet instruments.

In their deadbeat qualities they also closely approach the Weston permanent magnet type of instrument.

AMMETERS

Model 160

Trade No.	Range Amperes	Price Each
06462	1	$15.50
06463	2	15.50
06464	3	15.25
06465	5	15.00
06466	10	15.00
06467	15	15.00
06468	25	15.00
06469	50	16.00
06470	75	16.00
06471	100	16.50
06472	150	16.50
06475	200	17.00
06476	250	17.50
06477	300	18.00
06478	400	18.50
06479	500	19.50

VOLTMETERS

Model 160

Trade No.	Range Volts	Price Each
06480	75	$16.00
06481	125	16.00
06482	150	16.00
06483	300	18.00
06484	500	20.50
06485	600	21.50
06486	750	22.50

Voltmeters with a range above 300 volts are provided with external resistances.

Diameter of case, 9.56 inches.
Depth of case, 3.15 inches.
Length scale arc, 6.50 inches.

AMMETERS

Model 159

06487	1	12.00
06488	2	12.00
06490	3	11.75
06491	5	11.50
06492	10	11.50
06493	15	11.50
06494	25	11.50
06495	50	12.50
06496	75	12.50
06497	100	13.00
06498	150	13.00
06499	200	13.50
06500	250	14.00
06505	300	14.50
06506	400	15.00
06508	500	16.00

VOLTMETERS

Model 159

06510	75	12.00
06511	125	12.00
06512	150	12.00
06513	300	14.50
06515	500	16.00
06848	600	17.00
06849	750	18.00

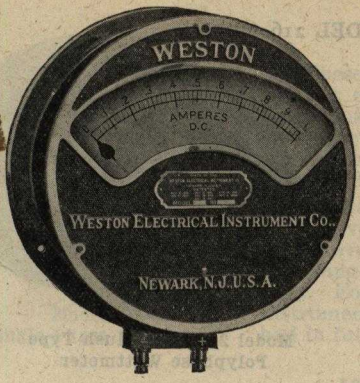
Voltmeters with a range above 150 volts are provided with external resistances.

Diameter of case, 7.25 inches.
Depth of case, 3.15 inches.
Length scale arc, 5.25 inches.

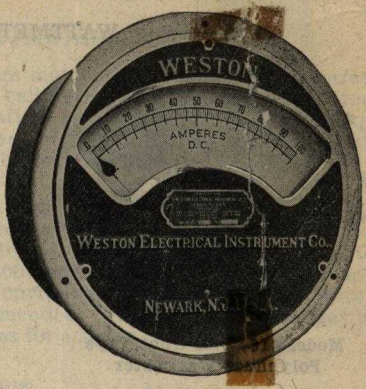
WESTON ROUND PATTERN STATION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 57



Regular Type



Flush Type

Diameter of front, 8 11/16 inches; diameter of flanged base, 9 9/16 inches; total depth, 4 3/8 inches; length of scale, 6 1/2 inches; weight, 15 pounds; weight packed 22 pounds; packing case, 8x10x14 inches.

Case is of cast iron, dustproof and neatly finished, affording effectual protection against external magnetic influences. Made in three patterns: Regular, back connection, and flush type. The scale is drawn on opaque paper, and hence cannot be illuminated from the rear.

VOLTMETERS

Regular Type Trade No.	Flush Type Trade No.	Range in Volts	Value of Each Scale Division in Volts	Price Each
016573	016585	3	.05	$25.00
016574	016586	6	.1	25.00
016575	016587	15	.2	25.00
016576	016588	25	.5	26.00
016577	016589	50	1.	26.50
016578	016590	75	1.	27.25
016579	016591	130	2.	28.25
016580	016592	150	2.	29.50
016581	016593	250	5.	31.50
016582	016594	300	5.	32.50
016583	016595	600	10.	35.00
016584	016596	750	10.	37.00

AMMETERS

Regular Type Trade No.	Flush Type Trade No.	Range in Amperes	Value of Each Scale Division in Amperes	Price Each
016531	016552	1	.02	$25.00
016532	016553	5	.1	25.00
016533	016554	10	.2	25.00
016534	016555	15	.2	25.00
016535	016556	25	.5	25.00
016536	016557	50	1.	25.50
016537	016558	75	1.	26.00
016538	016559	100	2.	26.50
016539	016560	150	2.	27.00
016540	016561	200	5.	28.00
016541	016562	250	5.	28.25
016542	016563	300	5.	28.25
016543	016564	400	10.	28.50
016544	016565	500	10.	29.50
016545	016566	600	10.	30.50
016546	016567	750	10.	31.50
016547	016568	1000	20.	32.50
016548	016569	1200	20.	33.50
016549	016570	1500	20.	39.25
016550	016571	2000	50.	43.75
016551	016572	2500	50.	45.25

The above prices are for No. 11 dull black japan finish.

No extra charge will be made for above instruments with back connection or flush type cases. Always specify the style desired, when ordering.

WESTON SWITCHBOARD INSTRUMENTS

FOR POLYPHASE CIRCUITS

WATTMETERS, MODEL 216



Model 216, Full-front Type
Polyphase Wattmeter



Model 216, Semi-flush Type
Polyphase Wattmeter

These wattmeters may be used with equal accuracy and without change of calibration, on direct current circuits or alternating current circuits of any frequency, power-factor or wave form, within the limits of usual commercial practice. The scale is uniform throughout the entire range of deflection.

These instruments have precisely the same characteristics as Model 167. All ranges are back-connected. Meters above 300 volts range have external resistance box. For ranges above 750 volts, both current and potential transformers are used, and for current ranges above 100 amperes current transformers must be used. For use with current transformers, the 5-ampere range instrument is recommended. They are regularly furnished with either one of two styles of case, namely: Full-front and semi-flush. The semi-flush type projects beyond the front of the board just sufficiently to bring the front of the instrument in the same plane with other Weston A.C. Switchboard Instruments. Full flush instruments may be had at slight extra cost.

Trade No.	Range Amperes	Scale Kilowatts	Price Each	Trade No.	Range Amperes	Scale Kilowatts	Price Each
			100 to 150 Volts				
085560	5	1	$70.00	085566	20	7.5	$70.00
085561	5	1.5	70.00	085567	50	10	70.00
085562	10	2	70.00	085568	50	15	70.00
085563	10	3	70.00	085569	100	20	75.00
085564	20	4	70.00	085570	100	30	75.00
085565	20	6	70.00	.....	...	..	.....
			200 to 300 Volts				
085571	5	2	75.00	085576	20	12	75.00
085572	5	3	75.00	085577	50	20	75.00
085573	10	4	75.00	085578	50	30	75.00
085574	10	6	75.00	085579	100	40	80.00
085575	20	8	75.00	085580	100	60	80.00
			400 to 600 Volts				
085581	5	4	80.00	085586	20	30	80.00
085582	5	6	80.00	085587	50	40	80.00
085583	10	8	80.00	085588	50	60	80.00
085584	10	12	80.00	085589	100	80	85.00
085585	20	20	80.00	085590	100	120	85.00
			600 to 750 Volts				
085591	5	5	85.00	085596	20	30	85.00
085592	5	7.5	85.00	085597	50	50	85.00
085593	10	10	85.00	085598	50	75	85.00
085594	10	15	85.00	085599	100	100	90.00
085595	20	20	85.00	085600	100	150	90.00

Dimensions

Kind of Instrument	Size, Case, Inches Diam.	Depth	Length of Scale Arc Inches
Full-front, three-phase, 5 to 20 amperes	$9\frac{11}{16}$	$6\frac{11}{32}$	$6\frac{5}{8}$
Full-front, three-phase, 50 to 100 amperes	$9\frac{43}{64}$	$6\frac{11}{32}$	$6\frac{5}{8}$
Full-front, two-phase, 5 to 20 amperes	$9\frac{11}{16}$	$6\frac{11}{32}$	$6\frac{5}{8}$

WESTON SWITCHBOARD INSTRUMENTS

FOR DIRECT CURRENT AND SINGLE-PHASE CIRCUITS

WATTMETERS, MODEL 167



Model 167
Single-Phase Wattmeter

These wattmeters may be used with equal accuracy and without change of calibration, on direct current circuits or single-phase alternating current circuits of any frequency, power-factor or wave form, within the limits of usual commercial practice. The scale is uniform throughout the entire range of deflection.

All ranges are back-connected. Meters above 300 volts range have external resistance box. For ranges above 750 volts, both current and potential transformers are used, and for current ranges above 100 amperes current transformers must be used. For use with current transformers, the 5-ampere range instrument is recommended. These instruments may also be had in full flush cases for a slight extra charge.

100 to 150 Volts

Trade No.	Range Amperes	Scale	Price Each	Trade No.	Range Amperes	Scale	Price Each
085491	1	150 watts	$50.00	085497	20	2 kw.	$50.00
085492	2	300 watts	50.00	085498	20	3 kw.	50.00
085493	5	500 watts	50.00	085499	50	5 kw.	50.00
085494	5	750 watts	50.00	085500	50	7.5 kw.	50.00
085495	10	1 kw.	50.00	085501	100	10 kw.	56.00
085496	10	1.5 kw.	50.00	085502	100	10 kw.	56.00

200 to 300 Volts

085503	1	300 watts	56.00	085510	20	6 kw.	56.00
085504	2	600 watts	56.00	085511	20	7.5 kw.	56.00
085505	5	1 kw.	56.00	085512	50	10 kw.	56.00
085506	5	1.5 kw.	56.00	085513	50	15 kw.	56.00
085507	10	2 kw.	56.00	085514	100	20 kw.	61.00
085508	10	3 kw.	56.00	085515	100	30 kw.	61.00
085509	20	4 kw.	56.00	.....	...	.....	.....

400 to 600 Volts

085516	1	600 watts	61.00	085522	20	8 kw.	61.00
085517	2	1.2 kw.	61.00	085523	20	12 kw.	61.00
085518	5	2 kw.	61.00	085524	50	20 kw.	61.00
085519	5	3 kw.	61.00	085525	50	30 kw.	61.00
085520	10	4 kw.	61.00	085526	100	40 kw.	67.00
085521	10	6 kw.	61.00	085527	100	60 kw.	67.00

600 to 750 Volts

085528	1	750 watts	67.00	085534	20	10 kw.	67.00
085529	2	1.5 kw.	67.00	085535	20	15 kw.	67.00
085530	5	2.5 kw.	67.00	085536	50	25 kw.	67.00
085531	5	4 kw.	67.00	085537	50	40 kw.	67.00
085532	10	5 kw.	67.00	085538	100	50 kw.	75.00
085533	10	7.5 kw.	67.00	085539	100	75 kw.	75.00

Dimensions

Diameter of case, 9⅝ inches; depth of case, 3⅞ inches; length of scale arc, 6⅝ inches.

WESTON SWITCHBOARD INSTRUMENTS

FOR ALTERNATING CURRENT



Model 226
Synchroscope

SYNCHROSCOPES, MODEL 226

100 to 125 Volts

Consist of a phase angle indicator mounted with its pointer behind a ground glass, and illuminated by a small synchronizing lamp installed behind the pointer and connected to synchronize light. A difference in frequency between two machines causes the pointer to swing back and forth, but owing to the fact that the lamp is lighted only half the time the pointer is seen only during every other swing, and thus appears to rotate continuously in one direction. When the machines have the same frequency but are out of phase, the pointer comes to rest at one side or the other of the middle of the scale. Perfect synchronism is indicated by the pointer remaining at rest in the middle of the scale with the lamp lighted. The indications are absolutely infallible.

Every synchroscope includes a lamp transformer, a condenser and a resistor mounted in a separate box. When used for other voltages than 100 to 125, potential transformers must be used. Can be calibrated for any frequency.

Trade No.	Cycles	Price Each	Trade No.	Cycles	Price Each
084946	25	$62.50	084948	50	$62.50
084947	40	62.50	084949	60	62.50

Dimensions

Diameter of case, 9⅝ inches; depth of case, 3⅞ inches; length of scale arc, 6⅝ inches.



Model 215
Power-Factor Meter

POWER-FACTOR METERS, MODEL 215

These instruments indicate, from 2/10 load to full load, the true phase angle to within 1 per cent, independent of any variable conditions found on ordinary commercial circuits. Polyphase meters may be used on any commercial frequency. Single-phase meters require a phase-splitting device, and therefore must be calibrated for the frequency at which they are to operate. Designed for all standard frequencies: 15, 25, 40, 50, 60, 125, and 133 cycles per second.

Polyphase meters are arranged for the following systems: two-phase, three-wire; two-phase, four-wire; and three-phase, three-wire. Meters above 150-volt range are equipped with external resistance box. All meters have the same kind of scale, reading from 0.50 lag to 0.50 lead. Special scales for power-factors as low as 0.30 may be had at slight extra cost. May also be arranged as sine or cosine meters

Polyphase

Range Amperes	Scale	100–150 V. Trade No.	100–150 V. Price Each	200–300 V. Trade No.	200–300 V. Price Each	400–600 V. Trade No.	400–600 V. Price Each	600–750 V. Trade No.	600–750 V. Price Each
5	50–1–50	084950	$55.00	084955	$60.00	084960	$70.00	084965	$75.00
10	50–1–50	084951	55.00	084956	60.00	084961	70.00	084966	75.00
20	50–1–50	084952	60.00	084957	65.00	084962	75.00	084967	80.00
50	50–1–50	084953	60.00	084958	65.00	084963	75.00	084968	80.00
100	50–1–50	084954	65.00	084959	70.00	084964	80.00	084969	85.00

Price of single-phase meters, including auxiliary device for splitting the phase, is $10.00 more than the corresponding range polyphase meter listed above. When ordering single-phase meters, always specify the frequency.

Dimensions

Diameter of case, 9⅝ inches; depth of case, 3⅞ inches; length of scale arc, 6⅝ inches.



Model 214
Frequency Meter

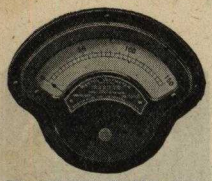
FREQUENCY METERS, MODEL 214

The indications are independent of changes of temperature, voltage and wave form, such as may be encountered in the commercial circuits of to-day. All meters are made for one voltage, 100 to 125 volts, and for voltage ranges outside of this, potential transformers must be used. Every frequency meter is provided with an external box, which contains reactors and resistors.

Trade No.	Cycles	Price Each	Trade No.	Cycles	Price Each
084970	20	$60.00	084973	60	$60.00
084971	25	60.00	084974	125	60.00
084972	40	60.00	084975	133	60.00

WESTON MINIATURE PRECISION INSTRUMENTS

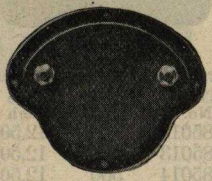
FOR DIRECT CURRENT



Model 267 Voltmeter
Front View

MODEL 267 SWITCHBOARD VOLTMETERS, AMMETERS AND MIL-AMMETERS

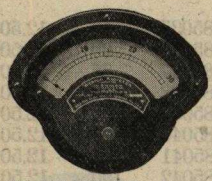
This group of instruments consists of a variety of ranges of small switchboard ammeters and voltmeters, suitable for use in small isolated lighting plants, small power plants, signal systems, battery charging panels, and for all kinds of service where small switchboard indicating instruments are needed.



Model 267 Voltmeter
Rear View

Voltmeters

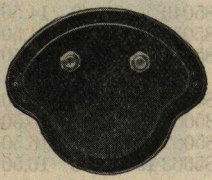
Trade No.	Range	Price Each	Trade No.	Range	Price Each	Trade No.	Range	Price Each
084867	1	$10.50	084876	7.5	$10.50	084885	50	$10.50
084868	1.2	10.50	084877	8	10.50	084886	60	10.50
084869	1.5	10.50	084878	10	10.50	084887	75	10.50
084870	2	10.50	084879	12	10.50	084888	80	10.50
084871	2.5	10.50	084880	15	10.50	084889	100	10.50
084872	3	10.50	084881	20	10.50	084890	120	10.50
084873	4	10.50	084882	25	10.50	084891	130	10.50
084874	5	10.50	084883	30	10.50	084892	150	10.50
084875	6	10.50	084884	40	10.50	....	....	....



Model 267 Ammeter
Front View

Ammeters

084893	1	10.50	084899	4	10.50	084905	12	10.50
084894	1.2	10.50	084900	5	10.50	084906	15	10.50
084895	1.5	10.50	084901	6	10.50	084907	20	10.50
084896	2	10.50	084902	7.5	10.50	084908	25	10.50
084897	2.5	10.50	084903	8	10.50	084909	30	10.50
084898	3	10.50	084904	10	10.50	....	....	....



Model 267 Ammeter
Rear View

Ammeters with External Shunts

For high ampere readings, Model 267 will be furnished as a millivoltmeter adjusted to external shunts. Information and prices relative to such instruments will be supplied upon application.

Dimensions

Vertical, 3.35 inches; horizontal, 4.1 inches; depth, 1.1 inches.

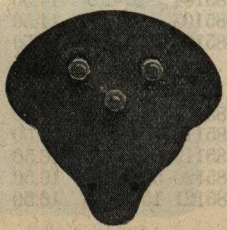


Model 268
Front View

MODEL 268 SWITCHBOARD VOLTAMMETERS

Adapted for use in electrolytic work, charging and discharging small storage batteries, and for service in connection with direct current ignition systems for gas and gasoline engines, and in all classes of work in which a single instrument is necessary for indicating either potential difference or current.

Trade No.	Range Volts	Range Amperes	Price Each	Trade No.	Range Volts	Range Amperes	Price Each
084910	10–0–15	10–0–15	$16.00	084918	5–0–15	10–0–30	$16.00
084911	10–0–15	2–0– 3	16.00	084919	5–0–10	5–0–10	16.00
084912	10–0–15	20–0–30	16.00	084920	10–0–20	2–0– 4	16.00
084913	7.5–0–15	7.5–0–15	16.00	084921	5–0–10	1–0– 2	16.00
084914	7.5–0–15	15–0–30	16.00	084922	5–0–10	10–0–20	16.00
084915	7.5–0–15	1.5–0– 3	16.00	084923	10–0–20	5–0–10	16.00
084916	1.5–0– 3	7.5–0–15	16.00	084924	10–0–20	1–0– 2	16.00
084917	5–0–15	1–0– 3	16.00	084925	10–0–20	10–0–20	16.00



Model 268
Rear View

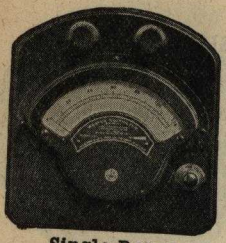
Dimensions

Vertical, 4.25 inches; horizontal, 4.2 inches; depth, 1.35 inches.

WESTON MINIATURE PRECISION INSTRUMENTS

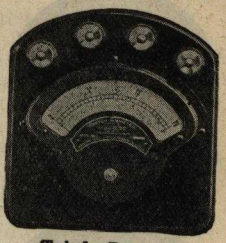
FOR DIRECT CURRENT

MODEL 280—PORTABLE INSTRUMENTS

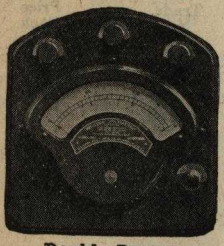


Single Range Voltmeter

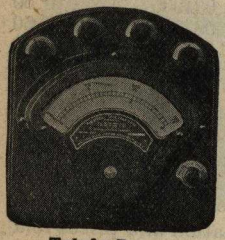
These instruments are all the same size and can be carried in an ordinary coat pocket. They are made in a great variety of ranges and are admirably adapted to all kinds of commercial and experimental testing that falls within their limits of e. m. f. and current.



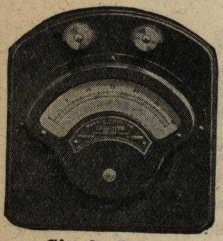
Triple Range Ammeter



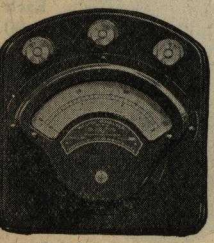
Double Range Voltmeter



Triple Range Voltmeter



Single Range Ammeter



Double Range Ammeter

Single Range Milli-Voltmeters

Trade No.	Range	Price Each	Trade No.	Range	Price Each	Trade No.	Range	Price Each
085002	50	$12.50	085007	120	$12.50	085012	300	$12.50
085003	60	12.50	085008	130	12.50	085013	400	12.50
085004	75	12.50	085009	150	12.50	085014	500	12.50
085005	80	12.50	085010	200	12.50	085015	600	12.50
085006	100	12.50	085011	250	12.50	085016	750	12.50

Single Range Voltmeters

085017	1	12.50	085026	7.5	12.50	085035	50	12.50
085018	1.2	12.50	085027	8	12.50	085036	60	12.50
085019	1.5	12.50	085028	10	12.50	085037	75	12.50
085020	2	12.50	085029	12	12.50	085038	80	12.50
085021	2.5	12.50	085030	15	12.50	085039	100	12.50
085022	3	12.50	085031	20	12.50	085040	120	12.50
085023	4	12.50	085032	25	12.50	085041	130	12.50
085024	5	12.50	085033	30	12.50	085042	150	12.50
085025	6	12.50	085034	40	12.50	.....	...	.....

Double Range Voltmeters

085043	20–2	14.50	085046	30–3	14.50	085049	80– 8	14.50
085044	20–8	14.50	085047	50–2.5	14.50	085050	100–10	14.50
085045	25–2.5	14.50	085048	50–5	14.50	085051	150–15	14.50

Triple Range Voltmeters

085052	25–10–2.5	16.50	085056	40–20– 4	16.50	085060	80–20–4	16.50
085053	30– 3–1.5	16.50	085057	50– 5– 2.5	16.50	085061	100–25–2.5	16.50
085054	30– 6–3	16.50	085058	50–25– 5	16.50	085062	150–15–1.5	16.50
085055	30–15–3	16.50	085059	50–25–10	16.50	085063	150–15–3	16.50

Single Range Mil-Ammeters

085064	50	12.50	085069	120	12.50	085074	300	12.50
085065	60	12.50	085070	130	12.50	085075	400	12.50
085066	75	12.50	085071	150	12.50	085076	500	12.50
085067	80	12.50	085072	200	12.50	085077	600	12.50
085068	100	12.50	085073	250	12.50	085078	750	12.50

Single Range Ammeters

085079	1	12.50	085085	4	12.50	085091	12	12.50
085080	1.2	12.50	085086	5	12.50	085092	15	12.50
085081	1.5	12.50	085087	6	12.50	085093	20	12.50
085082	2	12.50	085088	7.5	12.50	085094	25	12.50
085083	2.5	12.50	085089	8	12.50	085095	30	12.50
085084	3	12.50	085090	10	12.50	.....	..	12.50

Double Range Ammeters

085096	1–0.1	14.50	085100	8–2	14.50	085104	25–2.5	14.50
085097	2.5–0.25	14.50	085101	10–1	14.50	085105	25–5	14.50
085098	5–0.1	14.50	085102	15–1.5	14.50	085106	30–3	14.50
085099	5–0.5	14.50	085103	20–2	14.50	.....	....	.....

Triple Range Ammeters

085107	5–2.5–0.25	16.50	085113	20–4–2	16.50	085122	25–10–5	16.50
085108	10–1–0.1	16.50	085114	20–8–2	16.50	085118	30– 3–1.5	16.50
085110	10–1–0.5	16.50	085115	25–2.5–0.5	16.50	085119	30– 6–3	16.50
085111	10–2.5–1	16.50	085116	25–5–2.5	16.50	085120	30–15–3	16.50
085112	15–3–0.150	16.50	085117	25–10–2.5	16.50	085121	15–3–1.5	16.50

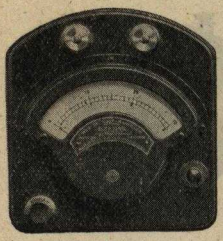
Dimensions

Vertical, 4.6 inches; horizontal, 4.4 inches; depth, 1.5 inches.

WESTON MINIATURE PRECISION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 280 —PORTABLE VOLT-AMMETERS

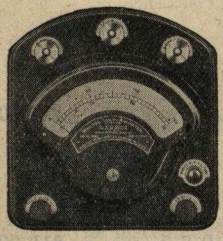


Single Range

These instruments possess the same characteristics and advantages as the switchboard instruments. They should be of great value in many kinds of commercial testing where the simultaneous reading of current and e. m. f. is not necessary.

Single Range

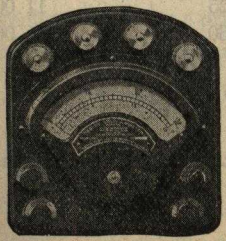
Trade No.	Range Volts	Range Amperes	Price Each	Trade No.	Range Volts	Range Amperes	Price Each
085142	1.5	3	$19.00	085173	20	4	$19.00
085143	3	1.5	19.00	085174	20	20	19.00
085144	3	3	19.00	085175	25	1	19.00
085145	3	12	19.00	085176	25	5	19.00
085146	3	15	19.00	085177	25	25	19.00
085147	3	30	19.00	085178	30	1.5	19.00
085148	4	8	19.00	085179	30	3	19.00
085149	5	1	19.00	085180	30	6	19.00
085150	5	5	19.00	085181	30	30	19.00
085151	5	10	19.00	085182	40	2	19.00
085152	6	6	19.00	085183	40	8	19.00
085153	6	12	19.00	085184	40	20	19.00
085154	6	30	19.00	085185	50	1	19.00
085155	7.5	1.5	19.00	085186	50	5	19.00
085156	7.5	7.5	19.00	085187	50	10	19.00
085157	7.5	15	19.00	085188	50	25	19.00
085158	8	2	19.00	085189	60	3	19.00
085159	8	4	19.00	085190	60	15	19.00
085160	8	8	19.00	085191	60	30	19.00
085161	8	20	19.00	085192	75	15	19.00
085162	10	1	19.00	085193	80	20	19.00
085163	10	5	19.00	085194	100	1	19.00
085164	10	10	19.00	085195	100	10	19.00
085165	10	25	19.00	085196	100	25	19.00
085166	12	30	19.00	085197	120	3	19.00
085167	15	1.5	19.00	085198	120	12	19.00
085168	15	3	19.00	085199	120	30	19.00
085169	15	7.5	19.00	085200	150	1.5	19.00
085170	15	15	19.00	085201	150	3	19.00
085171	15	30	19.00	085202	150	15	19.00
085172	20	2	19.00	085203	150	30	19.00



Double Range

Double Range

085204	20–2	8–2	23.00	085213	50– 5	5–0.1	23.00
085205	20–8	20–2	23.00	085214	50– 5	10–1	23.00
085206	25–2.5	2.5–0.25	23.00	085215	50– 5	25–2.5	23.00
085207	25–2.5	5–0.5	23.00	085216	50– 5	25–5	23.00
085208	25–2.5	25–2.5	23.00	085217	80– 8	20–2	23.00
085209	30–3	15–1.5	23.00	085218	100–10	25–2.5	23.00
085210	30–3	30–3	23.00	085219	150–15	15–1.5	23.00
085211	50–2.5	5–0.5	23.00	085220	150–15	30–3	23.00
085212	50–5	1–0.1	23.00	.....	.....	....	....



Triple Range

Triple Range

085221	25–10–2.5	10–2.5–1	27.00	085231	50–25– 2.5	25–2.5–0.5	27.00
085222	30– 3–1.5	30–3–1.5	27.00	085232	50–25– 5	25–5–2.5	27.00
085223	30– 6–3	30–6–3	27.00	085233	50–25–10	10–1–0.5	27.00
085224	30–15–3	15–3–0.150	27.00	085234	50–25–10	10–2.5–1	27.00
085225	30–15–3	30–15–3	27.00	085235	50–25–10	25–10–5	27.00
085226	40–20–4	20–4–2	27.00	085236	80–20– 4	20– 8–2	27.00
085227	50– 5–2.5	5–2.5–0.25	27.00	085237	100–25– 2.5	25–10–2.5	27.00
085228	50– 5–2.5	10–1–0.1	27.00	085238	150–15– 1.5	30– 3–1.5	27.00
085229	50– 5–2.5	25–5–2.5	27.00	085239	150–15– 3	15– 3–1.5	27.00
085230	50–25–2.5	10–5–0.5	27.00	085240	150–15– 3	30– 3–1.5	27.00

Dimensions

Vertical, 4.6 inches; horizontal, 4.4 inches; depth, 1.5 inches.

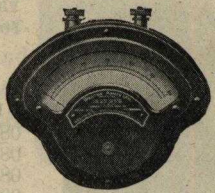
WESTON MINIATURE PRECISION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 279, PORTABLE BATTERY TESTERS



Voltmeter



Ammeter

These instruments consist of a battery testing voltmeter and a variety of ranges of ammeters. They are designed to facilitate the accurate and rapid testing of single cells of storage and other batteries. The voltmeter is provided with a special detachable spike terminal, designed to minimize the time required to make a test. In form it resembles somewhat a speed indicator, and is extremely convenient to manipulate and to read.

The ammeter also has conveniently arranged binding posts, but otherwise it resembles in general appearance the switchboard instruments. The form of the case of both the voltmeter and the ammeter is convenient to hold in the hand, thus adding much to the general usefulness of the instruments.

VOLTMETERS

Trade No.	Range Volts	Price Each
085261	3–0–3	$11.00

ZERO CENTER AMMETERS

Trade No.	Range Amperes	Price Each	Trade No.	Range Amperes	Price Each
085262	1–0–1	$11.00	085267	7.5–0–7.5	$11.00
085263	1.5–0–1.5	11.00	085268	10–0–10	11.00
085264	2–0–2	11.00	085269	15–0–15	11.00
085265	3–0–3	11.00	085270	20–0–20	11.00
085266	5–0–5	11.00	085271	30–0–30	11.00

ZERO LEFT AMMETERS

085272	1	11.00	085278	7.5	11.00
085273	1.5	11.00	085279	10	11.00
085274	2	11.00	085280	15	11.00
085275	3	11.00	085281	20	11.00
085276	4	11.00	085282	25	11.00
085277	5	11.00	085283	30	11.00

DIMENSIONS

Voltmeters

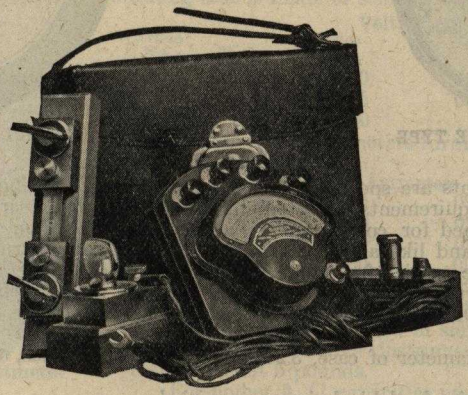
Vertical, case only, 3.5 inches, with terminal, 4.9 inches; horizontal, 4.2 inches; depth, 1.35 inches.

Ammeters

Vertical, 3.7 inches; horizontal, 4.2 inches; depth, 1.4 inches.

WESTON GARAGE TESTING INSTRUMENTS

MODEL 280



The Weston Model 280 Garage Testing Instrument has six ranges as follows: 30 volts, 3 volts and .1 volt (100 millivolts), 300 amperes, 30 amperes and 3 amperes.

The variety of tests that can be made with this combination of ranges is enormous. In reality the instrument is the equivalent of six separate electrical measuring instruments of different ranges and it provides a means of making any tests that are necessary on electric starting and lighting systems.

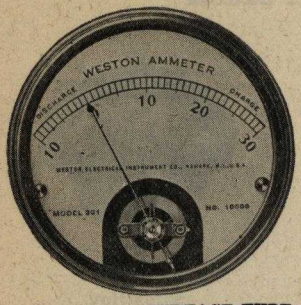
Ordinarily, six instruments of this size would cost in the neighborhood of $80.00, so that the remarkably low price named on this Model 280 garage testing instrument will be readily appreciated, and especially will its low cost be realized when it is borne in mind that Model 280 is an instrument of the highest grade procurable in its size. It is a standard Weston product, fully guaranteed by the maker and it may be depended upon for accuracy, serviceability and durability that has never been acquired except by other Weston models, and then only in instruments of much higher price. In short, it is a thoroughly reliable instrument of precision, offered in a convenient size and at a price that enables a garage proprietor to obtain a full and permanent electrical testing equipment at an insignificant cost.

A small booklet which describes the Model 280 thoroughly will be sent upon request.

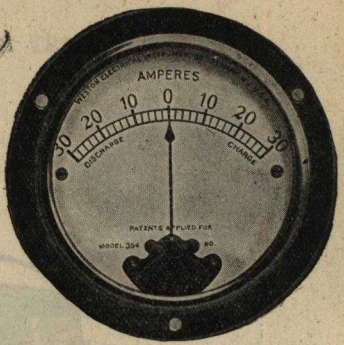
Trade No.	Description	Price Each
109586	Complete as above, without leather carrying case	$22.50
109587	Complete as above, with leather carrying case to contain instrument and shunts	25.25

WESTON AUTOMOBILE INSTRUMENTS

MODELS 301 AND 354



MODEL 301—SURFACE TYPE



MODEL 354—FLUSH TYPE

MODEL 301

These instruments are specially built for the cowl or dashboard with a full knowledge of the exacting requirements of automobile and motor boat service.

They are designed for continuous reliability, operate upon the permanent magnet movable coil principal, and like all other Weston models, are constructed with the most conscientious regard for the service for which they are intended.

Model 301 instruments are made in two styles of cases, surface type and flush type.

Surface type: Diameter of case, 2.75 inches. Depth of case, 1.234 inches. Length of scale 2.35 inches.

Flush type: Diameter of case, 3.25 inches. Depth of case, 1.171 inches. Length of scale, 2.35 inches.

Finished either in dead black japan or nickel.

AMMETERS—ZERO LEFT

Surface Type Trade No.	Flush Type Trade No.	Range	Price Each	Surface Type Trade No.	Flush Type Trade No.	Range	Price Each
115846	115867	0–1	$6.00	115888	115907	0–8	$6.00
115847	115868	0–1.5	6.00	115889	115908	0–10	6.00
115848	115869	0–2	6.00	115890	115909	0–12	6.00
115849	115870	0–2.5	6.00	115891	115910	0–15	6.00
115850	115871	0–3	6.00	115892	115911	0–20	6.00
115851	115872	0–4	6.00	115893	115912	0–25	6.00
115852	115873	0–5	6.00	115894	115913	0–30	6.00

AMMETERS—ZERO CENTER

115853	115874	1–0–1	6.00	115895	115914	10–0–10	6.00
115854	115875	1.5–0–1.5	6.00	115934	115935	10–0–30	6.00
115855	115876	2–0–2	6.00	115896	115915	15–0–15	6.00
115856	115877	3–0–3	6.00	115897	115916	20–0–20	6.00
115857	115878	5–0–5	6.00	115898	115917	30–0–30	6.00

VOLTMETERS—ZERO LEFT

115858	115879	0–1	6.00	115899	115918	0–10	6.00
115859	115880	0–1.5	6.00	115900	115919	0–12	6.00
115860	115881	0–2	6.00	115901	115920	0–15	6.00
115861	115882	0–2.5	6.00	115902	115921	0–20	6.00
115862	115883	0–3	6.00	115903	115922	0–25	6.00
115863	115884	0–4	6.00	115904	115923	0–30	6.00
115864	115885	0–5	6.00	115905	115924	0–40	6.00
115865	115886	0–8	6.00	115906	115925	0–50	6.00

VOLTMETERS—ZERO CENTER

115866	115887	3–0–3	6.00	.....	.....	....	....

MODEL 354

Designed expressly for use on the dashboard of automobiles, motor boats or motorcycles equipped with electric starting and lighting devices. The mechanical workmanship is of the highest grade and the electrical characteristics are such that the instrument may be depended upon to give perfect satisfaction and reliable indications under the extremely severe conditions of automobile service. Made in flush type, diameter over flange $2\frac{35}{64}$ inches, and in surface type, diameter, $2\frac{13}{64}$ inches.

115926	115928	10–0–10	4.25	115930	115932	20–0–20	4.25
115927	115929	15–0–15	4.25	115931	115933	30–0–30	4.25

ROLLER-SMITH PORTABLE INSTRUMENTS

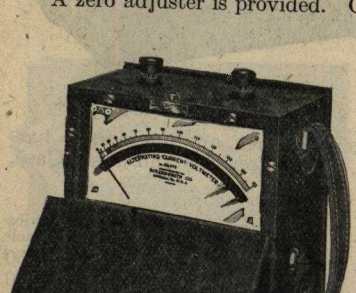
FOR ALTERNATING (AND DIRECT) CURRENT

GENERAL SERVICE TYPE

These instruments are recommended where a high-grade instrument at a moderate price is desired and are especially built for Central Station use and similar conditions where good accuracy and ability to withstand considerable handling are essential.

The accuracy of these instruments is excellent and the indications are dead beat. Since these instruments are of a new improved electro magnet type, they operate on direct or alternating current; however, unless otherwise ordered, calibration is for alternating current. They may be calibrated for D. C. also in addition to A. C. at $2.50 net additional, although there is little difference between the A. C. and D. C. calibrations.

A zero adjuster is provided. Containing case is made of selected oak, highly finished.



General Service Type Voltmeter

Voltmeters

Trade No.	Range	Price Each	Trade No.	Range	Price Each
098471	75	$18.50	098474	500	$26.50
098472	150	18.75	098475	600	27.50
098473	300	22.50	.....	....	.....

Double range voltmeters furnished at $5.00 additional to list prices above.

Ammeters

098476	1	17.75	098482	75	17.50
098477	5	17.00	098483	100	17.50
098478	10	17.00	098484	150	18.00
098479	15	17.00	098485	200	18.50
098480	25	17.00	098486	250	18.75
098481	50	17.50	098487	300	19.00

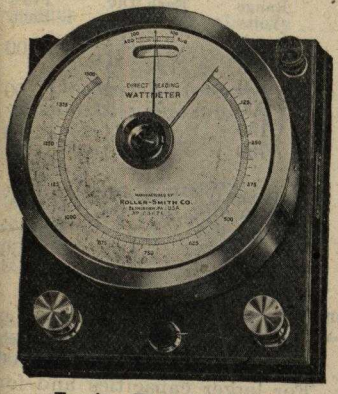
Ammeters are furnished in single range only.

Size of the above instruments is 7x7x4¼ inches. Weight, about 5 pounds.

For higher A. C. capacities use transformers with 150-volt and 5 amp. instruments.

PORTABLE WATTMETERS, TORSION TYPE

These instruments are of the torsion dynamometer type, eliminating error from varying power factors. Scales are 10 inches long with 300 divisions. These instruments are dead beat and have zero adjuster and hardwood carrying case.



Torsion Type Wattmeter

SINGLE CURRENT

For Circuits of 150 Volts Maximum

Trade No.	Max. Amps.	Range Watts	Price Each	Trade No.	Max. Amps.	Range Watts	Price Each
098431	1	150	$65.00	086921	80	12000	$80.00
098432	2	300	65.00	086922	100	15000	80.00
098433	10	1500	70.00	086923	200	30000	90.00
086919	20	3000	70.00	086924	400	60000	100.00
086920	40	6000	75.00	.....	....	.....	.....

DOUBLE CURRENT

For Circuits of 150 Volts Maximum

098434	1	150	75.00	086927	40	6000	95.00
	2	300			80	12000	
098435	2	300	75.00	086928	50	7500	95.00
	4	600			100	15000	
098436	5	750	82.50	086929	100	15000	110.00
	10	1500			200	30000	
086925	10	1500	82.50	086930	200	30000	120.00
	20	3000			400	60000	
086926	20	3000	87.50	.....	....	.....	.....
	40	6000					

Size of above instruments is 7¾x6¾x5 inches. Weight, about 6 pounds.

For 300 volts maximum potential, scale values and ranges in watts thus doubled, add to price of corresponding 150-volt wattmeter, $5.00; for 600 volts maximum, quadrupling range, add similarly $15.00.

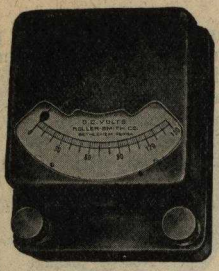
For a 300-volt potential coil in addition to the 150-volt one, add to list price $10.00; for a 600-volt coil, add similarly $20.00.

POLYPHASE WATTMETERS

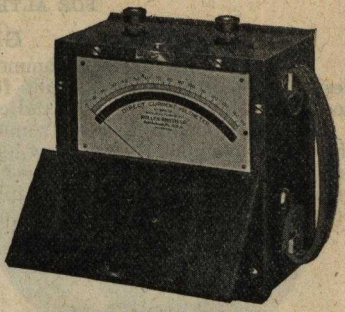
Polyphase wattmeters consist virtually of two single-phase meters mechanically superimposed and having the two movable coils secured to a common through staff. They give accurate readings on two and three-phase circuits whether or not the load is balanced and are equally useful on single-phase and on three-wire circuits. Being virtually two single-phase instruments the price of any capacity is double that of a single-phase instrument of like capacity.

ROLLER-SMITH PORTABLE INSTRUMENTS

FOR DIRECT CURRENT



Handy Type



General Service Type

HANDY TYPE

Designed particularly for the use of wiremen and maintenance men, and for storage battery testing. Accurate and strong. Jewels are mounted on springs to withstand jars. Case, black enameled.

Voltmeters

Trade No.	Range Volts	Each Div. Volts	Price Each	Trade No.	Range Volts	Each Div. Volts	Price Each
098529	1.5	.02	$17.50	098533	150	2	$18.50
098530	3	.05	17.50	098534	300	5	22.00
098531	15	.2	17.50	098535	3 and 75	.04 and 1	21.50
098532	75	1	18.00	098536	3 and 150	.04 and 2	22.00

Ammeters

Trade No.	Range Amperes	Each Div. Amperes	Price Each	Trade No.	Range Amperes	Each Div. Amperes	Price Each
098537	1	.02	$17.50	098540	25	.5	$17.50
098538	5	.1	17.50	098541	50	1	18.00
098539	10	.2	17.50	098542	75	1	19.00

Leather case, for voltmeter or ammeter, $1.75 each, list.

GENERAL SERVICE TYPE

Voltmeters

Trade No.	Range Volts	Each Div. Volts	Price Each	Trade No.	Range Volts	Each Div. Volts	Price Each
098543	3	.02	$29.00	098548	3	.02	$38.00
098544	15	.1	29.00		150	1	
098545	150	1	33.00	098549	150	1	41.00
098546	300	2	36.00		300	2	
098547	600	5	40.00	098550	150	1	47.00
					750	5	

Ammeters

Trade No.	Range Amperes	Each Div. Amperes	Price Each	Trade No.	Range Amperes	Each Div. Amperes	Price Each
098551	1	.01	$29.00	098553	25	.2	$29.00
098552	15	.1	29.00	098554	50	.5	29.50

Instruments only
With Scale to Fit Separate Shunt

Trade No.		Price Each
098555	Instrument only	$29.00

Ammeters up to 50 amperes have self-contained shunts. For larger capacities and for two or more ranges, separate shunts are used with instrument only, listed above. Extra ranges on same instrument should be chosen with reference to convenient scale markings. Even multiples are best; for example, 100 amperes and 10 amperes. Price of this combination is $29.00 plus $3.50 plus $6.50, making a total of $39.00.

SEPARATE SHUNTS

Trade No.	Amperes	Price Each	Trade No.	Amperes	Price Each
098556	1	$7.00	098561	100	$3.50
098557	5	6.50	098562	200	4.00
098558	10	6.50	098563	300	4.50
098559	25	6.50	098564	400	5.50
098560	50	7.00	098565	500	7.00

Shunts up to 50 amperes inclusive, are tube type.

ROLLER-SMITH PORTABLE INSTRUMENTS

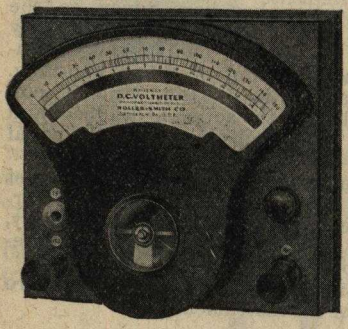
FOR DIRECT CURRENT

PORTABLE STANDARD TYPE

Recommended for all work requiring dependability and precision. Deadbeat, have zero adjusters, and mirrors under needle. Improved d'Arsonval mechanism.

Voltmeters have an average resistance of 100 ohms per volt.

Polished wood carrying case furnished with each instrument.



VOLTMETERS

Trade No.	Range Evenly Divided from Zero M. V.	Value of Each Division M. V.	Price Each
098576	75	.5	$45.00
098577	150	1	45.00
098578	1500	10	45.00
	Volts	Volts	
098579	3	.02	47.50
098580	15	.1	47.50
098581	150	1	50.00
098582	300	2	55.00
098583	600	5	65.00
098584	750	5	70.00

Trade No.	Range Evenly Divided from Zero Volts	Value of Each Division Volts	Price Each
098585	15	.1	$55.00
	150	1	
098586	15	.1	60.00
	300	2	
098587	150	1	60.00
	300	2	
098588	150	1	75.00
	750	5	
098589	15	.1	70.00
	150	1	
	300	2	

AMMETERS

	M. A.	M. A.	
098590	25	.2	45.00
098591	150	1	45.00
098592	1500	10	45.00
098593	20	.2	50.00
	500	5	
	Amps.	Amps.	
098594	5	.05	47.50

Trade No.	Amps.	Amps.	Price Each
098596	15	.1	47.50
098597	25	.2	47.50
098598	50	.5	50.00
098599	100	1	52.00
098600	150	1	53.00
098601	200	2	53.00
098602	300	2	56.00

Instruments Only

These instruments give full scale deflection on 50 M. V., but are marked in amperes for use with the following shunts.

Trade No.		Price Each
098603	Instruments only	$45.00

PORTABLE SHUNTS

For use with instruments only, listed above, for all ranges greater than 300 amperes and or more than one range in amperes on the same instrument.

Single Capacity

Trade No.	Amperes	Price Each
098604	100	$20.00
098605	150	21.00
098606	200	23.00
098607	300	26.00

Trade No.	Amperes	Price Each
098608	400	$30.00
098609	500	33.00
098610	750	40.00
098611	1000	53.00

Two Capacity

098612	1 and 10	20.00
098613	1.5 and 15	20.00
098614	3 and 15	20.00

098615	5 and 50	22.00
098616	10 and 100	25.00
.....	.....	.....

PORTABLE MULTIPLIERS

For adapting voltmeters and wattmeters, D. C. or A. C., to higher voltages. Each must be adapted to its own meter. When furnished with multiple scale instruments, they are adapted for use with higher scale, unless ordered otherwise.

For Use with 150-Volt Instruments

Trade No.	Single Range Multiplying By	Price Each
098617	10	$20.00
098618	20	30.00
098619	30	40.00
098620	40	50.00

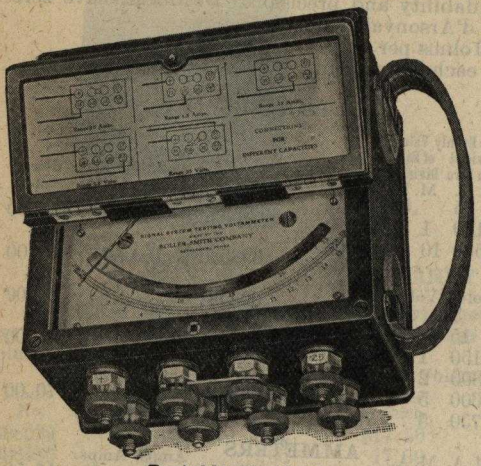
Trade No.	Multiple Range Multiplying By	Price Each
098621	2 and 5	$20.00
098622	5 and 10	25.00
098623	10 and 20	35.00
098624	2, 5 and 10	35.00

A multiplier of 5 for use with 300-volt instruments, or of 2.5 for use with 600-volt instruments, takes same price as multiplier of 10 for use with 150-volt instruments.

ROLLER-SMITH SIGNAL SYSTEM TESTING VOLT-AMMETERS

PORTABLE STANDARD SIGNAL SYSTEM VOLT-AMMETERS

Size, 6½x6¼x4; Weight, 8 Pounds



Portable Standard SS Volt-Ammeter

These portable instruments have been designed for making the various tests on relays, track circuits and batteries as required in railway signal inspection and maintenance. The two ampere and three voltage ranges will be found to cover practically all tests for quantities now used in active work, as the selection of ranges has been based on the experience of not less than thirty signal engineers who have been consulted. Particular attention has been given to the making of an instrument that is not only flexible in its use, but one that will withstand a great amount of rough handling. The mechanism is of the resilient coil D'Arsonval type, the action is deadbeat and the scales 5½ inches long with equal divisions.

The containing cases are made of cast aluminum heavily enameled and are watertight. The binding posts are extra heavy, cannot be turned loose and have non-removable tops.

Each instrument is equipped with a zero adjuster, operated by turning a screw accessible at the base of the instrument.

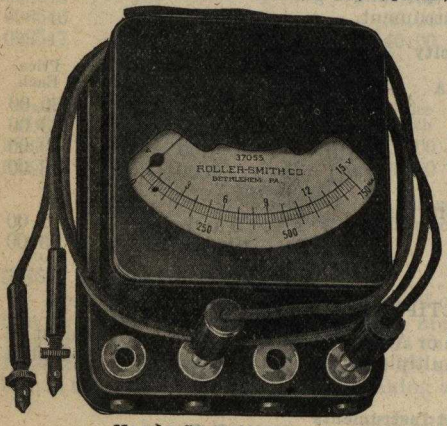
Ranges

Amperes	Volts
0 to 150 mil-amperes in 1 mil-amperes division	0 to 3 volts in .02 volts division
0 to 1.5 amperes in .01 amperes division	0 to 30 volts in .2 volts division
0 to 15 amperes in .1 amperes division	

Trade No.		Price Each
28704	With five ranges as above	$50.00
28705	Same as above, but with extra scale 0 to 150 volts	57.50

HANDY MODEL SIGNAL SYSTEM VOLT-AMMETERS

Size, 4¾x4x2½; Weight, 38 Ounces



Handy SS Volt-Ammeter

To meet the need of a smaller instrument than the portable standard model illustrated above, we have designed the handy type as illustrated herewith. This employs the same resilient D'Arsonval mechanism as the portable standard, but instead of having a number of binding posts, the plug and socket connection is used. This instrument meets the call for a thoroughly high grade compact volt-ammeter for maintainers' use and it will withstand a tremendous amount of rough usage. Each instrument has a zero adjuster.

Ranges

Amperes	Volts
0 to 600 mil-amperes in 10 mil-amperes division	0 to 3 volts in .05 volts division
0 to 6 amperes in .1 amperes division	0 to 30 volts in .5 volts division

Trade No.		Price Each
28706	With four scales as above	$26.50
28707	Separate leather carrying case for handy instrument	1.75

ROLLER-SMITH PORTABLE INSTRUMENTS



PORTABLE BOND TESTERS

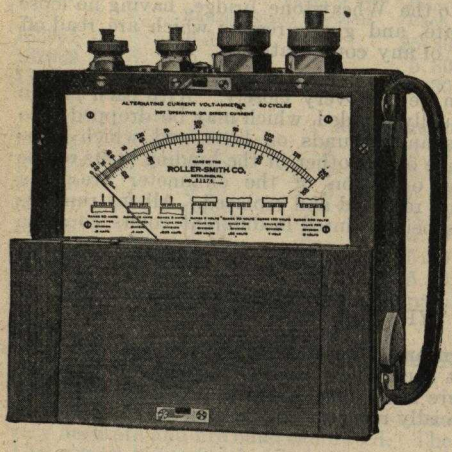
Rapid and accurate. One man can use it. Compares 3 feet of bonded rail with 3 feet of unbroken rail and reads direct in equivalent length of unbroken rail. Ordinarily uses current in rail and accuracy is independent of amount of current, this influencing sensibility only.

For places where current in rails is small or intermittent, or for new construction, a special high sensibility model is furnished, current being obtained from portable storage batteries. To operate the high sensibility model, two men are required.

The contact bar carries renewable saw blade contacts which will not fail to make good contact. The bar may be folded for more easy transportation.

In operation, the section of the bar marked "Bond" is made to span the joint. The central button is then rotated until the galvanometer needle at the top comes to 0; the rotated needle then indicates directly on the scale, the length of rail to which the bonded section is equivalent.

Trade No.	Description	Size, Closed Inches	Weight Pounds	Price Each
097653	Standard sensibility type	5¼x8¼x7½	6	$ 95.00
097654	High sensibility type	5¼x8¼x7½	6	120.00



SIGNAL SYSTEM TESTING VOLTAMMETERS

Alternating Current

The rapid advances recently made in electric signaling show an increasing tendency toward the use of alternating current, and suitable instruments are requisite. The problem of their design was, however, of much greater magnitude, and was solved only after long and expensive design and experimental work. The selection of the ranges has been most carefully worked out. These instruments will be welcomed by those who heretofore have been forced to carry around a varied assortment of ammeters and voltmeters ranging in number from two to five or more.

Case is of oak and is provided with substantial leather handle, hinged cover and snap catch. Binding posts are heavy and have non-removable tops. Each binding post is legibly marked with a numeral corresponding to the scale value which is obtained when that post is used. A zero adjuster convenient for manipulation is incorporated. Particular attention is called to the method of indicating by diagrams on the scale the proper connections for the various ranges and data covering the values per scale division.

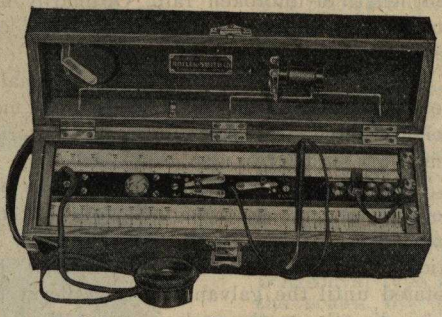
These instruments operate only on alternating current and are calibrated for the frequency on which they are to be used.

Ranges

Amperes	Volts
10 to 60 in .5 divisions	1 to 6 in .05 divisions
2 to 12 in .1 divisions	5 to 30 in .25 divisions
.5 to 3 in .025 divisions	20 to 120 in 1 divisions
	40 to 240 in 2 divisions

Trade No.	Mfrs. No.	Size Inches	Weight Pounds	Price Each
097657	888	6⅞x7x4¼	7	$80.00

ROLLER-SMITH PORTABLE OHMMETERS



Galvanometer Type Ohmmeter

These instruments in many respects are superior to the Wheatstone bridge, having no loose plugs to be lost, being extremely simple to operate, and giving results which are read off directly in ohms from a scale without the necessity of any computation.

The scales are 30 inches long and, therefore can be read very closely. With each instrument, there is supplied a pair of loose scales, equally divided, which may be dropped into place over the regular scales when locating crosses and grounds on lines, and which show directly the distance of the point of trouble from one or the other of the binding posts of the instrument. The 6 dry cells necessary for the operation of the ohmmeter are in a separate compartment in the base and may be readily removed and replaced. All instruments are multi-scale, the numerals for the different scales being printed in different colors, so as to avoid any chance of confusion.

TELEPHONE TYPE

This type has the telephone receiver only as a means of finding the point of balance. The battery circuit key is built into this receiver so that it may be closed by the same hand which holds it to the ear, this meaning that the batteries are in use only at the time that observations are actually being made. The telephone type is specially recommended because of its simplicity and the absence of all delicate parts.

Trade No.	Mfrs. No.	No. of Scales	Range Ohms	Size Inches	Weight Pounds	Price Each
097637	3000	4	10, 100, 1000, 200000	17x5x5	11	$45.00
097638	3001	4	10, 100, 1000, 2000000	17x5x5	11	50.00

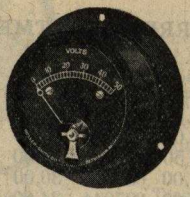
Galvanometer Type

This type differs from the telephone type in that, in addition to the telephone receiver, it contains a d'Arsonval galvanometer of good sensibility together with an induction coil and sundry switches. By means of one switch either the telephone receiver or the galvanometer may be used at will for detection of attainment of balance and by means of another switch the battery current is either applied direct or used to excite the induction coil, from the secondary windings of which is then obtained alternating current. This type is useful where noise makes telephone readings difficult.

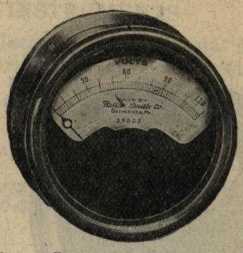
Trade No.	Mfrs. No.	No. of Scales	Range Ohms	Size Inches	Weight Pounds	Price Each
097639	3002	4	10, 100, 1000, 200000	17x5x5	11	$60.00
097640	3003	4	10, 100, 1000, 2000000	17x5x5	11	65.00
097641	3004	Leather carrying case				8.00

ROLLER-SMITH SWITCHBOARD INSTRUMENTS

DIRECT CURRENT



Junior Imp Type



Imperial Type

JUNIOR IMP TYPE

These instruments are particularly recommended where severe service is to be encountered, as in various types of small switchboards, such as are used for battery charging, farm lighting, etc. Mechanism is of the permanent magnet, moving coil type, insuring uniform scale divisions and dead beat indications. Magnets are forged tungsten steel. Moving element is light but rigid. Case is heavy brass with black rubberoid finish and is dust and moisture-proof. Dials are etched metal, black. Connections are in the form of heavy studs projecting from the rear, and are provided with suitable nuts and washers. Diameter over all is 3½ inches.

Base flange type furnished for all regular work.

Voltmeters, 3½ Inches in Diameter

Trade No.	Range	Value of Each Division	Price Each	Trade No.	Range	Value of Each Division	Price Each
132961	0–10	.5	$5.30	132971	0– 50	2	$5.30
132962	0–15	.5	5.30	132972	0– 80	2	7.00
132963	0–30	1	5.30	132973	0–150	5	7.00

Ammeters, 3½ Inches in Diameter

132964	0– 5	.2	5.30	132974	30–0– 30	2	5.30
132965	0–10	.5	5.30	132975	40–0– 40	2	5.30
132966	0–15	.5	5.30	132976	0– 60	2	7.00
132967	0–30	1	5.30	132977	60–0– 60	5	7.00
132968	0–40	2	5.30	132978	0– 80	2	7.00
132969	10–0–10	1	5.30	132979	0–100	5	7.00
132970	15–0–15	1	5.30	.....	.....	...	....

Ammeters over 40 amperes have separate shunt and 3-foot leads.

IMPERIAL TYPE

These instruments are recommended where a high grade type of instrument is desired for medium sized switchboards. Imperial instruments are of the permanent magnet type, dead beat, very accurate and are hand calibrated. The best quality jewel and pivot bearings are employed. The case is brass, finished in baked enamel and dustproof. All scales begin at zero and are evenly divided and they are unusually well lighted. Only two holes in switchboard are required for mounting.

Voltmeters, 4 Inches in Diameter

Trade No.	Range	Value of Each Division	Price Each	Trade No.	Range	Value of Each Division	Price Each
097829	3	.05	$8.25	097833	50	1	$ 9.00
097830	10	.2	8.25	097834	130	2	10.00
097831	15	.25	8.50	097887	150	2.5	10.00
097832	30	.5	8.50	097835	250	5	11.00

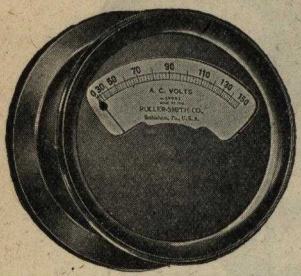
Ammeters, 4 Inches in Diameter

097841	1	.02	8.25	097846	30	.5	9.25
097842	3	.05	8.25	097847	50	1	10.00
097843	5	.1	8.25	097848	100	2	11.00
097844	10	.2	9.00	097849	150	2.5	11.50
097845	15	.25	9.00	097850	200	4	12.00

Ammeters over 50 amperes have separate shunts with 3-foot leads. 50-ampere and under are self-contained. Meters 50 amperes and under supplied with separate shunts at list price of 100 ampere capacity device.

ROLLER-SMITH SWITCHBOARD INSTRUMENTS

FOR DIRECT AND ALTERNATE CURRENT



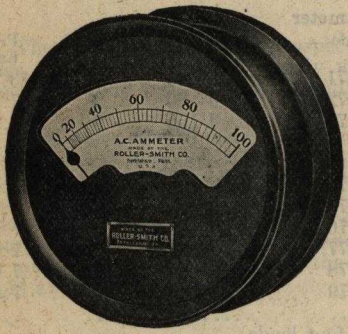
I. P. Type

DIRECT CURRENT VOLTMETERS

Range Volts	Val. Div.	Type I. P. Trade No.	Type I. P. Price Each	Type R. R. Trade No.	Type R. R. Price Each	Type I. D. Trade No.	Type I. D. Price Each
15	.2	097934	$15.50	097941	$24.00	097960	$50.00
100	1	097935	16.00	097940	27.00	097961	55.00
150	2	097936	16.50	097942	27.00	097962	55.00
300	2.5	097937	18.00	097943	30.00	097963	60.00
600	5	097938	21.00	097944	34.00	097964	63.00
750	10	097939	27.50	097945	36.00	097965	64.00

DIRECT CURRENT AMMETERS

Range Amps.	Val. Div.	Type I. P. Trade No.	Type I. P. Price Each	Type R. R. Trade No.	Type R. R. Price Each	Type I. D. Trade No.	Type I. D. Price Each
25	.2	097983	$16.00	097947	$24.00	097980	$55.00
50	.5	097984	16.50	097948	24.00	097981	55.00
100	1	097985	17.50	097950	25.00	097966	55.00
200	2	097986	18.00	097951	26.00	097967	55.00
300	2.5	097987	18.50	097952	28.00	097968	58.00
400	5	097988	19.50	097953	29.00	097969	59.00
500	5	097989	21.00	097954	29.00	097970	60.00
750	10	097990	25.00	097955	31.50	097971	62.00
1000	10	097991	27.00	097956	32.50	097972	64.00
2000	20	097992	35.50	097958	40.00	097974	72.00
3000	30	097993	38.00	097959	43.00	097975	75.00
5000	50	097994	67.50	097982	76.00	097977	85.00



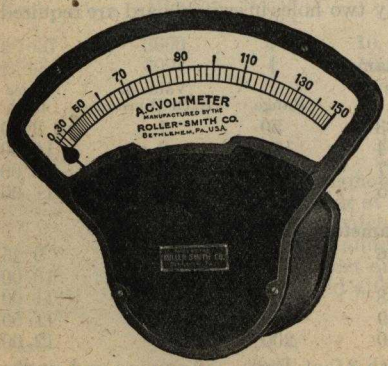
R. R. Type

ALTERNATING CURRENT VOLTMETERS

Range Volts	Type I. P. Trade No.	Type I. P. Price Each	Type R. R. Trade No.	Type R. R. Price Each	Type I. D. Trade No.	Type I. D. Price Each
75	097897	$14.50	097909	$18.50	097930	$55.00
150	097898	14.75	097910	18.75	097921	55.00
300	097899	18.50	097911	22.50	097922	60.00
600	097900	21.00	097912	27.50	097923	67.50

ALTERNATING CURRENT AMMETERS

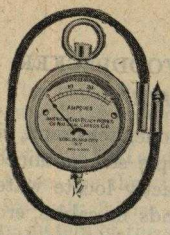
Range Amps.	Type I. P. Trade No.	Type I. P. Price Each	Type R. R. Trade No.	Type R. R. Price Each	Type I. D. Trade No.	Type I. D. Price Each
5	097901	$13.50	097913	$17.00	097924	$50.00
10	097902	13.50	097914	17.00	097931	50.00
25	097903	13.50	097915	17.00	097932	50.00
50	097904	13.75	097916	17.50	097925	50.00
100	097905	13.75	097917	17.50	097926	52.50
200	097906	14.75	097918	18.50	097927	55.00
300	097907	15.50	097919	19.00	097928	58.00
500	097908	17.50	097920	20.00	097929	60.00



I. D. Type

I. P. (Isolated Plant) type meters are 7½ inches in diameter and weigh about 7 pounds; R. R. (Regular Round) type meters are 9⅜ inches in diameter and weigh about 13 pounds; I. D. (Illuminated Dial) type meters are 13¾ x 11⅝ inches and weigh about 18 pounds.

EVEREADY BATTERY TESTING INSTRUMENTS



No. 1002

POCKET INSTRUMENTS

The Eveready Pocket Meters are light, neat, accurate and deadbeat, not affected by polarity as they read equally well with either direction of current. Cases are of brass, heavily nickel-plated and polished. Attached to each meter is a flexible insulated cord of sufficient length. The movements are sensitive, at the same time, simple in construction and do not get out of order easily or require adjustment.

AMMETERS
Range 0-35 Amperes

Trade No.	Mfrs. No.	Diameter Inches	Price Each
054394	1002	2	$1.00

VOLTMETERS
Range 0-10 Volts

054392	1005	2	1.10

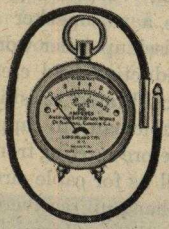
VOLTAMMETERS
Range 0-35 Amperes, 0-11 Volts

054396	1003	2	1.30

COIL TESTERS
Range 0-1½ Amperes in Fifths

A reading with the coil tester will show to the fraction of an ampere how much current is being taken through the plug.

054398	1007	2	1.50



No. 1003

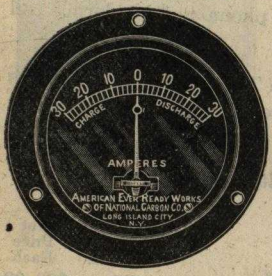
AUTOMOBILE DASH TYPE INSTRUMENTS

An indicating ammeter or voltmeter of a size and type suitable for dashboard mounting is an absolute necessity for determining the proper operation of the generator, storage battery, etc., for electric starting and lighting equipments in connection with automobiles and motor boats.

AMMETERS
Flush Type

Trade No.	Model	Range	Case Diam. Inches	Flange Diam., In.	Price Each
42734	1012	10-0-10	2⅛	2¾	$2.00
42735	1012	15-0-15	2⅛	2¾	2.00
42736	1012	20-0-20	2⅛	2¾	2.00
42737	1012	30-0-30	2⅛	2¾	2.00
		Surface Type			
42738	1013	10-0-10	2⅛	...	2.00
42739	1013	15-0-15	2⅛	...	2.00
42740	1013	20-0-20	2⅛	...	2.00
42741	1013	30-0-30	2⅛	...	2.00
		VOLTMETERS			
		Flush Type			
42742	1010	15-0-15	2⅛	2¾	2.50
42743	1010	30-0-30	2⅛	2¾	2.50
		Surface Type			
42744	1011	15-0-15	2⅛	...	2.50
42745	1011	30-0-30	2⅛	...	2.50

Standard finish, dull black enamel. Nickel furnished if desired.



Model 1012



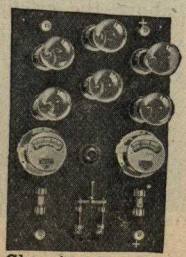
Model 1013

CHARGING BOARDS

Designed for charging 20 to 100-ampere-hour storage batteries from a direct current source of supply. Not suitable for alternating current. Shipped complete ready to install, with following equipment:

Two binding posts at top for direct current service connection.
Two binding posts at bottom for storage battery connection.
Six receptacles for either 25 or 40-watt power lamps.
Two 10-ampere fuse plugs.
One 25-ampere switch.
One Model 50 Eveready Ammeter.
One Model 51 Eveready Voltmeter.

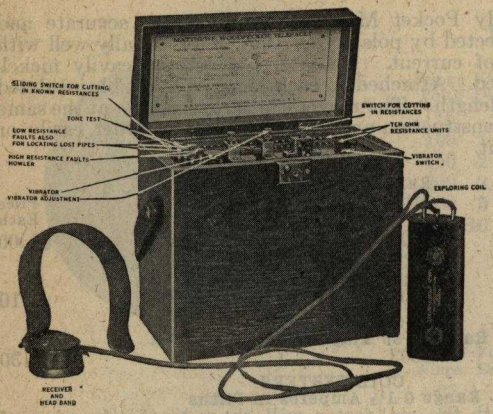
Board is 18 inches high by 12 inches wide by 1 inch thick, is of highly polished slate and is well finished throughout.



Charging Board

Trade No.	Mfrs. No.	Description	Price Each
81162	1024	Board complete, less lamps.....	$30.00

MATTHEWS TESTING INSTRUMENTS



MATTHEWS WOODPECKER TELEFAULT

For use on telephone, telegraph, signal or power cable. A simple self-contained instrument that will exactly locate water in cables, shorts of all kinds in cables, crosses, grounds, split pairs, in fact, everything except "opens." It only uses one dry cell battery, maximum voltage under 5 volts. The tone is like a woodpecker on a pole and does not "noise" up other working pairs, because of the inductive field created. It has a set of known calibrated resistances, which enable the troubleman to approximately locate trouble before starting from the office. Can be used for locating trouble on open-wire circuits as well as for cable circuits. Can also be used as a tone test set, as a "howler" to make subscribers hang up receivers; for locating the path of concealed wires, conduits or pipes, either in walls, ceiling or floors.

The Type C Matthews Woodpecker Telefault is held in a neat, strong case, furnished with a carrying strap and waterproof cover. The vibrator, battery, head phone and exploring coil are all contained in this box.

The Type F Matthews Woodpecker Telefault is the same as the Type C, except that it is smaller and lighter and has no resistance units to measure distance to trouble. Battery is carried outside.

The Type H Matthews Woodpecker Telefault is for finding faults in power cables.

Trade No.	Description	Shipping Wt., Lbs.	Net Price Each
67479	Type C Telefault complete	19	$60.00
67482	Type F Telefault, complete	7	36.00
67483	Type H Telefault, complete	8	45.00
67480	Extra exploring coils	2	15.00
67481	Extra receivers	1	3.00

No batteries are furnished



MATTHEWS TYPE C TELEHEIGHT

This vest pocket instrument is so designed that linemen can sight at the top of the object or at any height within its range on the object and get its exact height above the ground in feet. For example, the height of poles, wires, buildings, trees, bridges, etc., can be quickly, easily and exactly determined with this instrument.

Trade No.	Description	Weight Ounces	Net Price Each
67478	Type C Teleheight	14	$11.00

Price includes a neat leather carrying case.

DUNCAN SWITCHBOARD WATTHOUR METERS

ALTERNATING CURRENT

MODEL M2S, SINGLE-PHASE, 60 CYCLES

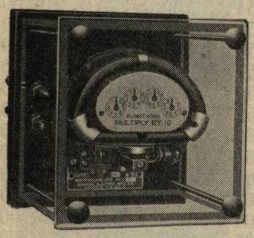
The meter element of the Model M2S is similar to that of the well known Model M2 service type watthour meter. An all plate glass cover for the M2S gives it a handsome appearance. Other parts of the meter are given a combination finish of hard rubber black and polished nickel. For both full load and light load the adjustments are of the micrometer type and easily accessible.

Prices are the same for 25-cycle and 133-cycle as for 60-cycle meters.

220-volt, 3-wire and 440-volt, 3-wire meters are furnished at the same price charged for the 2-wire meters of the same voltage.

Instrument transformers are included in the prices of such sizes requiring either current or voltage transformers, or both. In ordering meters with registering mechanism geared for use with instrument transformers, it is necessary that the primary and secondary ratings of the latter be mentioned.

In ordering, specify amperes, volts, cycles, and whether 2 or 3-wire.



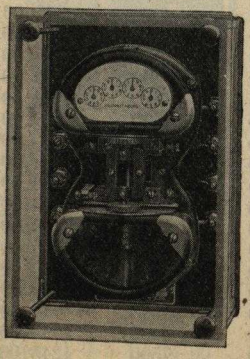
Model M2S

	2-wire, 60 Cycles							
	110 Volts		220 Volts		440 Volts		2200 Volts	
Amps.	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
5	146651	$71.00	146666	$76.00	146681	$81.00	146696	$110.00
10	146652	73.00	146667	78.00	146682	83.00	146697	113.00
15	146653	75.00	146668	80.00	146683	85.00	146698	116.00
25	146654	81.00	146669	86.00	146684	91.00	146699	124.00
50	146655	85.00	146670	90.00	146685	95.00	146700	129.00
75	146656	93.00	146671	98.00	146686	103.00	146701	134.00
100	146657	101.00	146672	106.00	146687	111.00	146702	140.00
150	146658	106.00	146673	111.00	146688	116.00	146703	146.00
200	146659	112.00	146674	117.00	146689	122.00	146704	152.00
300	146660	117.00	146675	122.00	146690	127.00	146705	158.00
400	146661	123.00	146676	128.00	146691	133.00	146706	164.00
500	146662	130.00	146677	135.00	146692	140.00	146707	169.00
600	146663	137.00	146678	142.00	146693	147.00	146708	175.00
800	146664	145.00	146679	150.00	146694	155.00	146709	188.00
1000	146665	155.00	146680	160.00	146695	165.00	146710	198.00
With Registering Train Geared for Use with Instrument Transformers								
5	146771	73.50	146772	78.50	146773	83.50	.....	.....

MODEL M2PS, POLYPHASE, 60 CYCLES

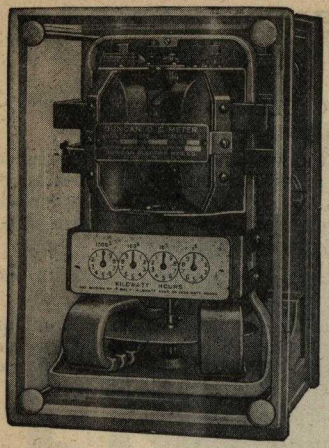
The Model M2PS is, in many respects, similar to the Model M2S. It is, in fact, merely a combination of two single-phase meters mounted upon one grid, and enclosed in an all plate glass case. The base, grid and other metal parts are given a combination hard rubber black and polished nickel finish. Like the M2S, the M2PS is provided with micrometer adjustments for both light load and full load.

Prices listed are the same for 25-cycle and 133-cycle as for 60-cycle meters. The same applies to meters for 3-phase 3-wire, or 2-phase 3-wire, or 2-phase 4-wire, and unless any one of these three combinations is specified in the order, the manufacturer will supply 3-phase 3-wire meters.



Model M2PS

5	146711	112.50	146726	125.00	146741	137.50	146756	252.50
10	146712	116.25	146727	128.75	146742	141.25	146757	253.10
15	146713	122.50	146728	135.00	146743	147.50	146758	253.75
25	146714	127.50	146729	140.00	146744	152.50	146759	254.35
50	146715	138.50	146730	151.25	146745	163.75	146760	255.00
75	146716	143.75	146731	156.25	146746	168.75	146761	256.25
100	146717	151.25	146732	163.75	146747	176.25	146762	257.50
150	146718	158.75	146733	171.25	146748	183.75	146763	260.00
200	146719	165.00	146734	177.50	146749	190.00	146764	265.00
300	146720	173.75	146735	186.25	146750	198.75	146765	273.25
400	146721	185.00	146736	197.50	146751	210.00	146766	285.00
500	146722	198.75	146737	211.25	146752	223.75	146767	298.75
600	146723	205.00	146738	217.50	146753	230.00	146768	305.00
800	146724	216.25	146739	228.75	146754	241.25	146769	316.25
1000	146725	228.75	146740	241.25	146755	253.75	146770	328.75
With Registering Train Geared for Use with Instrument Transformers								
5	146774	115.00	146775	127.50	146776	140.00	.....	.....



DUNCAN WATTHOUR METERS

MODEL R SWITCHBOARD METERS

For Direct Currents

All Model R watthour meters are of the shunted type. Made in sizes from 100 to 20000 amperes and for two and three-wire systems.

They are provided with an all plate glass cover. The internal metal portions receive either a hard rubber black, polished nickel, or polished copper finish. Unless otherwise specified the hard rubber black finish is given.

5-foot cables are provided with each meter as a standard length, and for additional lengths a net extra charge will be made, as follows:

6-foot leads	$1.25	14-foot leads	$10.00
8-foot leads	3.30	16-foot leads	12.50
10-foot leads	5.00	18-foot leads	15.80
12-foot leads	8.00	20-foot leads	18.50

110 TO 125 VOLTS—2-WIRE

Trade No.	Amps.	Kilowatts	Price Each
088509	100	10	$190.00
088510	150	15	195.00
088511	200	20	200.00
088512	300	30	210.00
088513	400	40	220.00
088514	500	50	230.00
088515	600	60	240.00
088516	800	80	250.00
088517	1000	100	260.00
088518	1200	120	265.00
088519	1500	150	275.00
088520	2000	200	295.00
088521	2500	250	305.00
088522	3000	300	325.00
088523	4000	400	355.00
088524	5000	500	400.00
088525	6000	600	440.00
088526	8000	800	490.00
088527	10000	1000	540.00
088528	12000	1200	595.00
088529	15000	1500	665.00
088530	20000	2000	890.00

220 TO 250 VOLTS—2-WIRE

Trade No.	Amps.	Kilowatts	Price Each
088531	100	20	$200.00
088532	150	30	205.00
088533	200	40	215.00
088534	300	60	230.00
088535	400	80	240.00
088536	500	100	245.00
088537	600	120	250.00
088538	800	160	260.00
088539	1000	200	265.00
088540	1200	240	270.00
088541	1500	300	280.00
088542	2000	400	300.00
088543	2500	500	310.00
088544	3000	600	330.00
088545	4000	800	360.00
088546	5000	1000	405.00
088547	6000	1200	450.00
088548	8000	1600	500.00
088549	10000	2000	550.00
088550	12000	2400	610.00
088551	15000	3000	680.00
088552	20000	4000	900.00

220 TO 250 VOLTS—3-WIRE

Trade No.	Amps.	Kilowatts	Price Each
088553	100	20	$255.00
088554	150	30	270.00
088555	200	40	285.00
088556	300	60	315.00
088557	400	80	335.00
088558	500	100	345.00
088559	600	120	365.00
088560	800	160	380.00
088561	1000	200	390.00
088562	1200	240	410.00
088563	1500	300	420.00
088564	2000	400	450.00
088565	2500	500	480.00
088566	3000	600	510.00
088567	4000	800	570.00
088568	5000	1000	655.00
088569	6000	1200	745.00
088570	8000	1600	840.00
088571	10000	2000	930.00
088572	12000	2400	1050.00
088573	15000	3000	1230.00
088574	20000	4000	1450.00

500 TO 600 VOLTS—2-WIRE

Trade No.	Amps.	Kilowatts	Price Each
088575	100	50	$210.00
088576	150	75	215.00
088577	200	100	225.00
088578	300	150	240.00
088579	400	200	250.00
088580	500	250	255.00
088581	600	300	260.00
088582	800	400	270.00
088583	1000	500	275.00
088584	1200	600	280.00
088585	1500	750	290.00
088586	2000	1000	310.00
088587	2500	1250	320.00
088588	3000	1500	340.00
088589	4000	2000	370.00
088590	5000	2500	415.00
088591	6000	3000	460.00
088592	8000	4000	510.00
088593	10000	5000	560.00
088594	12000	6000	620.00
088595	15000	7500	695.00
088596	20000	10000	920.00

440 TO 500 VOLTS—3-WIRE

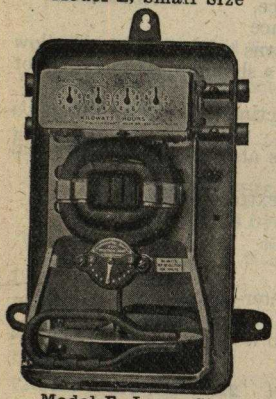
Trade No.	Amps.	Kilowatts	Price Each
088597	100	50	$265.00
088598	150	75	280.00
088599	200	100	295.00
088600	300	150	325.00
088601	400	200	345.00
088602	500	250	355.00
088603	600	300	375.00
088604	800	400	390.00
088605	1000	500	400.00
088606	1200	600	420.00
088607	1500	750	430.00
088608	2000	1000	460.00
088609	2500	1250	490.00
088610	3000	1500	520.00
088611	4000	2000	580.00
088612	5000	2500	665.00
088613	6000	3000	755.00
088614	8000	4000	850.00
088615	10000	5000	945.00
088616	12000	6000	1065.00
088617	15000	7500	1245.00
088618	20000	10000	1465.00

DUNCAN WATTHOUR METERS

DIRECT CURRENT



Model E, Small Size



Model E, Large Size
Case Removed



Model HC

MODEL E, HOUSE TYPE

This model is extremely accurate on light loads. All parts are interchangeable. Responds quickly to load variations; accuracy not affected by overloads. Drag can be increased 40 per cent. Brushes detachable for inspection. Magnets unaffected by short circuits. Does not creep when load is off.

Can be furnished with dials reading directly in dollars and cents, if desired.

***110 to 125 Volts Two-Wire**

Trade No.	Capacity Amp.	Capacity Horse Power	Price Each
028305	5	¾	$31.25
028306	10	1½	34.00
028307	15	2¼	38.50
028308	25	3½	45.00
028309	50	7	58.25
028310	75	10	75.00
028311	100	15	90.00
028312	150	20	102.50
028313	200	30	115.00
028314	300	40	130.00
028315	400	60	150.00
46544	500	..	170.00
028316	600	80	190.00

***220 to 250 Volts Three-Wire**

Trade No.	Capacity Amp.	Capacity Horse Power	Price Each
028324	5	1¼	$36.25
028326	10	3	40.00
028327	15	4	47.25
028328	25	7	56.00
028329	50	15	71.50
028330	75	20	93.50
028331	100	25	110.00
028332	150	40	126.00
028333	200	50	150.00
028334	300	80	175.00
.....	...	...	.....
.....	...	...	.....
.....	...	...	.....

***220 to 250 Volts Two-wire**

Trade No.	Capacity Amp.	Capacity Horse Power	Price Each
028342	5	1¼	$36.25
028344	10	3	40.00
028345	15	4	47.25
028346	25	7	56.00
028347	50	15	69.25
028348	75	20	88.00
028349	100	25	102.50
028350	150	40	118.00
028351	200	50	135.00
028352	300	80	150.00
028353	400	125	170.00
46546	500	...	190.00
028354	600	175	210.00

***500 to 600 Volts Two-wire**

Trade No.	Capacity Amp.	Capacity Horse Power	Price Each
028359	5	3	$46.25
028360	10	5	51.50
028361	15	10	60.50
028362	25	15	71.50
028363	50	30	88.00
028364	75	50	104.50
028365	100	75	120.00
028366	150	100	132.50
028367	200	150	155.00
028368	300	200	180.00
028369	400	300	195.00
46547	500	...	205.00
028370	600	400	220.00

*In ordering, specify normal operating voltage of circuit.

MODEL HC, PORTABLE TEST TYPE

This meter involves the same theory of operation as all Duncan Commutator Type Direct Current Watthour Meters. The current upon entering the meter is controlled by the cylindrical switch at the rear, and the spring contacts resting against it operate to arrange the windings of the series field coils for the different loads. This arrangement gives maximum torque for the different capacities. Attached to the controller switch handle is a marked index which shows the capacity in amperes. The dial is the fly-back type used in stop watches. Every test can be started from zero.

Trade No.	Amperes	Volt	Price Each
57559	1–2–5–10–25–50	110	$212.50
57560	1–2–5–10–25–50	220	225.00
57561	1–2–5–10–25–50	500	237.50
57562	1–2–5–10–25–50	110–220	250.00
57563	1–2–5–10–25–50	110–500	257.50
57564	1–2–5–10–25–50	220–500	262.50
57565	1–2–5–10–25–50	110–220–500	275.00

Trade No.	Amperes	Volts	Price Each
57566	5–10–25–50–100	110	$237.50
57567	5–10–25–50–100	220	250.00
57568	5–10–25–50–100	500	262.50
57569	5–10–25–50–100	110–220	275.00
57570	5–10–25–50–100	110–500	282.50
57571	5–10–25–50–100	220–500	287.50
57572	5–10–25–50–100	110–220–500	300.00

DUNCAN WATTHOUR METERS

MODEL M2, INDUCTION TYPE, FOR ALTERNATING CURRENT, 25, 60 AND 133 CYCLES



Model M2

Model M2 Meters are designed for long time accuracy and for low maintenance cost. Their durable mechanical and electrical construction reduces repairs to a minimum, while the great permanence of the retarding magnet, the high quality of the jewel bearing, the lightness of the moving element, and their high ratio of torque to weight, make adjustments few. However, if adjustments are needed, the entire meter element may be removed by simply taking out four screws, and both the potential and series coils may be slipped from their cores.

Every effort has been made to render the removal of screws unnecessary. For instance, the screw holding the junction box cover in place functions as a lock rather than as an ordinary screw. If given two turns to the left it will allow the pressed steel lid to swing open. Since the screw is provided with a shoulder, its pinch is not depended upon to hold the lid shut.



Model M2
Cover Removed

A low top bearing friction is assured by the absence of dust-collecting oil, and by the lightness and low center of gravity of the moving element.

The standard exterior finish is hard rubber black, which color is also used for all internal parts except a few which are nickel-plated.

When specially called for, glass covers will be furnished without extra charge.

Important Points

Series loss in watts	.29	Torque in millimeter-grams	42
Potential loss in watts (approximate)	1	Weight of moving element in grams	10
Total full load loss in watts (approx.)	1.3	Ratio of torque to weight	4.2 to 1

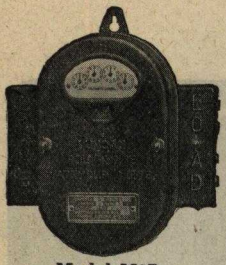
110 Volts, Two-wire			220 Volts, Two-wire			220 Volts, Three-wire		
Trade No.	Cap. Amps.	Price Each	Trade No.	Cap. Amps.	Price Each	Trade No.	Cap. Amps.	Price Each
34151	5	$17.00	34167	5	$19.00	74531	5	$19.00
34152	10	20.00	34168	10	22.00	74532	10	22.00
34153	15	22.50	34169	15	24.50	74533	15	24.50
34155	25	27.00	34171	25	30.00	74535	25	30.00
34156	50	37.00	34172	50	40.00	74536	50	40.00
34157	75	43.00	34173	75	46.00	74537	75	46.00
34158	100	48.00	34174	100	51.00	74538	100	51.00
34159	150	52.00	34175	150	55.00	74539	150	55.00
34160	200	57.00	34176	200	60.00	74540	200	60.00
34161	300	60.00	34177	300	63.00	74541	300	63.00
34162	400	66.00	34178	400	69.00	74542	400	69.00
34163	500	72.00	34179	500	75.00	74543	500	75.00

440 Volts, Two-wire			440 Volts, Three-wire			2200 Volts, Primary, Two-wire		
Trade No.	Cap. Amps.	Price Each	Trade No.	Cap. Amps.	Price Each	Trade No.	Cap. Amps.	Price Each
74547	5	$22.00	74563	5	$22.00	74579	5	$80.00
74548	10	25.00	74564	10	25.00	74580	10	81.50
74549	15	27.50	74565	15	27.50	74581	15	83.00
74551	25	32.00	74567	25	32.00	74583	25	84.50
74552	50	42.00	74568	50	42.00	74584	50	86.00
74553	75	48.00	74569	75	48.00	74585	75	88.00
74554	100	53.00	74570	100	53.00	74586	100	90.00
74555	150	57.00	74571	150	57.00	74587	150	95.00
74556	200	62.00	74572	200	62.00	74588	200	100.00
74557	300	65.00	74573	300	65.00	74589	300	104.00
74558	400	71.00	74574	400	71.00	74590	400	110.00
74559	500	77.00	74575	500	77.00	74591	500	116.50

In ordering, be sure and specify number of cycles wanted, and unless specified in your order 60-cycle will be furnished. Prices include meters complete with current and potential transformers, that is, for sizes requiring same.

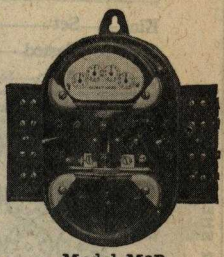
DUNCAN WATTHOUR METERS

MODEL M2P, POLYPHASE SERVICE TYPE



Model M2P

The Duncan Model M2 P Polyphase Watthour Meter is essentially a combination of two Model M2 single-phase meters driving a common shaft and registering mechanism. The shaft is exceptionally short; the driving torque high; the moving element light, and none is more accurate. They possess the many superlative qualities of the Model M2 and are remarkable for their simplicity, accessibility and splendid appearance.



Model M2P
Cover Removed

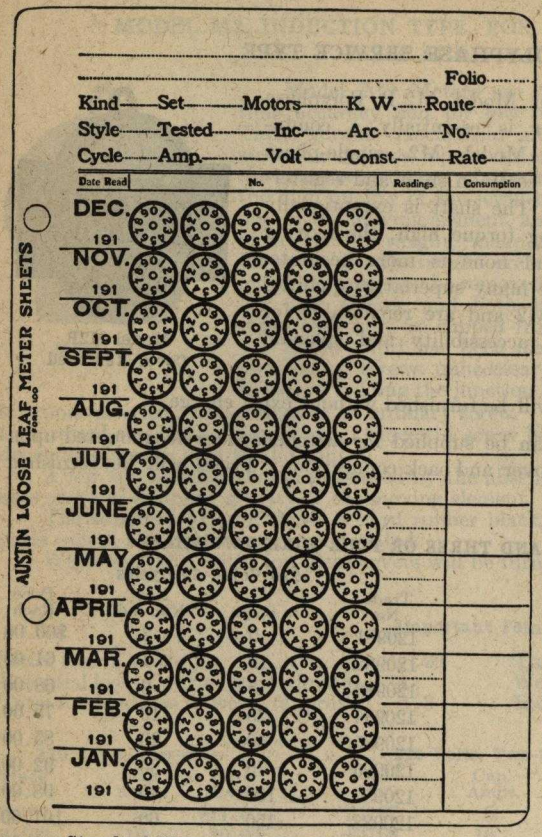
If specially called for, glass covers will be furnished without extra charge.

The Model M2P meter mechanism can be supplied for switchboard service mounted upon a handsome base having a plate glass cover and back connections. Prices will be furnished upon request.

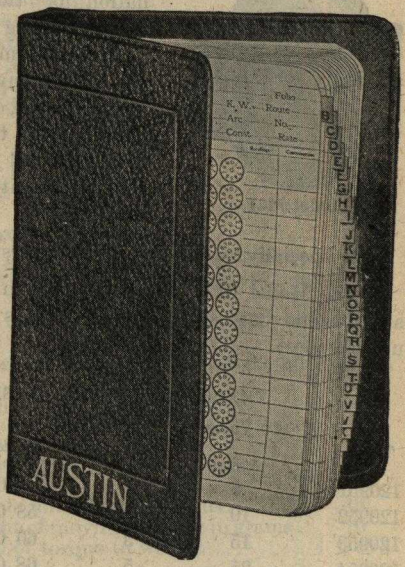
THREE-WIRE, THREE-PHASE, AND THREE OR FOUR-WIRE, TWO-PHASE

Trade No.	110 Volts, 60 Cycles Amps.	Kw. Non-ind.	Price Each	Trade No.	220 Volts, 60 Cycles Amps.	Kw. Non-ind.	Price Each
120951	5	1	$53.00	120981	5	2	$60.00
120952	10	2	58.00	120982	10	4	64.00
120953	15	3	60.00	120983	15	6	68.00
120954	25	5	68.00	120984	25	10	75.00
120955	50	10	78.00	120985	50	20	85.00
120956	75	15	85.00	120986	75	30	92.00
120957	100	20	91.00	120987	100	40	98.00
120958	150	30	100.00	120988	150	60	107.00
120959	200	40	105.00	120989	200	80	112.00
120960	300	60	113.00	120990	300	120	120.00
120961	400	80	125.00	120991	400	160	132.00
120962	500	100	140.00	120992	500	200	147.00
120963	600	120	155.00	120993	600	240	162.00
120964	800	160	170.00	120994	800	320	178.00
120965	1000	200	196.00	120995	1000	400	204.00
	440 Volts, 60 Cycles				**2200 Volts Primary, 60 Cycles**		
120966	5	4	73.00	120996	5	20	175.00
120967	10	8	77.00	120997	10	40	176.00
120968	15	12	80.00	120998	15	60	177.00
120969	25	20	88.00	120999	25	100	178.00
120970	50	40	98.00	121000	50	200	179.00
120971	75	60	105.00	121001	75	300	180.00
120972	100	80	111.00	121002	100	400	181.00
120973	150	120	120.00	121003	150	600	182.00
120974	200	160	125.00	121004	200	800	187.00
120975	300	240	133.00	121005	300	1200	197.00
120976	400	320	145.00	121006	400	1600	210.00
120977	500	400	160.00	121007	500	2000	224.00
120978	600	480	170.00	121008	600	2400	240.00
120979	800	640	190.00	121009	800	3200	269.00
120980	1000	800	218.00	121010	1000	4000	290.00

LOOSE LEAF METER BOOKS, SHEETS AND SEALS



Standard Meter Book Sheet 8½x5½ Inches
Illustration is half actual size



Pocket Size Meter Book

METER BOOKS AND SHEETS

These meter books are equipped with the celebrated I-P adjustable nickel-plated binders which permit the book to be open flat at any point for the removal or insertion of sheets without in any manner disturbing the other sheets.

The standard books have rigid cloth binding with leather backs and corners and take standard sheets 8½x5½ inches.

The pocket edition is proving even more popular than the standard size. It is made of flexible leather as per illustration and takes sheets measuring 5½x3½ inches.

Trade No.	Description	Price Each
08240	No. 1 binder complete with 100 sheets, standard size, 8½x5½ inches	$2.00
104745	No. 1 binder only, capacity 100 sheets, cloth bound, leather backs and corners	1.50
08241	No. 2 binder complete with 200 sheets, standard size, 8½x5½ inches	2.75
104746	No. 2 binder only, capacity 200 sheets, cloth bound, leather backs and corners	1.75
08242	Extra meter sheets, standard size, 8½x5½ inches, for Nos. 1 and 2 binders per 100	.50
08243	Linen tabbed indexes for Nos. 1 and 2 binders, extra per set	1.00
104747	*No. 3 binder complete with 100 sheets, pocket size, 5½x3½ inches	3.10
104748	No. 3 binder only, capacity 150 sheets, flexible leather	2.60
104749	Extra meter sheets, pocket size, 5½x3½ inches, for No. 3 binder, per 100	.50
104750	Linen tabbed indexes for No. 3 binder, extra per set	.65

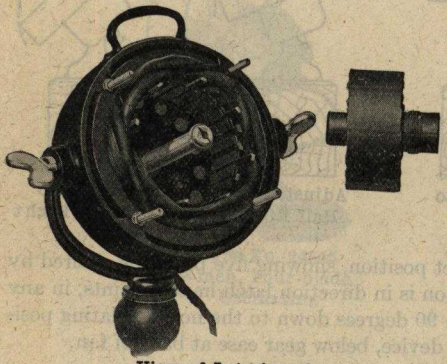
METER SEALS

8244	Seals and wire, per 100	.50
8235	Sealing tool, 7 inches long, with initials	4.50

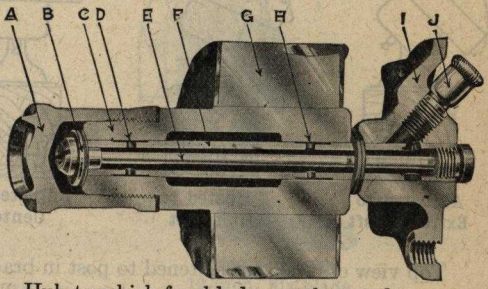
*Capacity 150 sheets.

EMERSON FANS

NON-OSCILLATING INDUCTION DESK BRACKET FANS



View of Interior of Induction Type Motor



A—Hub to which fan blades are fastened.
B—Armature retaining nut and washers.
C—Armature hub of soft cast iron.
D—Oil slots in hollow steel shaft.
E—Stud through center of hollow shaft.
F—Hollow shaft of case-hardened steel.
G—Armature of laminated iron.
H—Rear oil slots in shaft.
I—Portion of rear housing or motor case.
J—Oil cup with removable cap, leading to center of shaft.

Five-year factory guarantee to the user accompanies each Emerson Fan, with post card coupon for factory registration of guarantee.

No moving contacts, brushes or commutator. Motors are of the pure induction type, as illustrated, which run for many years without repair or adjustment.

Quiet motors, designed, manufactured and adjusted with the greatest precision and care.

Fine speed regulation: Three distinct speeds, made possible by modern motor design and absence of starting contacts.

Strong air-moving power. Breeze enough at high speed to satisfy any user in any weather.

Reasonable current consumption without sacrificing breeze-power or simplicity of design for a negligible saving of a few watts.

Convertible desk bracket base; the most secure and simple device (patented) for changing any desk fan to a bracket fan in a moment without extra parts. Remove a set screw, readjust the base and replace the screw; the motor may be adjusted in any direction but the joint cannot slip. The fan is secure.

Famous ½-inch diameter hardened steel shaft, a tapered hollow spindle F which is pressed into the rear housing I and supports the rotor G, fitted to the shaft with the greatest accuracy.

Oil-tight dust-proof bearing which can not throw oil over wall or furnishings; fan hub A screws firmly over the front end of armature hub C against a leather washer which makes an oil-tight joint and keeps oil inside the bearing.

Simple oiling arrangements (no cup to unscrew); oil inserted through oil cup J runs into hollow center of shaft and direct to bearing surfaces through slots D and H. Reserve supply of lubricant sufficient for one season in inner recess between shaft and armature when fan is shipped from factory.

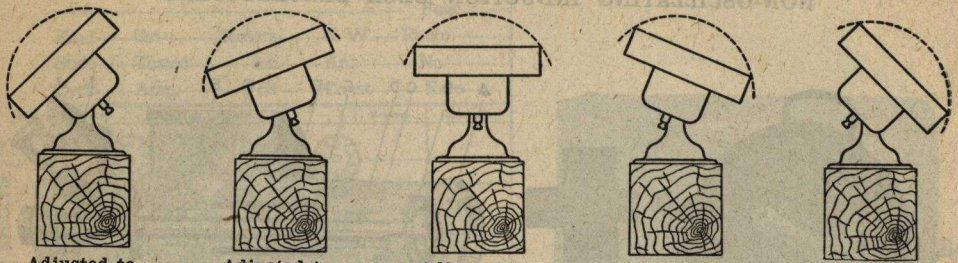
In use for eighteen years, this bearing has been proved to be ideal for fan service. The soft porous iron of the armature hub C, running on the hardened steel shaft F and absorbing oil, develops a glaze which improves the bearing surfaces with successive years of service.

Parker quiet fan blades, scientifically designed, secure breeze without noise.

Complete with cords and plugs attached and tested out at the factory, saving trouble and expense to every retailer who sells Emerson Fans.

EMERSON FANS

OSCILLATING DESK BRACKET FANS



Adjusted to Extreme Left | Adjusted to Half Left | Adjusted to Center | Adjusted to Half Right | Adjusted to Extreme Right

Top view of oscillator fastened to post in bracket position, showing five positions secured by adjusting collar. Note that center of arc of oscillation is in direction latch handle points, in any position. The arc of oscillation may be varied from 90 degrees down to the non-oscillating position by moving the adjustable member of oscillating device, below gear case at back of fan.

A Successful Oscillating Mechanism

The oscillating mechanism of Emerson Fans has demonstrated its practicability in service. Many thousands of fans equipped with practically the same device have been placed in service during the past five years. No radical changes in design have been necessary, although minor improvements have been made.

Smooth operation is assured by the positive acting single-link mechanism, operated by worm-wheel, gear and pinion, enclosed in the gear case at back of motor. All wearing parts are of liberal proportions, insuring ample strength for continued service for many years.

All parts of the mechanism of the device are renewable without taking the motor apart or removing the fan blades or guard. A screwdriver is the only tool needed.

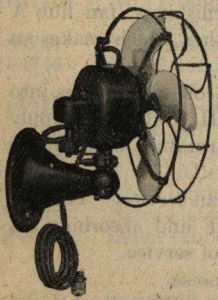
The arc or range through which the fan oscillates is instantly adjustable from 0 to 90 degrees through a number of different positions in each of which the device is automatically secured.

The non-oscillating position is readily secured and retained by the adjustable device.

Hinged desk-bracket base is adjustable to straight or angular position by removing wing screw in spherical portion of stand.

Fan may be tilted up or depressed by loosening wing screw, with adjustability similar to that of a trunnion fan. These fans may be mounted high and pointed down to reach many persons without annoyance to those near by.

No need for shelves or brackets to mount Emerson Fans on post or wall; no adapters, tools or extra parts needed to change from desk fans to bracket fans.



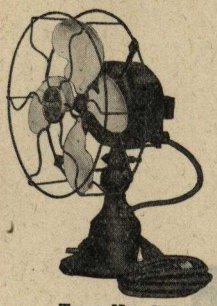
Oscillating Fan in Bracket Position

Adjusting collar permits motor to be swiveled instantly to change the direction of breeze, without changing the position of the base. This feature is independent of adjustment for varying the arc of oscillation and is especially useful when base is screwed to wall.

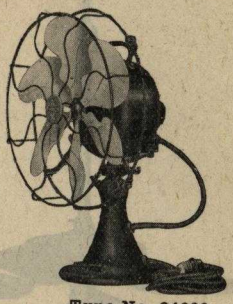
Automatic lock on adjusting collar, which is secured in any one of five positions by spring on latch handle.

Increased value and convenience to the user is the result of this facility of adjustment. These fans may be fastened to wall in corners without wasting breeze on a blank wall, and may be installed on side walls as in picture theatres and pointed to assist general air movement in one direction, toward air outlets.

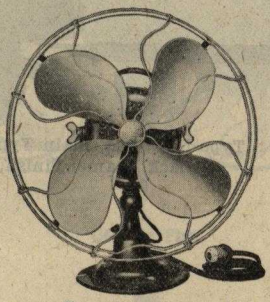
EMERSON FANS



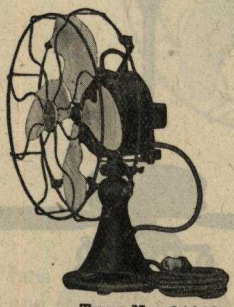
Type No. 24645
9-inch, Four-blade
Oscillating



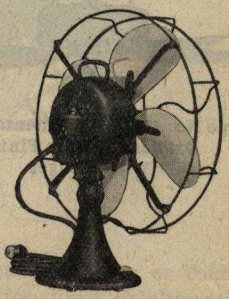
Type No. 24666
12-inch, Six-blade
Oscillating



Type No. 19648
16-inch, Four-blade
Non-oscillating



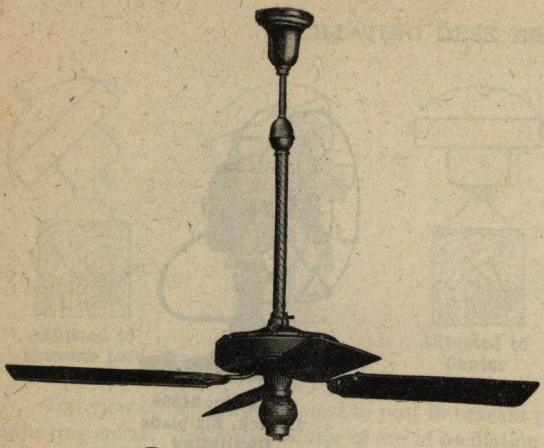
Type No. 24646
12-inch, Four-blade
Oscillating



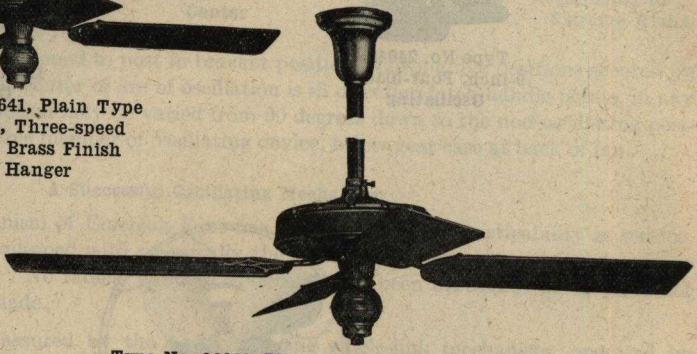
Type No. 24648
16-inch, Four-blade
Oscillating

Detailed Descriptive Bulletin and Prices Furnished upon Application

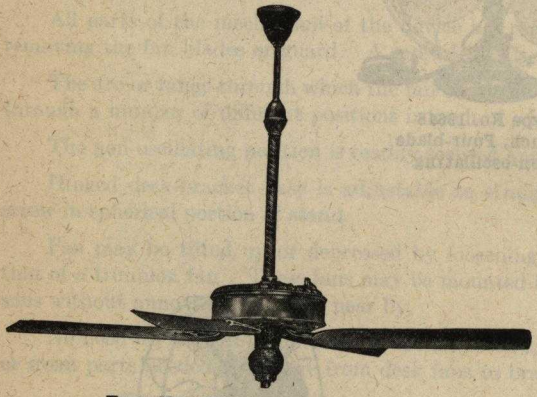
EMERSON FANS



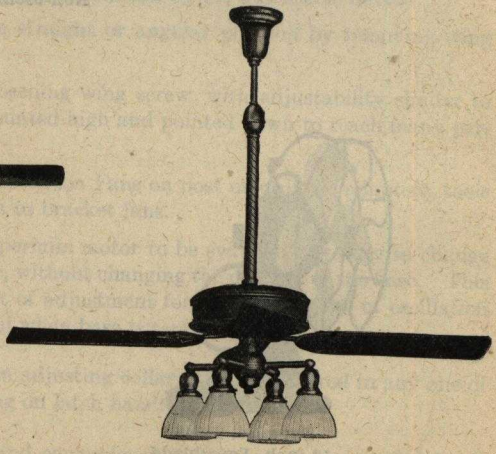
Type No. 37641, Plain Type
Four-blade, Three-speed
Light Mat Brass Finish
With Hanger



Type No. 36641, Plain Type, Four-blade, Three-speed
Black Enamel Finish, Without Hanger Pipe



Type No. 42641, Ornamental Type
Oxidized Copper Finish
With Hanger

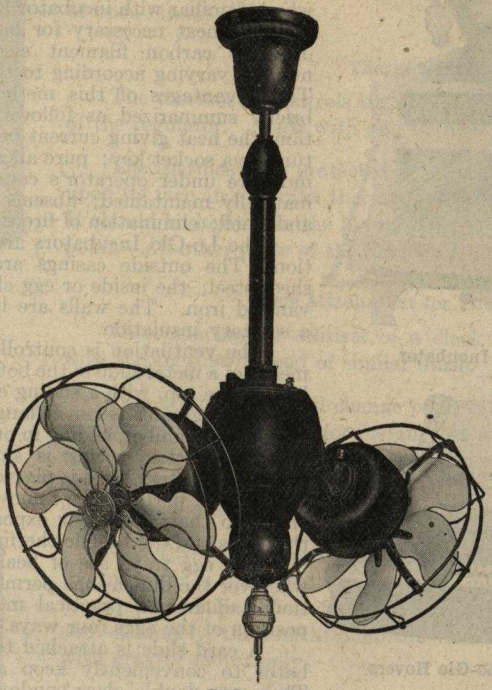


Type No. 42641
With Electrolier Attachment

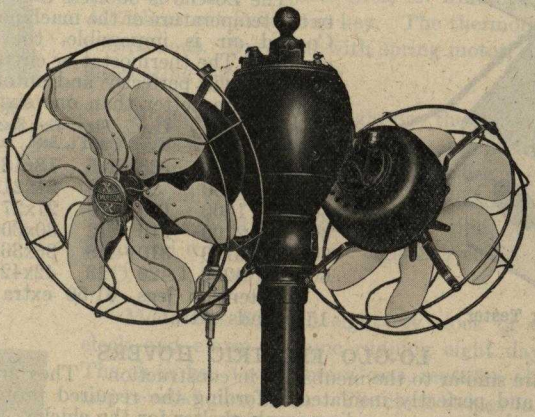
Detailed Descriptive Bulletin and Prices Furnished on Application

EMERSON FANS

DUPLEX ROTARY CEILING FANS



Ceiling Fan

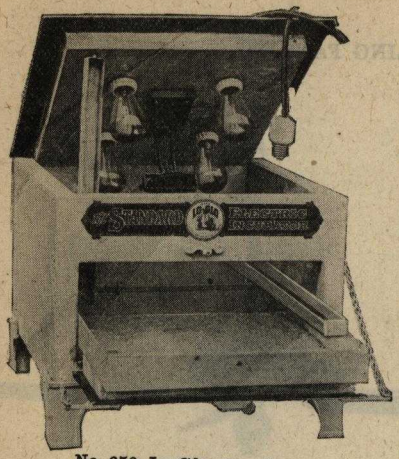


Column Fan

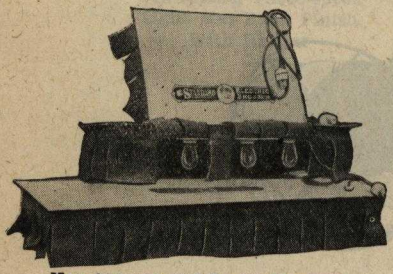
These fans are of the gyrating type supplied with ceiling, column or counter column mountings and equipped with 12-inch or 16-inch fan motors for direct or alternating current. They are particularly adapted for large rooms, hotel lobbies, theater foyers, banking and reception rooms; in fact, any place where a lively and general movement of air is more desirable than a strong steady breeze.

Detailed Descriptive Bulletin and Prices Furnished on Application

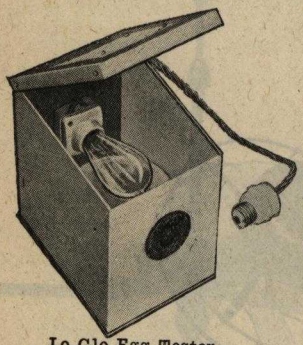
LO-GLO ELECTRIC INCUBATORS



No. 650 Lo-Glo Incubator



Nos. 200, 201, 202 Lo-Glo Hovers



Lo-Glo Egg Tester

LO-GLO ELECTRIC INCUBATORS

The successful application of electricity to incubation is today a fact, and its superiority for the purpose of hatching, hovering and breeding chicks, ducks, turkeys, pheasants, etc., will be apparent to any one who is familiar with incubator hatching in general.

The heat necessary for hatching is produced by ordinary carbon filament electric light bulbs, the number varying according to the size of the machine. The advantages of this method of heating may be briefly summarized as follows: Simplicity of operation, the heat giving current being supplied by merely turning a socket key; pure air and perfect ventilation; moisture under operator's control; the heat is automatically maintained; absence of smoke, soot, fumes and smell; elimination of fire risk.

The Lo-Glo Incubators are of all metal construction. The outside casings are of heavily enameled sheet steel; the inside or egg chamber is of heavy galvanized iron. The walls are lined with asbestos and a sanitary insulation.

The ventilation is controlled from the outside by means of a metal slide in the bottom and a small 5/8-inch hole in the top, with a sliding cover. The moisture or humidifying tank is on a flange attached to the side of the egg chamber, sliding in or out and easy of access.

The electric wiring is surrounded by approved insulating material and is placed between the outer and inner metal parts of the removable top lid of the machine, so that nothing is exposed but the sockets for the bulbs and the Lo-Glo thermostat or circuit breaker.

The egg trays are of heavy galvanized wire and wherever the dimensions permit they are made in sectional squares, a practical method for changing the position of the eggs four ways.

A card slide is attached to the side of each incubator to conveniently keep a record of the hatch. There are double glass windows in the door of every machine.

The Lo-Glo is odorless and the air is only heated to the temperature of the machine (102 or 103 degrees). Cooked air is impossible, the humidity remaining normal. The thermostat or circuit breaker, after being once set, will perfectly and automatically control the temperature better than one sixty-fourth of a degree.

Trade No.	Mfrs. No.	Cap. Eggs	Size Cu. Ft.	Floor Space Reqd., In.	Weight, Pounds Uncrated	Crated	Price Each
60339	650	65	5	18x18	42	65	$22.00
60340	850	85	6	21x21	52	80	26.00
60342	1600	160	10	27x27	86	130	32.00
60343	2100	210	12	30x30	100	145	38.00
60344	3100	310	18	36x36	130	185	44.00
60345	4200	420	23	42x42	165	225	50.00

Extension legs, $1.50 extra. Weight with legs, 15 pounds extra.

LO-GLO ELECTRIC HOVERS

Lo-Glo Hovers are similar to the incubators in construction. They are of metal, very light in weight, portable, and perfectly insulated, affording the required protection. A curtain of quality felt surrounds the frame, providing ample shelter for the chicks. Also 8 feet of flexible cord are furnished with each hover.

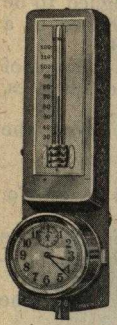
Trade No.	Mfrs. No.	Capacity, Chicks	Price, Each
60346	200	50	$5.50
60347	201	100	7.00
60348	202	150	9.00

LO-GLO ELECTRIC EGG TESTERS

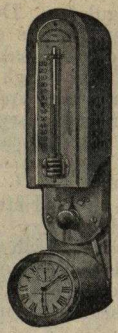
All metal construction, with a powerful reflector, 6 feet of flexible wire and plug attachment. Can also be used as a candling box. This tester should be ordered with all machines.

Trade No.		Price, Each
60349	Lo-Glo egg tester	$2.50

MINNEAPOLIS HEAT REGULATORS



No. 35



No. 47

Regulator

This regulator consists of a thermostat, a motor, and two cells of open circuit battery.

Thermostat

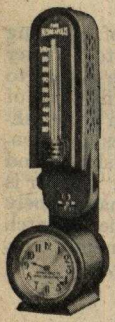
The thermostat controls the operation of the whole mechanism of the regulator. Made with and without a time attachment.

The thermostat is protected by an ornamental screen, having upon its face an accurate thermometer, and is finished in bronze. It should be located in the living room at an average temperature point. All other parts of the device are located in the basement.

Time Attachment for Thermostat

This attachment consists of a clock mounted in connection with the thermostat and of similar finish.

This arrangement will change point of temperature control at any predetermined hour; for instance, it will hold the temperature at night at 60° and will automatically raise the temperature to 70° at the rising hour. It is not necessary to use the time attachment except when desired.



No. 55



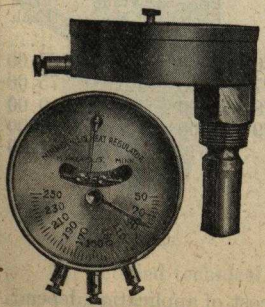
No. 60

Model No. 35 is furnished with a clock time attachment. The thermometer is small and inconspicuous and is an ornament to any room. Model No. 35 is furnished only in one design, as shown above; namely, the time attachment with one-day clock. Operated with gravity motor only.

Model No. 47 with one-day clock. The clock is hinged in front and swings in a complete circle for winding. It is easily removed. All arbors wind with one key. The thermometer is small and inconspicuous. Operated with spring motor, direct current motor or alternating current motor.

Model No. 55 duplex eight-day thermostat. Will automatically lower the temperature at night to any desired point, and at any predetermined hour in the morning raise the temperature to any desired point. With this model the device is entirely automatic. The only thing necessary is to wind the clock once a week. Equipped with a handsome eight-day clock. Operated with spring A. C. or D. C. motor.

Model No. 60 with eight-day clock of very high-grade, both clock and alarm of same running eight days with one winding. The clock has a solid brass case, repeater alarm, jeweled balance, and beveled glass front. The clock swings in a complete circle and does not have to be removed for winding. Operated by spring motor, direct current motor or alternating current motor.

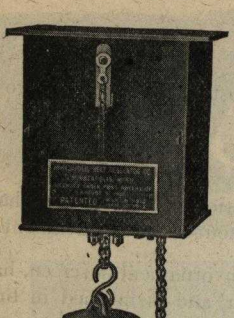


No. 65

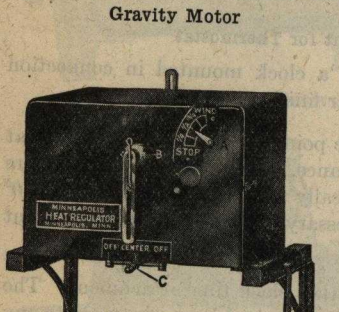
Model No. 65 is the same in electrical construction as the other models. Especially adapted for the control of valves, dampers, etc., for the regulation of hot water tanks, steam, bake ovens, etc. Operated with spring motor, direct current or alternating current motor.

Further information and prices on following page.

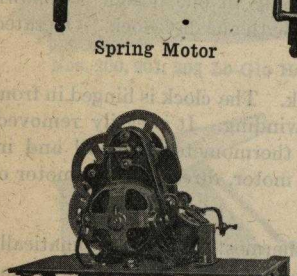
MINNEAPOLIS HEAT REGULATORS



Gravity Motor



Spring Motor



Direct Current Motor

Gravity Motor

Furnished only with No. 35 regulator. Designed to be fastened to the ceiling of the basement. Is enclosed in a pressed steel case, finished in black enamel, baked.

The power is furnished by an iron weight, which is of ample size to lift all dampers on the modern types of furnaces, and no special expensive dampers are necessary.

All motors, when run down, automatically leave the drafts closed.

Spring Motor

The motor is encased in a solid pressed steel cover, No. 22 gauge, finished in black enamel, baked.

There is an index finger with scale which travels as the motor is wound and unwound, a glance at the motor showing at all times the condition in reference to winding.

The cover is dustproof, cotton sleeving being used at the shaft.

The motor is also provided with basement switch by means of which the motor can be operated in the basement at will.

Easily wound by means of a crank key.

Furnished with Nos. 47, 55, 60 and 65 only.

Batteries

Two cells of open circuit battery are used, and as no work is required of the battery except releasing the motor, and it is in service only a second at a time, it will last a number of years.

Direct Current Motor

This motor has ample power and is capable of handling the heaviest work that a heat regulator can be put to. Power is furnished by four dry cells which have ample power to operate the device for a full heating season. A new set of dry cells should be installed each fall. Aside from replenishing the batteries and oiling once a year it requires no attention. All shafts run in finely adjusted brass bushings and motor is as finely adjusted as a high-priced clock. Motor is encased in a dustproof, 22-gauge steel cover, handsomely finished in black enamel. Furnished with basement switch by which it may be operated at will in the basement. Furnished with Nos. 47, 55, 60 and 65 regulators only.

Alternating Current Motor

Designed to operate directly from the lighting circuit. Operates with 110-volt, 60-cycle alternating current, but a small transformer is mounted on bottom of the case and this cuts down the voltage of the current which operates the thermostat and magnet coils. This makes the installation very simple, as the motor and transformer are complete in one unit. Furnished with Nos. 47, 55, 60 and 65 regulators only.

Model No.	Time Attachment	With Gravity Motor Trade No.	With Gravity Motor Price Each	With Spring Motor Trade No.	With Spring Motor Price Each	With D. C. Motor Trade No.	With D. C. Motor Price Each	With A. C. Motor Trade No.	With A. C. Motor Price Each
35	One-day clock	102792	$35.00	.....	....	.....	....	.....	....
47	One-day clock	.....	....	019433	$47.00	122076	$57.00	122080	$67.00
55	Duplex clock	.....	....	122075	55.00	122077	65.00	122081	75.00
60	Eight-day clock	.....	....	019434	60.00	122078	70.00	122082	80.00
65	Hot water regulator	.....	....	019435	65.00	122079	75.00	122083	85.00
Thermometer only								019436	1.30

Description of above regulators on preceding page.

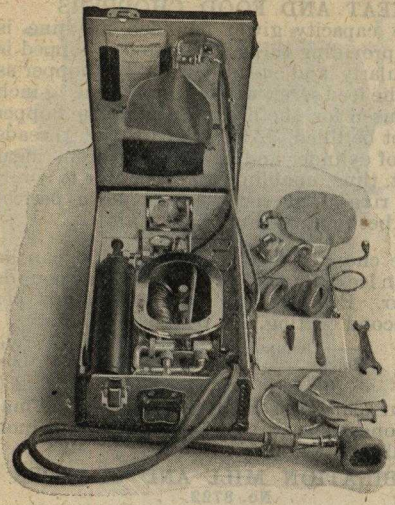
Prices include wire, and all hardware, complete, ready to install.

Directions for installing with each regulator.

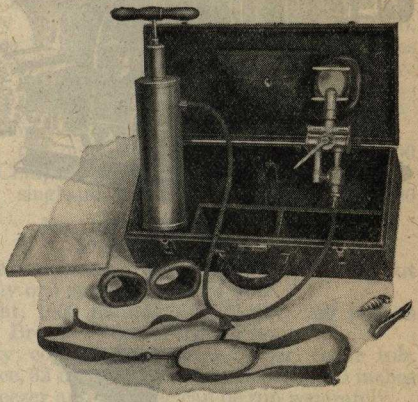
Shipping weight, approximately 30 pounds each.

NOTE.—Regulators can be readily applied to any style heater, the cost of application depending upon the size and style of heating apparatus. Special dampers will be furnished if desired.

DRAEGER OXYGEN APPARATUS



Standard Pulmotor



Type B Pulmotor

STANDARD PULMOTORS

The standard pulmotor is operated by compressed oxygen and is automatic. The operator is not called on for physical exertion; he can give all his attention to the patient.

This apparatus creates respirations identical in volume and cadence with those of natural respiration, regardless of age or physical development. It may be used on any patient with safety and comfort, no matter how badly he may be injured.



Self-rescue Apparatus

TYPE B PULMOTORS

The Type B pulmotor satisfies the need of a small, light weight, hand-operated resuscitation apparatus which can be operated independent of any oxygen supply, and carried on foot, if need be to the scene of accident. This machine assures the scientific control of lung pressures.

SELF-RESCUE BREATHING APPARATUS

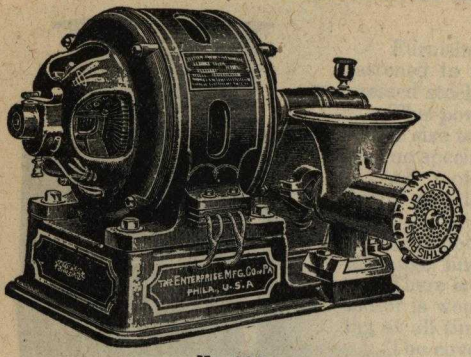
This apparatus consists of an oxygen cylinder and supply valve, breathing bag, regenerator, respiratory pipe with rubber mouth-piece and nose clamp.

The machine is simple, and yet possesses the highest degree of efficiency. It affords protection against poisonous and deadly gases for a full working period of one half hour.

For detailed technical specifications and description of the above apparatus, send for separate catalogues.

ENTERPRISE POWER CHOPPERS AND COFFEE MILLS

FOR DIRECT AND ALTERNATING CURRENT



No. 822

MEAT AND FOOD CHOPPERS

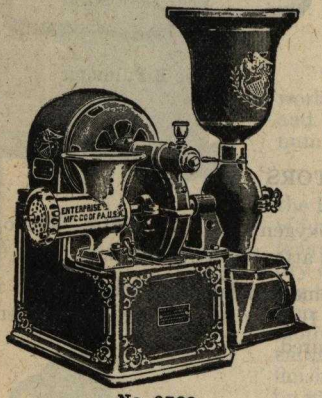
The capacity given for each machine is correct, providing the material to be chopped is fed regularly and steadily into the hopper as fast as the feed screw will take it and the ⅜-inch plate is used for the first cutting. The hopper must not be filled. Always keep the threads on end of cylinder and on ring free from meat and dirt, thus enabling the operator to screw up the ring tight enough to make a perfect contact between the knife and plate.

No. 822

The chopper is detachable, so it can be placed in ice chest. Capacity: Pork, 300 pounds per hour. Beef, first cutting, 200 pounds per hour, second cutting, 100 pounds per hour.

Trade No.	Dimensions, Inches — Height	Length	Width	Wt. Lbs.
69491	16	25	19	230

Four plates are furnished with each machine; one, each, with ⅛, 3/16, ¼ and ⅜-inch holes; also four knives.



No. 8722

COMBINATION MILL AND CHOPPER

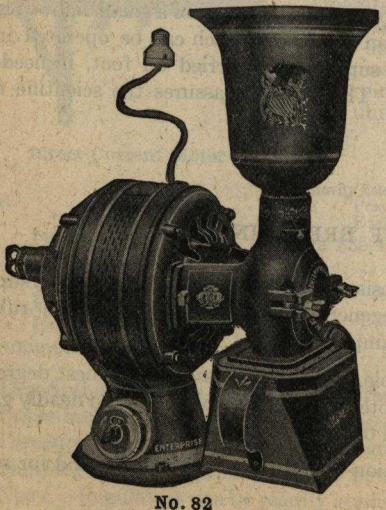
No. 8722

Designed to meet the requirements of those handling groceries and meats. The chopper is detachable, so it can be placed in ice chest, if desired. Furnished with ¾ horse power motor for direct current and ½ horse power for alternating current. Capacity: Granulating, 1½ pounds of coffee per minute; pulverizing, ⅜ pound of coffee per minute. Pork, 300 pounds per hour. Beef, first cutting, 200 pounds per hour.

Can be regulated to grind coffee fine or coarse while mill is running. Pulverizing grinders furnished only when so ordered.

69492	30	25	26	275

Four plates are furnished with each chopper; one, each, with ⅛, 3/16, ¼ and ⅜-inch holes; also four knives.



No. 82

COFFEE MILLS

No. 82

Designed to meet the requirements of the small grocer, also for use in hotels and restaurants. This machine has the desirable feature that the grinders are direct-connected with the shaft of motor, thus dispensing with the use of gears. Capacity, granulating, 1½ pounds of coffee per minute. Can be regulated to grind coarse or fine while running. Motor, ¼ H. P.

69493	23	20	10	85

No. 0862½

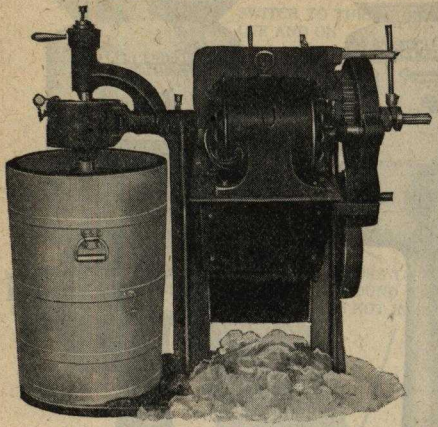
No. 0862½ is the same as No. 82, except that it has two mills—one mill fitted with tooth grinders which cut the coffee for granulating, the other with ribbed grinders for pulverizing. Both mills can be operated at same time if so desired. Capacity, granulating 2½ pounds of coffee per minute, pulverizing ½ pound of coffee per minute. Can be regulated to grind coarse or fine while running. Fitted with ½ H. P. motors.

69494	25	27	20	130

Prices quoted on application.

When ordering, specify whether direct or alternating current. If direct, give voltage; if alternating, give voltage, cycle and phase.

AMERICAN COMBINATION FREEZERS AND ICE BREAKERS



No. 101

No. 101—TWO SPEEDS
10-gallon Capacity

These machines have no pulleys or belt; driven direct by electric motor.

Weight, 1000 pounds. Capacity, 250 gallons per day. Breaks 3 tons of ice per hour.

Heavy copper can, spiral beater, cedar tub. Floor space, 32 inches wide, 50 inches long, 50 inches high. Freezer and breaker can be run separately.

Trade No.	Description	Price Each
90593	Complete with 2 H. P., 60-cycle, two or three-phase A. C. motor	$280.00
90594	Complete with 2 H. P., 60-cycle, single-phase A. C. motor.....	313.00

No. 102—ONE SPEED
10-gallon Capacity

These machines are the same as No. 102, but run at only one speed instead of two.

Weight, 1000 pounds. Capacity, 250 gallons per day. Breaks 3 tons of ice per hour.

Heavy copper can, spiral beater, cedar tub. Floor space, 32 inches wide, 45 inches long, 50 inches high. Freezer and breaker can be run separately.

90595	Complete with 2 H. P., 60-cycle, two or three-phase A. C. motor	264.00
90596	Complete with 2 H. P., 60-cycle, single-phase A. C. motor.....	291.00
90597	Complete with 2 H. P., D. C. motor	275.00



No. 103

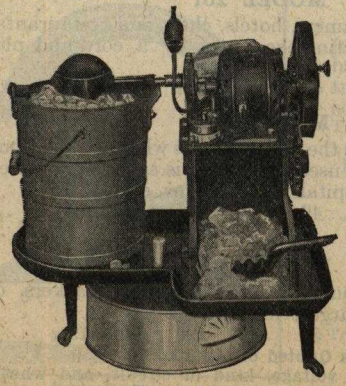
No. 103
5-gallon Capacity

A practical machine for druggists, hotels, restaurants and confectioners.

These machines are similar to the 10-gallon freezers, with the exception that the crusher is driven by a link belt.

Copper can, spiral beater, cedar tub. Weight, 500 pounds. Floor space, 26 inches wide, 32 inches long, 42 inches high.

90598	Complete with 1 H. P., D. C. motor	175.00
90599	Complete with 1 H. P., 60-cycle, single-phase A. C. motor.....	175.00



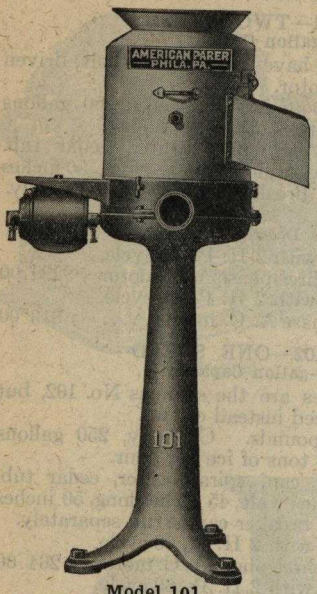
No. 104

No. 104
4, 6 and 8-quart Capacity

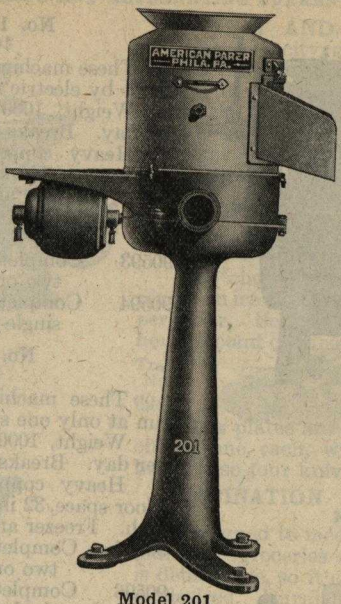
These small freezers have been designed to save the labor attached to making ice cream and also guarantees cleanness and purity of homemade products. It stands on four ball-bearing casters, and is only 28 inches high. It will run any other small machine, such as a washing machine, etc. Easily attached to any electric light socket. Weight, 165 pounds.

Trade No.	Cap. Qts.	Description	Price Each
90600	4	Complete with ⅙ H. P. D. C. motor.....	$70.00
90601	4	Complete with ⅙ H. P. A. C. motor.....	80.00
90602	6	Complete with ¼ H. P. D. C. motor.....	80.00
90603	6	Complete with ¼ H. P. A. C. motor.....	85.00
90604	8	Complete with ¼ H. P. D. C. motor.....	90.00
90605	8	Complete with ¼ H. P. A. C. motor.....	95.00

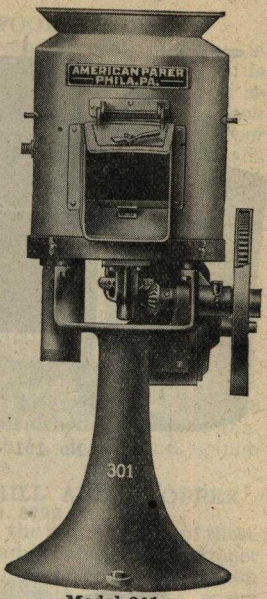
AMERICAN VEGETABLE PARING MACHINES



Model 101



Model 201



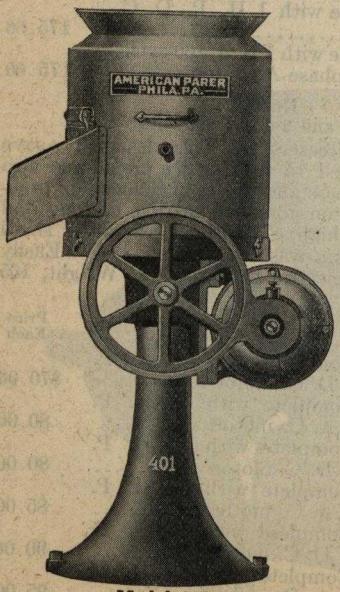
Model 301

These machines will remove solely by friction, the refuse or outer skin from vegetables.

These machines in all sizes are made to conform to the power requirements of all locations, furnished with either direct or alternating current enclosed motors.

The work is done as follows: Start the motor, turn on the water, empty into the cylinder at one time sufficient potatoes, or other vegetables, to almost fill it up. The friction disc will at once cause the contents to form a rotary motion and come in contact with the cylinder, which will immediately cause the return of the potatoes, etc., to the center of the disc, from where they are again taken to the side of the cylinder and so the movement of the contents repeats itself, while the whole time, by gentle friction and rubbing contact with the disc, the outer skin only is being removed without tearing or bruising the vegetables. The water is constantly sprayed over them, thoroughly washing them and also carries off the parings from the machine through the waste outlet.

In these various machines it takes from 2 to 3 minutes to pare each load of potatoes.



Model 401

MODEL 101

This model is made specially for yachts, cafes, clubs, small restaurants, hotels and other institutions. These machines use the power taken from any light socket by a cord and plug.

Trade No.	Capacity Pounds	Motor H. P.	Height Inches	Cylinder Size, In.	Floor Space Inches	Price Each
87010	15	1/8	48	11½x12	17x17	.....

MODEL 201

Designed for steamers, hotels, clubs and restaurants and can be run by connecting the motor by a cord and plug to light socket.

87011	25	¼	49	13 x13	17x17	.....

MODEL 301

This model meets the requirements where 10 to 25 bushels of potatoes, etc., are used daily, and is specially adapted for prominent hotels, hospitals, sanitariums, etc.

87012	40	½	49	15 x17	19x19	.....

MODEL 401

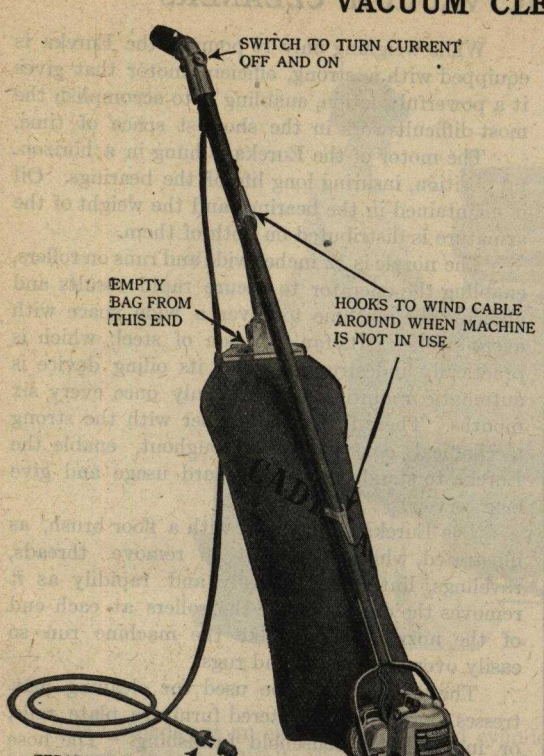
This model is built specially for food packers, ocean steamships and the largest institutions.

87013	60	1	50	20 x20	19x19	.....

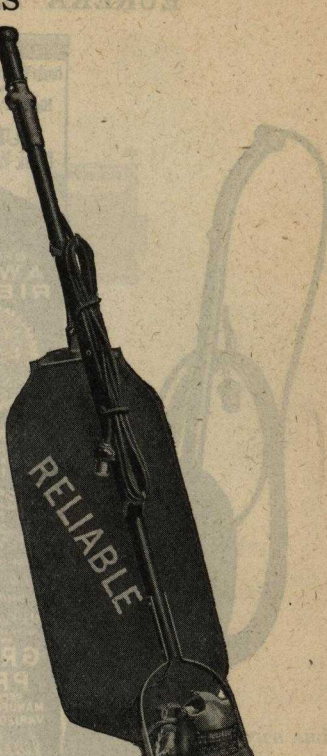
Prices Quoted on Application

In ordering, specify voltage, kind of circuit, and whether alternating or direct current motor is desired.

VACUUM CLEANERS



Model 16

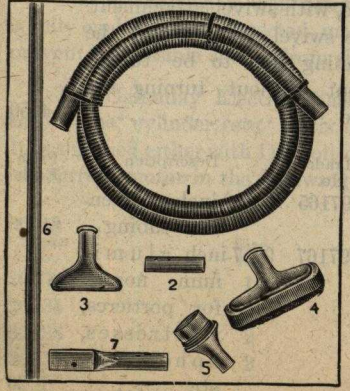


Model 21

CADILLAC, MODEL 16

This machine has more power and stronger suction than any cleaner of same class on the market. Added to this are several distinctive features: Pistol grip handle, flush switch in handle. Universal motor (can be operated on direct or alternating current), fitted with 12-inch nozzle and revolving brush for picking up lint and threads. No complicated bag connections. Has full aluminum frame, making the machine light and durable. Can be converted into a blower as desired. The machine is of low construction, which enables the operator to sweep under heavy furniture. It is absolutely guaranteed by us.

Trade No.	Model	Weight Pounds	Price Each
100467	16	9	$32.50



Attachments

RELIABLE, MODEL 21

This machine is all that the name implies. Similar to the Cadillac, Model 16, with the exception of straight handle in place of pistol grip. The whole machine is a trifle smaller, having a 10½-inch nozzle. This machine is covered by the same guarantee as the Cadillac, Model 16.

Trade No.	Model	Weight, Pounds	Price, Each
100468	21	8	$25.00

EXTRA ATTACHMENTS FOR ABOVE CLEANERS

No. 1—8 feet of best covered hose.
No. 2—Nipple for hose to connect No. 3 or No. 4.
No. 3—Nozzle for furniture, draperies, mattresses, etc.
No. 4—Brush for clothes, woodwork, etc.
No. 5—Hose connection, to connect hose to machine.
No. 6—Extension handle to reach high places.
No. 7—Tool for cleaning books and radiators.

Trade No.	Description	Price, Each
100469	Complete as listed above.....	$7.50

Moving picture machine slides and advertising material furnished to dealers upon request.

EUREKA ELECTRIC VACUUM CLEANERS



Cleaner

While weighing only 10 pounds, the Eureka is equipped with a strong, efficient motor that gives it a powerful suction, enabling it to accomplish the most difficult work in the shortest space of time.

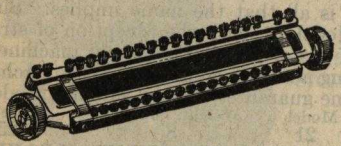
The motor of the Eureka is hung in a horizontal position, insuring long life of the bearings. Oil is maintained in the bearings and the weight of the armature is distributed on both of them.

The nozzle is 12 inches wide and runs on rollers, enabling the operator to secure rapid results and allowing the machine to cover a wide space with every stroke. Its fan is made of steel, which is practically indestructible, and its oiling device is automatic, requiring attention only once every six months. These features, together with the strong mechanical construction throughout, enable the Eureka to stand up against hard usage and give long service.

The Eureka is equipped with a floor brush, as illustrated, which enables it to remove threads, ravelings, lint, etc., as easily and rapidily as it removes the dust. Notice the rollers at each end of the nozzle, which make the machine run so easily over the carpets and rugs.

The machine may be used for cleaning mattresses, portieres, upholstered furniture, plate rails, or indeed, any household furnishing. The hose attachment is fitted right onto the front of the machine and, together with various tools, any object may be reached and thoroughly cleaned.

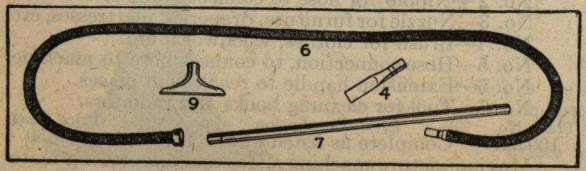
Trade No.	Description	Price Each
097158	Eureka Cleaner with floor brush	$37.50
097174	Set of attachments	6.50



Floor Brush

ATTACHMENTS

Trade No.	Part No.	Description	Price Each
097162	4	Attachment for cleaning radiators, book-cases, etc.	$0.80
097164	6	8-foot 1¼-inch web covered hose, with swivel attachment. The swivel joint allows the cleaning tool to be turned about without turning the hose	4.50
097165	7	30-inch extension tubing	$1.00
097167	9	7-inch aluminum nozzle, for portieres, mattresses, upholstery, etc.	1.20



Attachments

GAINADAY ELECTRIC WASHERS AND WRINGERS



The Gainaday is an electrically operated cylinder type machine built for long service and hard wear. It is beautifully designed and finished, sturdily constructed and fully guaranteed.

The Gainaday is a washer and wringer combined and is equipped with a ¼ horse power motor of well-known make, providing ample power for running both cylinder and wringer at the same time.

A perforated zinc cylinder revolves and reverses, forcing hot water and suds through meshes of the clothes and removing all dirt without wear and tear. The cylinder is both light weight and strong. It weighs only 17 pounds. Made of zinc, it will not rust, warp or corrode.

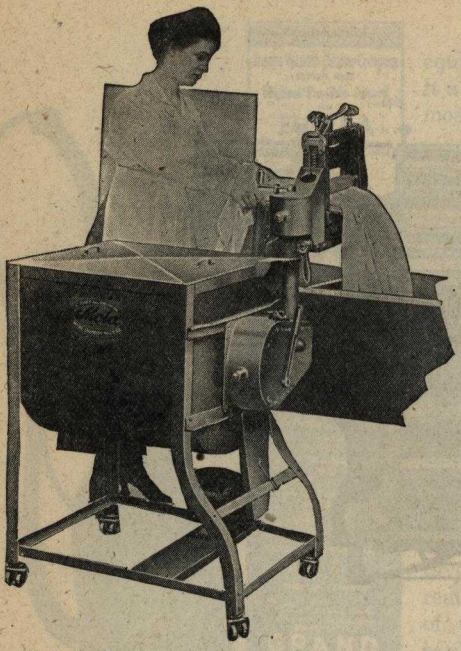
The sturdy wringer that swings into three positions in itself recommends the Gainaday. Strong supports make the wringer non-sagable. You wring the clothes direct from washer to rinse water, from rinse water to blue water, from blue water to basket without moving the machine. Saves one-half the work required in using a washer with ordinary stationary wringer.

The mechanism is well designed and strongly built with high carbon cut steel gears. It is fully enclosed and protected, making accidents impossible. The motor is thoroughly insulated, preventing possible shocks from short circuits, etc.

The Gainaday Electric Washer and Wringer is constructed entirely of metal, including tub, frame, cylinder, etc. It is compact in design and will pass through a 26-inch doorway. It is supplied either with 110-volt direct current motor or 110-volt, 60-cycle, single-phase, alternating current motor in the following types and sizes.

Trade No.	Size No.	Tub Finish	Capacity Sheets	Price Each
20034	1	Galvanized	8	$105.00
20035	1	Copper	8	120.00
20036	2	Galvanized	14	130.00
20037	2	Copper	14	145.00

MOLA HOME LAUNDRY MACHINES



The Mola Home Laundry Machine is of the cylinder type which is recognized by all experts as the only logical way to wash clothes clean without injury.

It will wash the most delicate laces or the heaviest blankets absolutely clean without injury.

The Mola is simple and easy to operate. Simply place clothes in cylinder with hot water and soap. Start the motor and the machine will do the rest.

Two levers, which are in easy reach of the operator at all times, are all that is necessary to operate this simple machine.

Construction is of metal; no wood to warp, shrink, or rot out in a short time. The body and cylinder are made of heavy galvanized steel or copper.

Cylinders are perforated with 5/16-inch clean, smooth holes, with nothing to catch or tear the clothes.

Capacity, six to eight sheets or equivalent.

All gearing is on one side of the machine, leaving the other three sides free of any obstruction to interfere with the operator. This gearing is enclosed and runs in hard oil which insures a noiseless, safe and long-life machine.

Current consumed, about two cents worth an hour. Machines can be equipped with gas heaters at a small additional expense.

Motor is 1/4 horse power special washing machine motor, large enough to operate both washer and wringer at the same time.

The Mola is furnished with stationary or swinging wringer. The illustration shows the swinging wringer machine with operator wringing the clothes from rinse water to blue water. Wringer can be set in any position, and this feature is a great labor and time saver, and appreciated by the housewife.

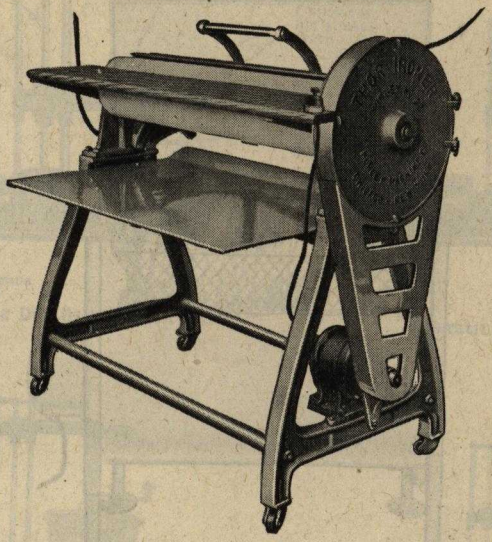
WITH STATIONARY WRINGER

Trade No.	Description	Price Each
130081	Galvanized body and cylinder	$ 90.00
130082	Galvanized body with copper cylinder	105.00
130083	Copper body, galvanized cylinder	105.00
130084	Copper body with copper cylinder	120.00
130085	Folding tub bench, extra	2.00
130086	Gas burner heating attachment, extra	3.50

WITH SWINGING WRINGER

130087	Galvanized body and cylinder	100.00
130088	Galvanized body with copper cylinder	115.00
130089	Copper body, galvanized cylinder	115.00
130090	Copper body with copper cylinder	130.00
147285	Gas burner heating attachment, extra	3.50

THOR ELECTRIC IRONING MACHINES



This electric home labor saving device wins instant approval in every household where electricity is used. That it will do 95 per cent of the home ironing alone commends it. Ironing day is turned into ironing hour.

Thor superiority is found in the simple principle of operation and construction. Any one who can fold a sheet can operate a Thor, and there are so few parts in the construction that it will never give trouble. The body is made of cast iron and all moving parts are enclosed.

The Thor is silent while in action and irons at the rate of eight feet per minute. The ironing shoe is controlled by a lever release and a snap switch instantly controls the current. The Thor drilled-hole burner gives a uniform heat and a patented air-mixer produces maximum heat with minimum consumption of gas.

One of the big new features of the Thor is the wide opening shoe. This new construction allows the shoe to drop away from the roll about 4½ inches, permitting free access to the ironing surface of the shoe. The shoe can easily be kept clean and free from starchy accumulations, and is easy to polish.

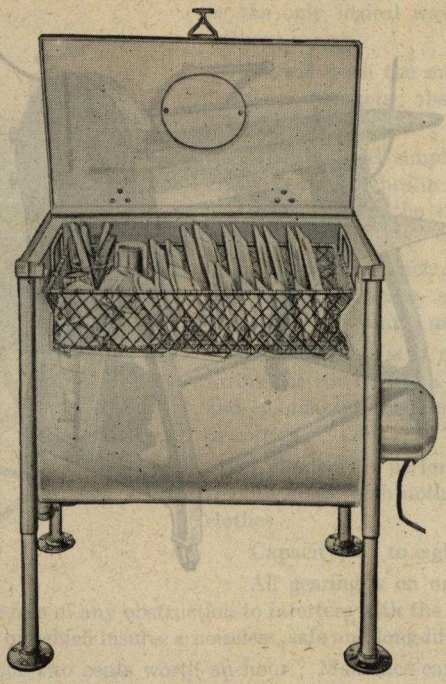
Cost per hour to operate: Electricity, 2 cents; gas, 1 cent.

The Thor Ironer is equipped with a specially designed motor, and is shipped complete ready for immediate use. Made in three sizes: The No. 38 will iron a 72-inch and the No. 44, an 88-inch sheet doubled. The No. 50, designed for the large home, small hotels, country clubs, and other institutions, will take a 100-inch sheet doubled.

Trade No.	Mfrs. No.	H. P. of Motor	Floor Space Inches	Net Wt. Lbs.	Price Each
90230	38	⅙	26x56	395	$120.00
90228	44	⅕	26x62	440	140.00
90229	50	¼	26x68	475	195.00

Gasoline attachment for heating shoe, $10.00 extra.

MINIT DISHWASHING MACHINES



Dishwasher with Portion of Front Cut Away to Show Basket in which Dishes are Placed

These machines are simple in construction and easy to operate. The dishes, glassware, knives and forks, milk bottles, and other articles are placed inside the machine in a wire container, and the dishes do not move. Instead, the propellers pick up the water from the bottom of the tank, and splash it with considerable force over all of the dishes hundreds of times in one minute, reaching the smallest recesses of the articles being cleansed in such a way that it does not endanger the frailest of light china or glassware. The water is not thrown on the dishes in a stream; the cup-shaped propellers break the water into a fine spray and the shaft, which revolves from 450 to 600 times each minute, picks up the water again just as soon as it returns to the bottom of the tank.

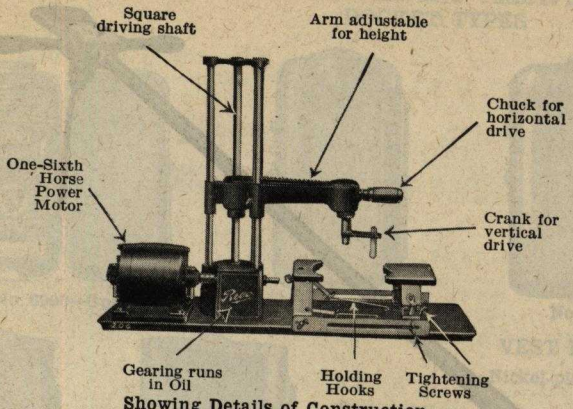
When the dishes are done there is no cleaning up work, as is the case when they are washed by hand. By a simple arrangement the Minit will drain itself automatically through a connection with the ordinary drain pipe, or it can be drained into a pail. For washing, a moderately hot water is used and for rinsing it should be very hot in order to dry, as well as sterilize, the dishes. No more water or washing powder are required than when dishes are washed by hand.

The motor is covered and protected by the housing at the side, a precaution which precludes the possibility of splashing with water or injury to the children. The outside surface is a high grade quality of white enamel, the inside is thoroughly rust proofed, quickly and easily cleaned and sterilized.

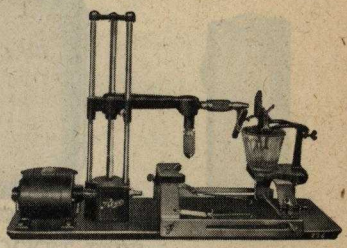
Trade No.	Description	Price Each
148543	Complete with A. C. 110-volt 60-cycle motor	$85.00
148544	Complete with D. C. 110-volt motor	85.00

Write for special prices on other voltages and frequencies.

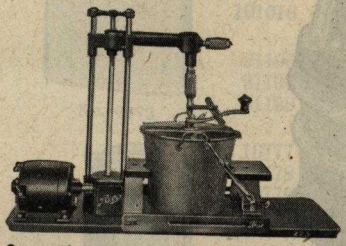
RECO ELECTRIC KITCHEN UNITS



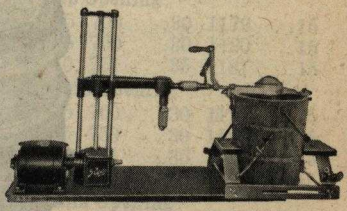
Showing Details of Construction



Operating Hand-driven Egg Whip



Operating Hand-driven Bread Mixer



Operating Ice Cream Freezer

The Reco Unit is an electrical cook, a mechanical helper, always ready to do the hard work and it costs but a few cents per week to operate.

It has been demonstrated fully that foods prepared with a Reco Unit are more palatable, delicious and healthy than when mixed, stirred, or beaten by hand. The Reco Unit never grows tired but works right along with the result that foods are mixed thoroughly, properly and completely. Think of the tedious hours spent mixing cake batter, mayonnaise, whipping cream and doing other things in the preparation of foods which require strength and patience.

The Reco Unit may be adapted to any type of cooking appliance which is turned by handle or wheel. It is so flexible that any hand-driven utensil can be driven without change or reconstruction. It is therefore unnecessary to purchase special utensils Simply use those which you have or those on sale at any hardware store.

The following are a few of the duties the Reco Unit will perform:

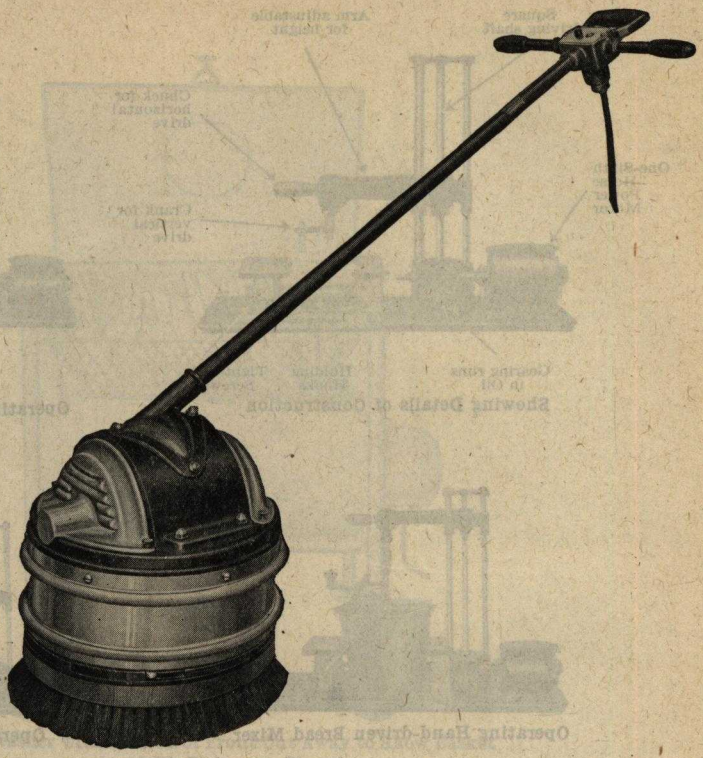
Mixing cake batter
Mixing bread
Beating eggs
Whipping cream
Stirring candy
Mixing mayonnaise
Turning ice cream freezer
Grinding coffee
Grinding nuts or spices
Polishing silver or cutlery
Sharpening knives
Etc., etc.

It is so simple, practical and easy to understand that anyone can, by reading the instruction sheet and with a little practice, operate any cooking appliance as handily as an expert.

Connect the plug to any electric light socket, prepare the ingredients and set the utensil in place, adjust the arm of unit to proper height, tighten clamps or hooks, turn the switch and let the Unit do the work.

Trade No.	Description	Price Each
25941	Unit complete with motor, buffing and grinding wheel attachment, cord and plug	$50.00

ROTARY MACHINES



Electric rotary machines, being the oldest rotary floor machines on the market, are used by thousands of people, among them office buildings, carpenter contractors, marble floor contractors, carpet cleaners, painters and decorators, wood floor contractors, building cleaners, hotels, hospitals, schools, dance halls, sanitariums, skating rinks, clubhouses, etc.

Some of the more general uses for the machine are marble surfacing, scrubbing, sandpapering, carpet scouring and shampooing, floor refinishing, and waxing and polishing.

The enclosed frame, as shown in the illustration, makes the machine waterproof and dustproof, yet allows perfect circulation of air for motor. This method of entirely enclosing machine makes it practically noiseless. The body of machine is stationary, there being no rotating parts visible except the attachment. The body is equipped with rubber bumpers, protecting walls, bases, furniture or anything that the machine might come in contact with. There is a special arrangement for adding or lessening weight of machine.

A flexible shaft outfit for buffing, grinding, polishing and burnishing side walls, bases, brass and metal fixtures, etc., can be attached in 1 minute.

A special constructed motor is installed in the machine, which gives it enormous power for a machine of this size. The finest ball bearings and the perfect machining of all parts prevents unsteadiness. All parts are made of best malleable iron, aluminum and steel. There are no wearing parts.

Machines can be adapted for bench work by change of handle.

Machines can be furnished for all currents, voltages, and cycles.

Trade No.		Price Each
106610	Combination electric rotary machine.....	$150.00

Write for Detailed Catalogue and Prices

EVEREADY DAYLOS

The Light That Says "There It Is"

POCKET TYPES



No. 6990—Open

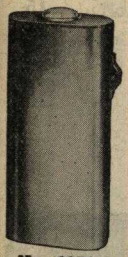


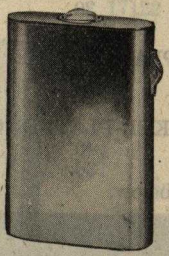
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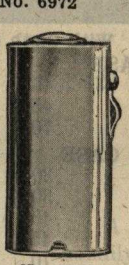
No. 6992


No. 6970


No. 6971


No. 6972

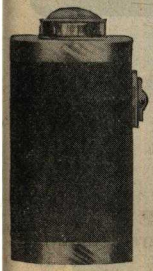

No. 6900

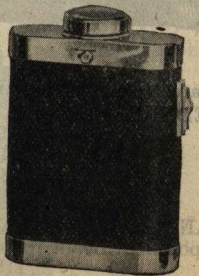

No. 6961


No. 6962



No. 6981


No. 6902


No. 6909

VEST POCKET TYPE

Nickel-plated, Side Opening

Trade No.	Mfrs. No.	Size Inches	Price, Each Complete	No. of Battery	Price, Ea. Extra Battery	No. of Bulb	Price, Ea. Extra Bulb
101014	6990	2½x1½x ⅝	$1.00	700	$0.30	1179	$0.15
101015	6991	3 x1¾x ¾	1.00	750	.30	1180	.15
101016	6992	3 x2¾x ¾	1.25	751	.35	1181	.15
Nickel-plated, Top Opening							
91196	6970	2½x1½x ⅝	.85	700	.30	1179	.15
91197	6971	3 x1¾x ¾	.85	750	.30	1180	.15
91198	6972	3 x2¼x ¾	1.10	751	.35	1181	.15
Nickel-plated, Bottom Opening							
16777	6900	2½x1½x ⅝	.75	700	.30	1179	.15
16778	6961	3 x1¾x ¾	.75	750	.30	1180	.15
16779	6962	3 x2¼x ¾	1.00	751	.35	1181	.15
101013	6954	3½x1⅞x1	1.00	792	.30	1182	.15
Silver-plated, Bottom Opening							

Designed for gifts, prizes, etc. An especially beautiful line embossed with an artistic design, quadruple silver-plated with popular gray finish.

101017	6980	2½x1½x ⅝	1.25	700	.30	1179	.15
101018	6981	3 x1¾x ¾	1.25	750	.30	1180	.15
101019	6982	3 x2¼x ¾	1.50	751	.35	1181	.15
With Black Cloth Covered Case							
054424	6902	3½x1⅞x1	1.00	792	.30	1197	.15
With Snake Cloth Covered Case							
101020	6952	3½x1⅞x1	1.00	792	.30	1197	.15
With Alligator Cloth Covered Case							
101021	6953	3½x1⅞x1	1.00	792	.30	1197	.15
With White Celluloid Covered Case							
101025	6950	3½x1⅞x1	1.25	792	.30	1197	.15
With Black Celluloid Covered Case							
101026	6951	3½x1⅞x1	1.25	792	.30	1197	.15

COAT POCKET TYPE

With Black Cloth Covered Case

054428	6903	3½x2¾x1	1.00	703	.35	1190	.15
054429	1991	5 x2¼x1⅛	1.25	793	.35	1197	.15
With Snake Cloth Covered Case							
101022	6904	3½x2¾x1	1.00	703	.35	1190	.15
101023	1992	5 x2¼x1⅛	1.25	793	.35	1197	.15
With Alligator Cloth Covered Case							
054427	6901	3½x2¾x1	1.00	703	.35	1190	.15
101024	1993	5 x2¼x1⅛	1.25	793	.35	1197	.15
With Vulcanized Fibre Case							
101027	6909	3½x2¾x1	1.50	703	.35	1190	.15
With Black Celluloid Case							
101028	6915	3½x2¾x1	1.50	703	.35	1190	.15

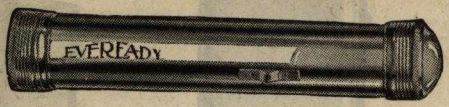
EVEREADY DAYLOS

The Light that says, "There it is"

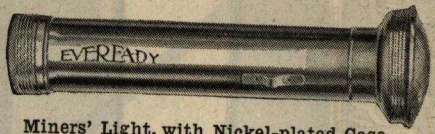
TUBULAR TYPES

The nickel-plated cases are not injured by oil or moisture.

All Daylos have slide switches, which give continuous light, except Nos. 2624, 2626 and 2627, which have spring switches, giving either flash or continuous lights, as desired.



With Nickel-plated Case



Miners' Light, with Nickel-plated Case

WITH NICKEL-PLATED CASE

Trade No.	Mfrs. No.	Size Inches	Price, Each Complete	No. of Battery	Price, Each Extra Battery	No. of Bulb	Price, Each Extra Bulb
101132	2630	1¼x 5	$1.25	791	$0.30	1182	$0.15
101133	2631	1½x 6½	1.50	790	.30	1198	.15
101134	2632	1½x 8½	1.75	705	.40	1193	.15

MINERS' LIGHTS, WITH NICKEL-PLATED CASE

101135	2633	1½x 8½	2.40	705	.40	1193	.15
101136	2634	1½x 6½	2.00	790	.30	1198	.15

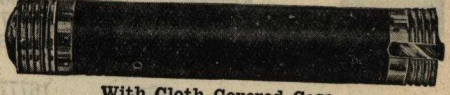
PORTABLE SEARCHLIGHTS, WITH NICKEL-PLATED CASE

097797	2637	1½x 8½	3.25	705	.40	1193	.15
097798	2638	1½x 6½	2.75	790	.30	1198	.15

Same pattern as searchlight with fibre case, illustrated below.



With Vulcanized Fibre Case



With Cloth Covered Case

WITH LEATHERETTE CASE

054413	2606	1½x 8½	1.20	705	.40	1193	.15
101137	2608	1½x11	1.50	711	.45	1199	.15
101138	2610	1½x13	2.00	715	.70	1195	.15

WITH VULCANIZED FIBRE CASE

054421	2602	1¼x 5	1.00	791	.30	1182	.15
054422	2604	1½x 6½	1.20	790	.30	1198	.15
054410	2612	1½x 8½	1.40	705	.40	1193	.15
101139	2614	1½x11	1.75	711	.45	1199	.15
101140	2615	1½x13	2.20	715	.70	1195	.15

WITH CLOTH COVERED CASE

16748	*2622	1½x 6½	.95	790	.30	1198	.15
16749	2624	1½x 6½	.95	790	.30	1198	.15
16742	2625	1½x 6½	.95	790	.30	1198	.15
16744	2626	1½x 8½	1.00	705	.40	1193	.15

*No. 2622 has a snake cloth case; No. 2625 has an alligator cloth case; Nos. 2624 and 2626 are black cloth covered.

WITH ENAMELED METAL CASE

101143	2628	1½x 6½	.75	790	.30	1198	.15
16745	2627	1½x 8½	.90	705	.40	1193	.15



Miners' Daylo, with Vulcanized Fibre Case



Portable Searchlight, with Vulcanized Fibre Case

MINERS' DAYLOS, WITH VULCANIZED FIBRE CASE

054417	2616	1½x 6½	1.50	790	.30	1198	.15
054418	2619	1½x 8½	1.70	705	.40	1193	.15
101141	2621	1½x11	2.25	711	.45	1199	.15
101142	2623	1½x13	2.70	715	.70	1195	.15

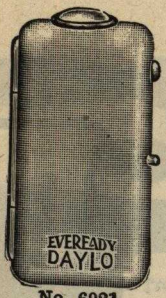
PORTABLE SEARCHLIGHTS, WITH VULCANIZED FIBRE CASE

Equipped with lens and parabolic reflector. Throws a powerful beam for a great distance.

16746	2659	1½x 8½	3.00	705	.40	1193	.15
16747	2653	1½x13	4.00	715	.70	1195	.15

EVEREADY DAYLOS

The Light that says "There it is"



No. 6921

PARISIAN IVORY DAYLOS

A light and dainty Daylo particularly suitable for a lady's hand bag, and for gift purposes at all seasons.

Trade No.	Mfrs. No.	Size Inches	Price Each Complete	No. of Battery	Price Each Extra Battery	No. of Bulb	Price Each Extra Bulb
17120	6920	¾x1½x2¾	$1.50	700	$0.30	1179	$0.15
17121	6921	⅞x1⅝x3¼	1.50	750	.30	1180	.15
17122	6922	¾x2¼x3¼	2.00	751	.35	1181	.15



No. 6922

SOLDIER BOY DAYLOS

With Belt Clip

Small, but very effective, and equipped with a convenient belt clip. Can be clipped on belt, pocket edge, shaving mirror, etc.

Gunmetal Case

Trade No.	Mfrs. No.	Length Inches	Price Each Complete	No. of Battery	Price Each Extra Battery	No. of Bulb	Price Each Extra Bulb
17123	2629	5¾	$1.50	791	$0.30	1182	$0.15



No. 2629 No. 2690

CARTRIDGE TYPE DAYLOS

A novelty, yet a perfectly practical one. Fits the pocket handily, and is very attractive in appearance. Carries the same serviceable battery as Nos. 2629 and 2630 tubulars.

Trade No.	Mfrs. No.	Size Inches	Price Each Complete	No. of Battery	Price Each Extra Battery	No. of Bulb	Price Each Extra Bulb
17124	2690	6½x1¼	$1.50	791	$0.30	1182	$0.15



No. 3651

MILITARY DAYLOS

The most practical Daylo for military or any outdoor service. Can be hung on coat button, or clipped on the belt, enabling owner to use both hands in opening and reading dispatches, handling a gun, etc.; or may be carried or hung on nail in tent pole by handle. Supplied with and without a compass.

Gun Metal Case

Without Compass

Trade No.	Mfrs. No.	Size Inches	Price Each Complete	No. of Battery	Price Each Extra Battery	No. of Bulb	Price Each Extra Bulb
17125	3651	3¾x2¼	$2.00	703	$0.35	1190	$0.15

With Compass

17126	3650	3¾x2¼	$4.00	703	.35	1190	.15

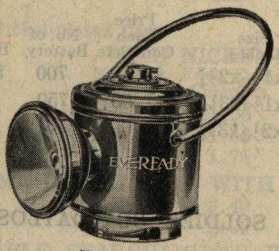
EVEREADY DAYLOS

The Light that says "There it is"

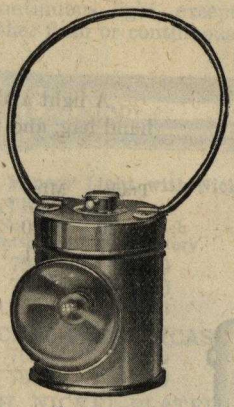
MISCELLANEOUS TYPES



No. 4716



No. 4702



No. 4708

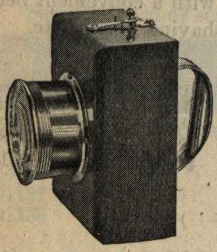


No. 4707

DRY CELL DAYLOS

Dry Cell Daylos take a standard round 6-inch dry cell, but give best results with Eveready No. 406 Battery. They give a large volume of brilliant white light and have a life of many months in ordinary service.

Trade No.	Mfrs. No.	Price, Each Less Battery	No. of Battery	Price, Each Ex. Battery	No. of Bulb	Price, Each Ex. Bulb
53437	4716	$1.25	406	$0.40	1451	$0.15



No. 4703

SEARCH LANTERNS

No. 4702

These Daylo Search Lanterns are equipped with a silver-plated parabolic reflector that throws a strong beam of light a long distance.

Trade No.	Mfrs. No.	Price, Each with Battery	No. of Battery	Price, Each Ex. Battery	No. of Bulb	Price, Each Ex. Bulb
53436	4702	5.50	710	.75	1195	.15

No. 4708

Similar in design to No. 4702, but smaller and lighter.

53440	4708	3.50	775	.45	1199	.15



No. 4709

HOUSE LAMPS

These Daylo House Lamps are of especial beauty and attractiveness. All parts are highly nickel-plated. Designed to appeal strongly to the housewife but equally useful to all who work in the dark.

Size 4¾x4½x3½ Inches

53434	4707	3.50	734	.45	1199	.15

Size 4x2¾x2½ Inches

53435	4706	2.00	703	.35	1190	.15

HOUSE LAMPS WITH WOODEN CASES

These Daylo House Lamps have a handsome oak case, convenient, rigid carrying handle and same reflecting mechanism as used in miners' Daylos.

Size 5x3¾x2¼ Inches

53432	4703	3.00	734	.45	1199	.15

Size 5x3¾x3½ Inches

53438	4704	5.00	719	.75	1195	.15

HOUSEHOLD LANTERNS

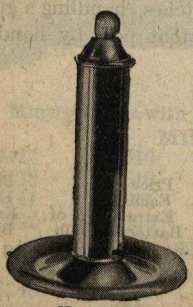
No. 4709

53441	4709	2.00	734	.45	1199	.15

No. 4712

Similar to No. 4709, but gives brighter light.

53442	4712	2.50	719	.75	1195	.15



No. 1657

CANDLES

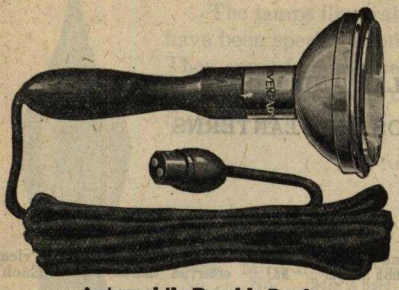
Dainty in design and beautifully nickel-plated.

53443	1657	1.00	791	.30	1192	.15

EVEREADY DAYLOS

The Light that says "There it is"

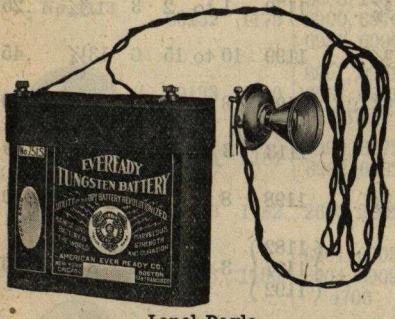
SPECIAL TYPES



Automobile Trouble Daylo



Cap Daylo



Lapel Daylo



Pistol Daylo



Fountain Pen Daylo



Range Lighter

AUTOMOBILE TROUBLE DAYLOS

Connected to lamp socket of the car lighting system. Throws a powerful beam of light over 100 feet. Safe around gasoline.

Trade No.	Mfrs. No.	Description	Price Each
55508	3751	With G-6, 4 candle power single contact Ediswan Base Lamp and attachment plug.....	$2.50
55509	3752	Same, with double contact.....	2.50

CAP DAYLOS

Cap Daylos are used by surveyors, miners, campers, etc. Bulb with strong reflector fastens in cap and is connected by cords with battery which is carried in the pocket.

Trade No.	Mfrs. No.	Price, Each Complete	No. of Battery	Price, Each Ex. Battery	No. of Bulb	Price, Each Ex. Bulb
16788	2876	$5.50	731	$0.75	1195	$0.15
16789	2877	5.00	734	.45	1199	.15

LAPEL DAYLOS

The lapel Daylos are smaller than the cap Daylos and are for the use of orchestras, bands, etc.

16790	3703	2.00	752	.45	1199	.15

PISTOL DAYLOS

Brass case, finished in gun metal or nickel-plated.

Trade No.	Mfrs. No.	Size Inches	Price Each Complete	No. of Battery	Price, Ea. Extra Battery	No. of Bulb	Price Each Extra Bulb
89515	2675	3x3⅝	$1.50	750	$0.30	1180	$0.15

FOUNTAIN PEN DAYLOS

Like a fountain pen in size and appearance.

Black Enamel

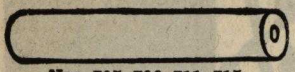
Trade No.	Mfrs. No.	Price, Each Complete	No. of Battery	Price, Each Ex. Battery	No. of Bulb	Price, Each Ex. Bulb
097799	2683	$1.00	706	$0.25	1179	$0.15
Nickel-plated						
097800	2684	1.00	706	.25	1179	.15

RANGE AND GAS LIGHTERS

Prevent fires from the careless use of matches. Pressure on the contact causes platinum coil in the perforated tip to glow white hot. Battery case is of vulcanized fibre. All other parts are nickel-plated.

Trade No.	Mfrs. No.	Description	Price, Each Complete	No. of Battery	Price, Each Ex. Battery
89516	2823	Range lighter.	$1.50	790	$0.30
89518	2824	Gas lighter...	2.00	790	.30
89517	2831	Renewal tip.....each			.25

EVEREADY TUNGSTEN BATTERIES



Nos. 705, 706, 711, 715. 753, 790 and 791

FOR TUBULAR AND VEST POCKET DAYLOS AND LANTERNS



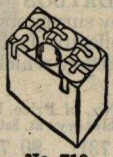
Nos. 700, 703 750 and 751



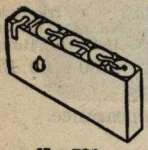
Nos. 792 and 793



No. 734



No. 719



No. 731



No. 752



No. 710



No. 775

Trade No.	Mfrs. No.	No. of Cells	Size Over All, In. Height	Width	Depth	Bulb No.	Hours of Service	Depreciation*	Net Weight Ounces	Price Each
054438	705	3	7	1 3/8	...	1193	8 to 12	6	10 1/2	$0.40
107066	706	2	4	9/16	...	1179	1 to 2	3	3/4	.25
054440	711	3	9 1/8	1 3/8	....	1199	10 to 15	6	13 1/4	.45
107067	715	5	11 3/4	1 3/8	...	1195	8 to 12	6	17	.70
107069	753	3	7	1	...	1113	3 to 5	4	6 1/4	.40
054441	790	2	4 3/4	1 3/8	...	1198	8 to 12	6	7	.30
054442	791	2	3 3/4	1	...	1182 or 1197 or 1192	3 to 5	4	3 1/4	.30
054450	700	2	1 7/8	1 1/8	9/16	1179	1 to 1 1/2	3	1 1/4	.30
054451	703	3	2 5/8	2 7/16	7/8	1190	3 to 5	4	4 1/2	.35
054452	750	2	2 1/4	1 5/16	11/16	1180	1 to 2	3	2	.30
054453	751	3	2 1/4	2	11/16	1181	1 to 2	3	2 3/4	.35
054455	792	2	2 1/2	1 5/8	5/16	1197	3 to 5	4	3	.30
054456	793	2	3 7/16	2 1/8	1	1197	6 to 10	6	6 1/2	.35
054457	734	3	3	4	1 3/8	1199 or 1113	10 to 15	6	13 3/4	.45
107071	719	5	3	4	2 3/4	1195 or 1115	10 to 15	6	23 1/4	.75
054431	731	5	3	6 5/8	1 1/2	1195	10 to 15	6	22 3/4	.75
054432	752	3	3 3/16	4	1 3/8	1199	10 to 15	6	14	.45
054435	710	5	3	3 5/8	...	1195	10 to 15	6	23	.75
107077	775	3	3	2 3/4	2 1/2	1199	10 to 15	6	14	.45

*Months in which batteries will stand on shelf without depreciating more than 10 per cent.

EVEREADY MINIATURE MAZDA LAMPS



No. 1113

The lamps illustrated on this page, with the exception of the candle lamp, have been specially constructed for use with the Eveready Tungsten Battery. They can, of course, be used for other purposes, but care should be taken that the correct voltage is ordered according to the strength of the battery on which they are to be used.

FLASH LIGHT BULBS

Trade No.	Mfrs. No.	Article with which Bulb is Used	Battery with which Bulb is Used	No. Cells of Battery	Style Bulb	Volts	Amps.	Approx.* C. P.	Price† Each
69141	1113	1650	753	3	Candle	4	.35	1½	$0.45
69132	1179	2683, 2684, 6900, 6970, 6980, 6990	700, 706	2	8/16-in. Opal	2.5	.35	¾	.15
69133	1180	6991, 6971, 6961, 6981, 2675	750	2	7/16-in. Opal	2.5	.35	1	.15
69134	1181	6992, 6972, 6962, 6982	751	3	7/16-in. Opal	3.8	.35	1½	.15
69143	1182	2630, 2602	791	2	7/16-in. Opal	2.7	.35	1	.15
69136	1190	6901, 6903, 6904, 6909, 4706	703	3	7/16-in. Clear	3.8	.35	1½	.15
69148	1192	1657	791	2	7/16-in. Clear	2.7	.35	1	.15
69138	1193	2606, 2612, 2619, 2626, 2627, 2633, 2659, 2632, 2637	705	3	9/16-in. Clear	3.8	.35	1½	.15
69140	1195	2610, 2615, 2623, 2653, 2876, 4704, 4712	710, 715, 719, 731	5	11/16-in. Clear	6.2	.35	2	.15
69135	1197	6902, 6950, 6951, 6952, 6953, 1991, 1992, 1993, 6954	792, 793	2	7/16-in. Clear	2.7	.35	1	.15
69137	1198	2604, 2622, 2624, 2625, 2616, 2631, 2634, 2628, 2638	790	2	9/16-in. Clear	2.9	.35	1	.15
69139	1199	2608, 2614, 2621, 4703, 4707, 2877, 3703, 4710, 4709, 4708,	711, 734, 752, 775	3	9/16 in. Clear	4	.35	1½	.15
69144	1451	4716	406	1	G-4½	1.5	.06	¾	.15



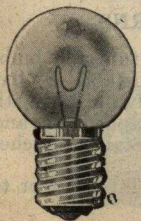
Nos. 1179, 1180 and 1181



Nos. 1190 and 1197



Nos. 1193, 1198 and 1199



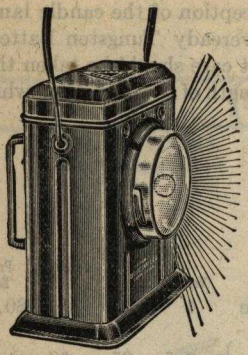
No. 1195

*Greatly magnified by lens and reflector when used in article.

†All prices on bulbs subject to change without notice.

Illustrations are actual size.

PORTABLE BATTERY LANTERNS



No. 1 Delta Lantern

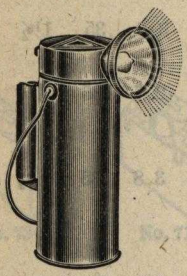
No. 1 DELTA TWO-CELL ELECTRIC LANTERNS

A reliable, heavy service electric lantern designed and built for hard usage.

Provided to receive two standard No. 6 dry batteries, either square or round cases, with either style of battery terminal. Made of cold-rolled steel. Base is formed into a flange, preventing lamp from upsetting on rough ground. Reflector is drawn out of sheet phosphor-bronze and triple silver-plated with an extra high polish. Width, 3¼ inches, and ribbed in such shape as to give a diffused light extending for 180° in every direction. Spot light reflector throws light 300 to 500 feet Switch is self-contained.

Height is 7¾ inches. Handsomely finished in baked semi-gloss black enamel, trimmed in polished nickel-plate. Equipped with 3-volt tungsten wire bulb.

Trade No.	Description	Std. Pkg.	Price Each
70008	Complete, less batteries.....	12	$2.00



No. 7 Delta Hand Lamp

No. 7 DELTA ELECTRIC HAND LAMPS

Especially adapted for outdoor use. The triple silver-plated parabolic reflector will throw a shaft of light 250 to 300 feet. In addition to the shaft of light, there is a subdued wide angle of light which illuminates a wide area of space in front of the lamp from 10 to 25 feet.

Operates on one ordinary dry battery with either kind of carbon terminal, and is equipped with tungsten wire bulb and high grade switch.

Made of steel, handsomely finished in semi-gloss black enamel thoroughly baked in. Trimmed in polished nickel-plate.

Height is 8½ inches.

70009	Complete, less battery.....	12	1.25

No. 2 DELTA SPECIAL ELECTRIC HAND LAMPS

Adapted as a general utility article. Throws a broad spreading light 25 to 50 feet. Contains double convex ground and polished lens, opal back bulb and special silver-plated reflector. Operates on one ordinary dry battery and gives a refined white light over a wide angle. Uses batteries with either kind of carbon terminal.

Made of steel, finished in semi-gloss baked enamel trimmed in nickel-plate. Height, 8½ inches.

70010	Complete, less battery.....	12	1.25



Dad's Lantern

No. 500 DELTA ELECTRIC HAND LAMPS

Designed for the same service and similar to No. 2, except that it is beautifully finished in highly polished nickel-plate.

70011	Complete, less battery.....	12	1.50

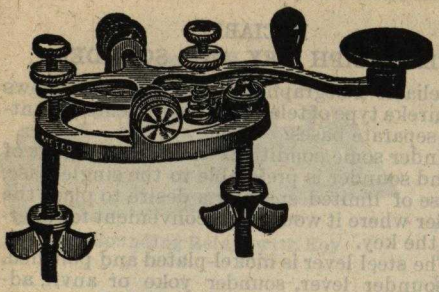
DAD'S ELECTRIC HAND LANTERNS

Equipped with large, 1-inch diameter size tungsten bulb. The bulb and 3-inch diameter reflector are adjustable so that the light can be focused. Made of steel beautifully finished with double baked-in enamel, decorated with lithographed red and black enamel, and highly polished nickel-plate. Stands 7 inches high. Will light on any standard 6-inch battery.

Can be equipped with spot light or searchlight reflector to throw light 300 to 500 feet.

70013	Complete, less battery.....	....	2.00

TELEGRAPH INSTRUMENTS



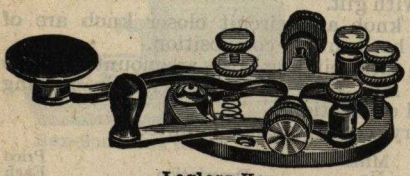
Key with Legs

STEEL LEVER KEYS

All keys are fitted with improved adjustment spring holder.

All the parts are finely finished. It has nickel-plated lever, gutta percha knobs, and brass work highly polished. It is the standard of Postal and Western Union Telegraph Companies.

Trade No.	Mfrs. No.	Description	Price Each
		With Legs	
11791	103	Nickel-plated lever, brass frame	$2.00
11792	105	Nickel-plated lever and frame	2.30
		Legless	
11793	108	Nickel-plated lever, brass frame	2.20
11794	109	Nickel-plated lever and frame	2.50

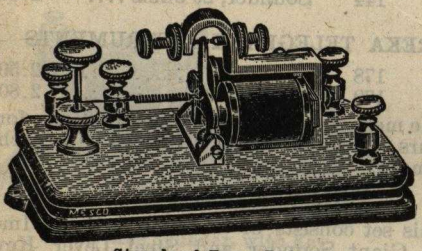


Legless Key

STANDARD PONY RELAYS

Mounted on polished mahogany base, with metallic sub-base.

Its use will enable work on lines up to 20 miles, with perfect ease, in cases where main line sounders fail to give satisfaction. Requires less battery to operate it than does any main line sounder of like resistance.

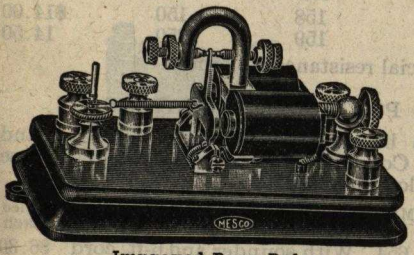


Standard Pony Relay

11795	114	5 ohms, for burglar alarm work	3.00
11796	115	20 ohms, for lines up to 10 miles	3.20
11797	116	50 ohms, for lines 10 to 30 miles	3.40
11798	118	75 ohms, for lines 30 to 50 miles	3.60

IMPROVED PONY RELAYS

This relay is an improvement on the standard pony type and combines the good points of the pony with those of the larger size instrument. It has adjustable magnets, one-piece armature and lever. It is finely finished and mounted on polished mahogany base with enameled iron sub-base.



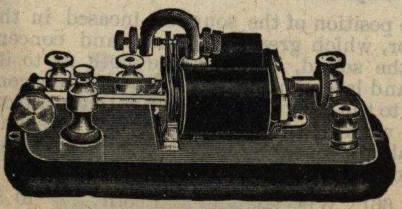
Improved Pony Relay

11799	162	5 ohms, for burglar alarm work	3.70
11800	163	20 ohms, for lines up to 10 miles	3.90
11801	164	50 ohms, for lines 10 to 30 miles	4.10
11802	165	75 ohms, for lines 30 to 50 miles	4.30

COMMERCIAL STANDARD RELAYS

Polished rubber covered coils, mahogany base.

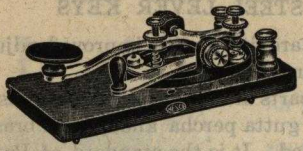
Ornamental sub-base and extension adjustment.



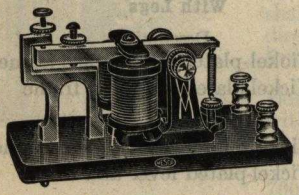
Commercial Standard Relay

11803	125	150 ohms	7.00
11804	145	250 ohms	7.50

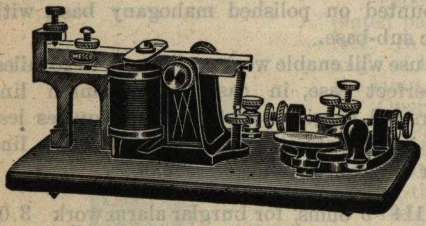
TELEGRAPH INSTRUMENTS



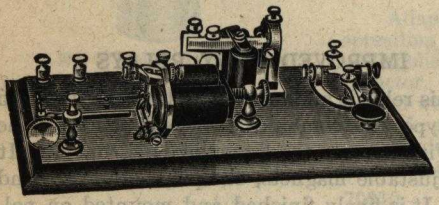
Reliable Telegraph Key



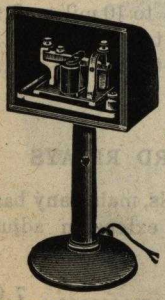
Reliable Telegraph Sounder

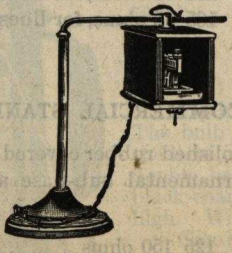


Eureka Telegraph Instrument



Combination Set





Portable Resonator with Sounder

Adjustable Resonator with Sounder

RELIABLE TELEGRAPH KEY AND SOUNDER

Reliable Telegraph Key and Sounder shows the Eureka type of telegraph instruments mounted on separate bases.

Under some conditions this arrangement of key and sounder is preferable to the single base, because of limited space or a desire to place the sounder where it would be inconvenient for operating the key.

The steel lever is nickel-plated and polished. The sounder lever, sounder yoke or anvil, adjusting screws, etc., are finely finished composition metal, such as is used in all high grade instruments. The sounder base is japanned and striped with gilt.

Key knob and circuit closer knob are of polished hard rubber composition.

Two extra binding posts are mounted on the Reliable Key Base for convenience in making electrical connections.

Every instrument is guaranteed.

Trade No.	Mfrs. No.	Description	Price Each
040168	101	Key	$1.20
040169	143	Sounder, 5 ohms	1.60
040170	144	Sounder, 20 ohms	1.90

EUREKA TELEGRAPH INSTRUMENTS

11815	178	5 ohms.....	2.50
11816	179	20 ohms.....	2.80

The most complete book of instructions for amateurs ever published is furnished with each instrument.

COMBINATION SETS

This set consists of a standard Relay Improved Giant Sounder and Steel Lever Key mounted on highly polished mahogany base.

Trade No.	Mfrs. No.	Resistance Ohms	Price Each
040171	158	150	$14.00
040172	159	250	14.50

Special resistances to order.

PORTABLE RESONATORS

The base of the standard is broad and heavy. Conducting cords pass through the base and hollow standard.

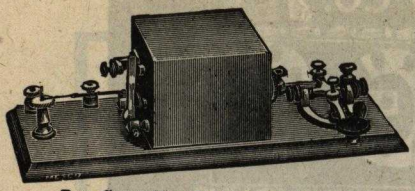
Trade No.	Mfrs. No.	Description	Price Each
040173	654	With sounder and 6-ft. cord	$6.30
040174	655	Resonator and base only...	3.50

ADJUSTABLE RESONATORS

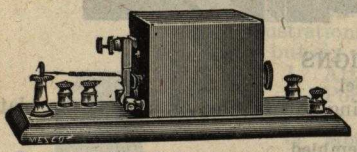
The position of the sounder, incased in the resonator, which greatly increases and concentrates the sound, is adjustable both as to its height and lateral place, so as to be entirely convenient to the receiving operator without affecting the work at other instruments, the sound being almost entirely confined to the immediate locality of the instrument.

040175	661	With sounder and cord...	10.80
040176	662	Without sounder.....	8.00

TELEGRAPH INSTRUMENTS



Box-Sounding Relay, with Key



Box-Sounding Relay, without Key

BOX-SOUNDING RELAYS

The box relay is designed to combine in one instrument, as far as possible, all the advantages to be obtained in ease of working on long or difficult lines, that is guaranteed by the use of a relay, and at the same time dispense with the usual local sounder and local battery. The box device has the acoustic effect of amplifying the sound to such an extent as to make the use of the sounder unnecessary, except in very noisy locations. Is provided with local connections, so that it can be used for a relay, if so desired; the magnets are adjustable, and there is a patented device attached to the sounding box, so that the sound can be regulated to suit. This set is made with box and base of polished mahogany.

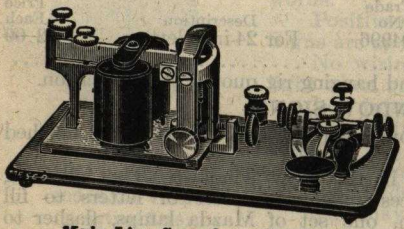
With Key

Trade No.	Mfrs. No.	Resistance Ohms	Price Each
040177	127	150	$10.00
040178	133	250	10.50

Without Key

040179	129	150	8.00
040180	131	250	8.50

Special resistances to order.

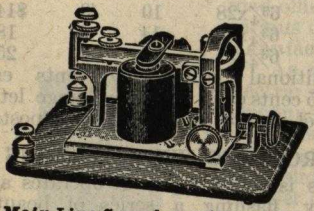


Main Line Sounder, with Key

MAIN LINE SOUNDERS

Unequaled for wrecking, testing, switching or temporary office use, and all places where it is desirable to dispense with local batteries.

Made with full size relay magnets of 150 ohms resistance, having a special armature adjustment and fully suited for doing, in a greatly improved manner, the work of regular main line box relays. They are sensitive to weak currents, giving a clear working sound on circuits where, without them, a relay with local sounder and battery would be absolutely necessary.



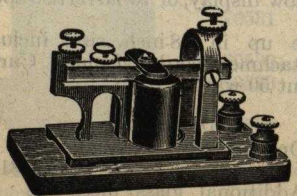
Main Line Sounder, without Key

With Key

040181	135	150	10.00
040182	138	250	10.50

Without Key

040183	136	150	8.00
040184	140	250	8.50



Improved Giant Sounder

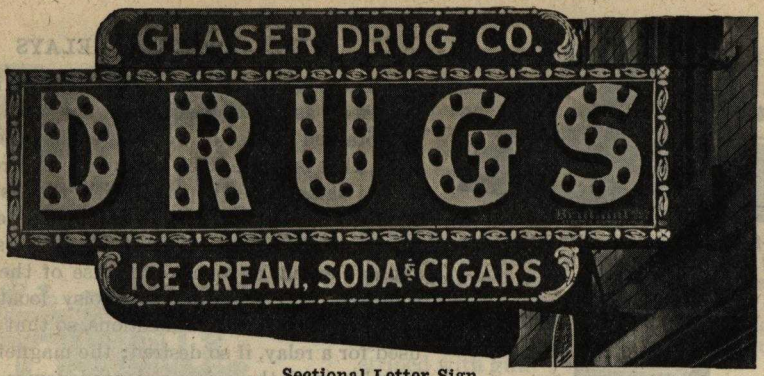
IMPROVED GIANT SOUNDERS

Aluminum Lever

One cell of ordinary crowfoot battery will operate this instrument, producing a sound louder and clearer than can be obtained from any other sounder with two cells of battery.

040187	111	5	2.80
040188	113	20	3.10

BRILLIANT ELECTRIC SIGNS



Sectional Letter Sign

SECTIONAL LETTER SIGNS

Porcelain Enameled Steel

These signs are furnished complete ready for attaching to building, or in separate plates ready for assembling.

Letters Only—Wired, Not Assembled

Trade No.	Height Inches	Price Each	Trade No.	Height Inches	Price Each
104991	12	$5.00	104993	24	$8.00
104992	16	6.00	.....	....	....

Ornamental End Plates

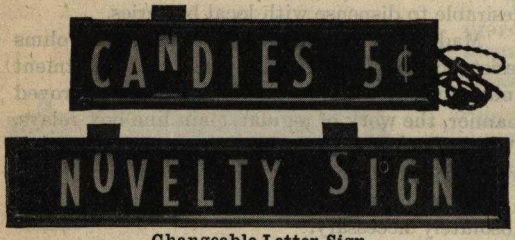
Trade No.	Description	Price Each	Trade No.	Description	Price Each
104994	For 12-inch letters	$1.00	104996	For 24-inch letters	$2.00
104995	For 16-inch letters	1.50	.....	.....	....

Prices on periods, commas, spaces, frames, panels and hanging rig quoted on application.

CHANGEABLE LETTER WINDOW SIGNS

These signs are made of shaded blue glass with opal white letters. Frames are finished in oxidized copper or polished brass.

Signs are made to stand, or can be suspended in the show windows. The following prices include one set of letters to fill sign, one set of Mazda lamps, flasher to flash lights on and off, and 8-foot attachment cord with plug. Letters are 3½ inches high. 10-watt lamps are used.



Changeable Letter Sign

Trade No.	Size Inches	No. of Letters	No. of Lamps	Price Each
104997	6¾x28	10	3	$14.00
104998	6¾x39	14	4	18.80
104999	6¾x57	21	6	25.00

Additional letters, 20 cents each. Blanks, 5 cents each. Will exchange letters via parcel post 5 cents each, plus postage.



Chromatic Sign

CHROMATIC WINDOW SIGNS

This is a live sign. It operates automatically, flashing a series of beautiful colors and tints. Will attract and hold the attention. Made with changeable face so as to allow insertion of different reading matter. Especially adapted for flashing the firm name in connection with any kind of a window display, or to advertise special sales, etc.

Made up in 18-inch size, including lamps, attachment cord and plug. Current used, about 50 watts.

Trade No.	Description	Price Each
105001	One face, with any name desired	$18.00
105002	Additional glass face, not over five words	4.00

PATTERSON INTERCHANGEABLE SECTIONAL-UNIT SIGNS

NATIONAL ELECTRICAL CODE STANDARD

FOR SHOW WINDOW AND OTHER INTERIOR ADVERTISING

Not Made for Circuits over 125 Volts



Glass Letter Slide



Double-faced

Patterson Interchangeable Sectional-Unit Signs open an entirely new field for money-making to the up-to-date energetic contractor and central station. Briefly described, as will be seen from the illustrations, the Patterson Interchangeable Electric Sign consists of but six simple and easily put-together units.

1. Attachment spacer for connecting circuit wires.
2. Porcelain base, 2¾x3½x1 inch, with Standard Edison base receptacle.
3. Metal reflector—double-faced—ample ventilation—grooved for two slides, front and back.
4. Glass slides—cameo glass, 2½x4 inches, with any letter or figure cut into surface.
5. Standard 7½ or 10-watt Mazda Sign Lamp.
6. Spacer, same as attachment spacer but designed to separate words.

Positive advantages of Patterson Interchangeable Sectional-Unit Signs are as follows:

No wiring. All letters automatically connect to current and light when units are pressed together.

Low initial cost.

Low maintenance, the only expense being the renewal of regular standard 7½ or 10-watt Mazda Sign Lamp in stock everywhere.

Patterson Electric Signs are double-faced, i. e., with provision for two glass slides in each unit so sign may be read from two sides.

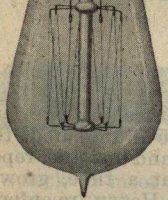
Sign may be changed in a minute to read anything desired. Only necessary to change glass fronts of letters, a supply of which is inexpensive to carry. The sign may be made larger or smaller, made up with several words or lines in a few moments because of unit design.

Sell at sight for window advertising to every class of merchants, department stores, both for window and department markings, railroad offices, national advertisers for loaning to their distributors in various cities, garages, railroad stations, theaters, hotels, newspapers, manufacturers of specialties, etc.

As good a day sign as could be desired, although primarily an electric night sign; colored letters by simply dipping lamps; flashing by connecting to flasher.

Brush brass finish channel bases. Channel furnished any length.

Signs regularly shipped with 1 blank back slide and 1 glass letter front slide to each unit; where double-faced units are desired, double number of glass letter slides must be ordered.



Mazda
Sign Lamp—10 Watts
100 to 125 Volts
(½ Actual Size)



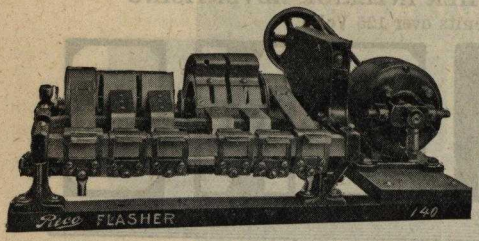
Sign Letter Unit
Showing Glass Slide
and Interior Detail

Trade No.	Description	Price Each
70530	Patterson Interchangeable Sectional-Unit Letter complete with one reflector, glass front, porcelain, base with connection clips and receptacle, one 7½ or 10-watt Mazda Sign Lamp (as specified)	2.75
70531	Extra glass fronts of cameo black and white glass (letters, figures, dollar signs, etc.)	.50
70532	Attachment spacer (only one needed to a one-line sign)	1.00
70533	Spacer (one needed between each word and at end of line)	.65
70534	Mazda 7½ or 10-watt Lamps, as specified	.27
70535	Brush brass channel, per foot	1.00

Allow 3 7/16 inches for each letter, 2½ inches for each attachment spacer, each word spacer and each end of line spacer.

Always state voltage of circuit on which signs are to be used.

RECO ELECTRIC SIGN FLASHERS



ON AND OFF TYPE

For flashing signs on and off, alternate sides, two or three color effects, etc. Has adjustable contacts, and minor or complete changes in flashing can be easily made.

Capacity, 6 Amperes per Switch

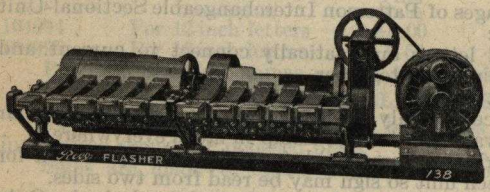
Trade No.	Mfrs. No.	No. of Switches	Size Inches	Wt., Lbs. Boxed	Price, Each Including Motor Either D. C. 110 V. or A. C. 110 V., 60 Cy.	Price Each Steel Cabinet
56516	B-1-6	1	13x13x11	45	$34.00	$4.50
56517	B-2-6	2	15x13x11	50	36.00	4.75

For each additional switch add $2.00 list.

Capacity, 15 Amperes per Switch

56520	B-1-15	1	15x13x11	50	38.00	4.50
56521	B-2-15	2	17x13x11	55	42.00	4.75

For each additional switch add $4.00 list.



SPELLING TYPE

For spelling a word, flashing one letter after another until all are illuminated, then all out, then all on as one and out and repeat, or for flashing one line at a time, growing vines, sunbursts, etc. Heavy re-enforced switches, self-oiling gears, ball bearings and all late improvements.

Capacity, 5 Amperes per Switch

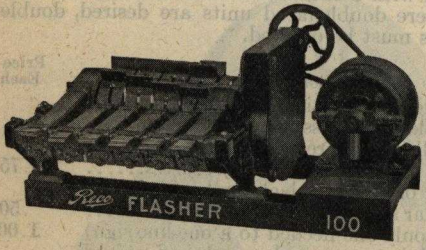
56522	4-5	4	16x13x11	40	39.00	4.50
56523	5-5	5	17x13x11	43	41.00	4.75

For each additional switch add $2.00 list.

Capacity, 12 Amperes per Switch

56527	B-4-12	4	19x13x11	50	44.50	5.50
56528	B-5-12	5	21x13x11	55	47.50	5.75

For each additional switch add $3.00 list.



LIGHTNING TYPE

Giving the effect of streaks of lightning in signs, displays, etc.

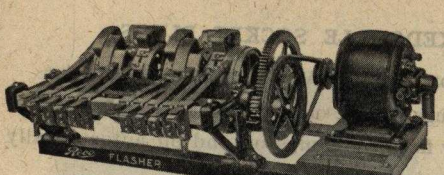
Lightning effects are wired, each streak on a separate circuit; thus a three-section lightning streak requires a three-switch flasher, etc. The flasher gives the natural lightning flash, same as seen in the sky.

Capacity, 5 Amperes per Switch

47557	L-3-5	3	16x13x11	40	37.50	4.50
47558	L-4-5	4	17x13x11	43	39.00	4.75

For each additional switch add $2.00 list.

RECO ELECTRIC SIGN FLASHERS



SPEED TYPE

Approved by the Underwriters

For spectacular and motion effects of all descriptions. Reproducing fire, sparks, smoke, clouds, rain, streams, waterfalls, fountains, steam, foam, ocean waves and sprays, moving grounds or tracks, dust, waving pennants, fluttering skirts, revolving wheels and globes, running borders and movements, etc.

Capacity, 4 Amperes per Switch

Trade No.	Mfrs. No.	No. of Switches	Size Inches	Wt., Lbs. Boxed	Price, Each Including Motor Either D.C. 110 V., or A.C. 110 V., 60 Cy.	Price Each Steel Cabinet
47551	4–4	4	17x13x11	40	$40.00	$4.50
47552	8–4	8	22x13x11	50	46.00	5.50

For each additional switch add $2.00 list.

Capacity, 8 Amperes per Switch

47555	S4–8	4	21x13x11	55	48.00	5.50
47556	S8–8	8	31x13x11	65	58.00	6.50

For each additional switch add $3.00 list.



SCRIPT TYPE

Approved by the Underwriters

Invisible handwriting effects in script letter signs perfectly reproduced, also used in rockets, vines, trailers, etc. Built single, double or triple deck to meet space requirements. Any Reco Flasher will safely carry a 150 per cent overload on 10–13 volts pressure; on 220 volts, ratings should be halved.

Capacity, 1 Ampere per Switch

47561	10–1	10	20x13x11	60	46.50	6.00
47562	20–1	20	34x13x11	68	54.00	8.50

For each additional switch, add 75 cents net.

RECO COLORED GLASS LAMP HOODS

Made from natural colored blown glass, in rich, clear colors for all sizes of lamps. Hoods never fade or wear out.

The hoods slip over the lamp bulbs easily and are securely held in place by a strong, yet flexible, non-corrosive phosphor bronze spring fastening. Can be removed quickly in case of burnout or bulb breakage and used many times over.



Reco Colored Glass Hood

Trade No.	Mfrs. No.	Size Inches	Color	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
84868	156	1¾	Ruby	100	23	$0.22
84869	161	1¾	Opal	100	23	.22
84870	158	1¾	Green	100	23	.21
84872	160	1¾	Amber	100	23	.21
84873	159	1¾	Blue	100	23	.21
84875	188	2⅜	Ruby	50	23	.35
84876	190	2⅜	Opal	50	23	.35
84877	189	2⅜	Green	50	23	.33
84879	191	2⅜	Amber	50	23	.33
84880	192	2⅜	Blue	50	23	.33

Size 1¾-inch fits bulb Style S-14 or any lamp of 1¾-inch diameter, including 5-watt, 7½-watt and 10-watt Mazda lamps or 2 C. P. carbon lamps.

Size 2⅜-inch fits bulb Style S-19 or any lamp of 2⅜-inch diameter, including 25-watt, 40-watt and 50-watt Mazda lamps or 8 C. P. carbon lamps.

MOTORLESS FLASHERS

SKEDOODLE SOCKET PLUGS

For Direct or Alternating Current



Skedoodle Plug

These plugs fit any ordinary sockets and standard lamps. They flash the lamps on and off automatically from fifteen to twenty times per minute.

They are used extensively for many varied electrical decorative effects as well as for show windows and signs.

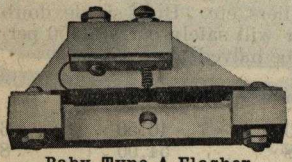
The hole in the cap is to reach the adjustment screw for changing the flash. The two bimetallic thermostats compensate for the change of temperature. The adjustment screw is gripped and cannot be affected by vibration. The contacts are platinum-iridium and very durable.

Approved by National Board of Fire Underwriters.

Trade No.	Mfrs. No.	Watts	Volts	Dimens. Inches	Net Wt. Ounces	Price Each
53815	162	20–60	100–250	2¾x1⅛	1¾	$1.00
53818	163	60–100	100–250	2¾x1⅛	1¾	1.25

Standard package, 100.

BABY TYPE A FLASHERS



Baby Type A Flasher

These flashers are designed especially for one-lamp advertising signs and display novelties. Both ends of the monometallic thermostat are securely bolted so as to prohibit the possibility of vibration or variation of the adjustment.

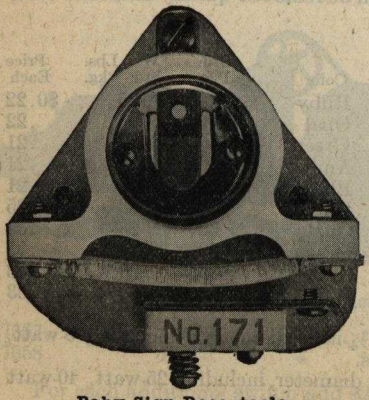
Wattage given is based on 110 volts.

Trade No.	Mfrs. No.	Amps.	Watts	Volts	Dimens. Inches	Net Wt. Ounces	Price Each
084566	170	½	55	100–125	2⅝x1x¾	1½	$0.75

Standard package, 100.

BABY SIGN RECEPTACLES

Approved by National Board of Fire Underwriters



Baby Sign Receptacle

This is a combination Baby Type A and sign receptacle. It is especially advantageous to the sign manufacturer, as it eliminates a great deal of work in the wiring operation and saves in cost of sign receptacle.

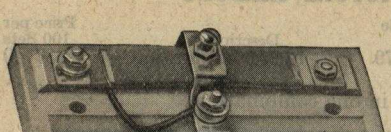
A rigid monometallic thermostat, platinum-iridium contacts, and spring tension adjustment screw insure perfect operation and durability.

Wattage given is based on 110 volts.

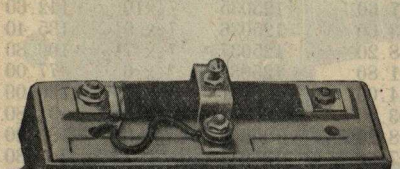
Trade No.	Mfrs. No.	Amps.	Watts	Volts	Dimens. Inches	Price Each
084564	171	½	55	100–125	2⅝x2½x2¼	$0.90

Standard package, 100.

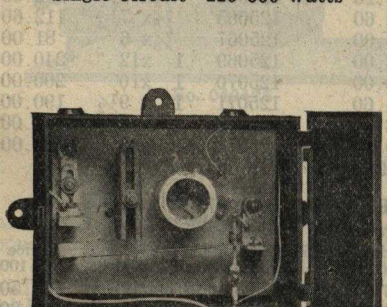
MOTORLESS FLASHERS



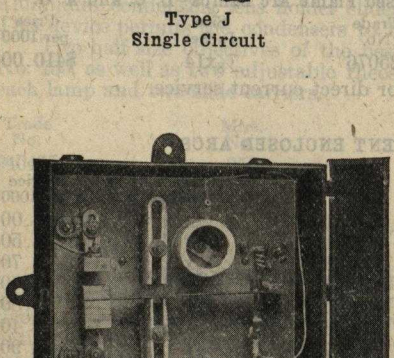
Type A
Single Circuit—55-220 Watts



Type A
Single Circuit—220-660 Watts



Type J
Single Circuit



Type J
Double Circuit

TYPE A FLASHERS

Single Circuit—55-220 Watts

These flashers employ a monometallic thermostat, both ends of which are securely bolted, thus rendering the machine absolutely unaffected by vibration. Heavy iridium platinum contacts are used, and the adjustment screw is rigidly held in place by a set nut. Connected in series, for direct or alternating current.

Trade No.	Mfrs. No.	Amps.	Watts at 110 Volts	Volts	Size Inches	Net Wt. Ounces	Price Each
084529	125	1	110	100–125	2x2x5	7½	$1.00
084530	127	2	220	100–125	2x2x5	7½	1.50
084531	180	¼	55	200–250	2x2x5	7½	1.25
084532	126	½	55	200–250	2x2x5	7½	1.50

Standard package, 12.

Covers are not usually needed but can be supplied, when ordered, at 15 cents each, net.

Single Circuit—220-660 Watts

These flashers are equipped with condenser and special arc eliminator. Many medium sized signs come within the range of this extremely simple device, and with the advent of the Tungsten Sign Lamp, its field is greatly enlarged.

Heavy iridium platinum contacts insure long service. Not affected by vibration; connected in series, direct or alternating current.

084533	181	3	330	100–125	6⅛x2⅛x2¼	26	4.50
084534	121	4	440	100–125	6⅛x2⅛x2¼	26	5.00
084535	182	5	550	100–125	6⅛x2⅛x2¼	26	6.00
084536	123	6	660	100–125	6⅛x2⅛x2¼	26	7.50
084537	183	1	220	200–250	6⅛x2⅛x2¼	26	5.00
084538	122	2	440	200–250	6⅛x2⅛x2¼	26	6.00
084539	124	3	660	200–250	6⅛x2⅛x2¼	26	8.50

Standard package, 6.

Covers are not usually needed but can be supplied, when ordered, at 20 cents each, net.

TYPE J FLASHERS

Single Circuit

Fitted with permanent Tungsten Steel Magnets, which insure a quick break at the contacts. The specially prepared graphite used in the contacts is extremely hard and very durable.

084540	153	2	220	100–125	8½x6¾x2⅞	15	12.00
084541	154	4	440	100–125	8½x6¾x2⅞	15	13.00
084542	155	6	660	100–125	8½x6¾x2⅞	15	14.00
084543	111	8	880	100–125	10 x7½x4	17	15.00
084544	113	10	1100	100–125	10 x7½x4	17	16.00
084545	115	15	1650	100–125	10 x7½x4	17	20.00
084546	117	20	2200	100–125	10 x7½x4	17	24.00

Standard package, 1.

Double Circuit

This type is the largest motorless flasher made. Its range of from 2 to 20 amperes includes 80 to 90 per cent of the electric signs in use. There is nothing to oil or wind up. The carbon contacts are very durable, and can be easily renewed when burnt out. Wattage given is per circuit.

084548	150	2	220	100–125	10½x10x4	26½	17.00
084549	151	4	440	100–125	10½x10x4	26½	18.00
084550	152	6	660	100–125	10½x10x4	26½	19.00
084551	112	8	880	100–125	10½x10x4	26½	21.00
084552	114	10	1100	100–125	10½x10x4	26½	22.00
084553	116	15	1650	100–125	10½x10x4	26½	26.00
084554	118	20	2200	100–125	10½x10x4	26½	30.00

Standard package, 1.

COLUMBIA CARBONS

WHITE A. C. SPECIAL MOTION PICTURE CARBONS

Trade No.	Description	Price per 100 Sets	Trade No.	Description	Price per 100 Sets
125077	3/8-inch combination	$25.50	125079	7/8-inch combination	$37.40
125078	3/4-inch combination	30.60	.....	.....	....

Above prices apply in quantities of 250 sets or over in one combination.

PROJECTOR CARBONS, FOR MOTION PICTURE MACHINES

Solid

Trade No.	Size Inches	Price per 1000	Trade No.	Size Inches	Price per 1000	Trade No.	Size Inches	Price per 1000
041653	1/2x12	$70.00	041691	5/8x12	$93.00	125034	7/8x12	$171.00
125014	1/2x10	58.40	125024	5/8x10	77.60	125035	7/8x10	142.60
125015	1/2x 9 1/2	55.40	125025	5/8x 9 1/2	73.60	125036	7/8x 9 1/2	135.40
041654	1/2x 7 1/2	43.80	041692	5/8x 7 1/2	58.20	125037	7/8x 7 1/2	106.80
125017	1/2x 6	33.60	041694	5/8x 6	41.80	125039	7/8x 6	77.00
041655	9/16x12	79.00	125027	3/4x12	124.00	125041	1 x12	230.00
125019	9/16x10	66.00	125028	3/4x10	103.40	125042	1 x10	191.80
125020	9/16x 9 1/2	62.80	125029	3/4x 9 1/2	98.20	125043	1 x 9 1/2	182.20
041690	9/16x 7 1/2	49.60	125030	3/4x 7 1/2	77.60	125044	1 x 7 1/2	143.80
125022	9/16x 6	35.60	125032	3/4x 6	55.80	125046	1 x 6	103.60

Cored

041658	1/2x12	75.00	041696	5/8x12	100.00	125062	7/8x12	180.00
125048	1/2x10	62.60	125058	5/8x10	83.40	125063	7/8x10	150.00
125049	1/2x 9 1/2	59.40	125059	5/8x 9 1/2	79.20	125064	7/8x 9 1/2	142.60
041659	1/2x 7 1/2	46.80	041697	5/8x 7 1/2	62.60	125065	7/8x 7 1/2	112.60
125051	1/2x 6	33.80	041699	5/8x 6	45.00	125067	7/8x 6	81.00
041660	9/16x12	85.00	84927	3/4x12	132.00	125069	1 x12	240.00
125053	9/16x10	71.00	84928	3/4x10	110.00	125070	1 x10	200.00
125054	9/16x 9 1/2	67.40	84929	3/4x 9 1/2	104.60	125071	1 x 9 1/2	190.00
041695	9/16x 7 1/2	53.20	84930	3/4x 7 1/2	82.60	125072	1 x 7 1/2	150.00
125056	9/16x 6	38.40	84932	3/4x 6	59.40	125074	1 x 6	108.00

All 12-inch projector carbons are pointed at both ends, at no extra charge.

SILVERTIP FLAME CARBONS

Yellow Light, Direct Current

Trade No.	Dimensions Mm.	Potential	Price per 100	Trade No.	Dimensions Mm.	Potential	Price per 100
041643	10x400	Positive	$14.90	041678	10x600	Positive	$21.50
041644	9x400	Negative	9.40	041679	9x600	Negative	13.80

Alternating Current

041687	10x400	.....	12.70	041689	10x600	.....	18.20

COLUMBIA FLAME CARBONS

Solid Yellow and White Flame—For Long Burning Enclosed Flame Arc Lamps—D. C. and A. C.

Trade No.	Size Inches	Price per 1000	Trade No.	Size Inches	Price per 1000
84925	7/8x12	$370.00	125076	7/8x14	$410.00

State on order whether carbons are for alternating or direct current service.

CARBONS

FOR DIRECT AND ALTERNATING CURRENT ENCLOSED ARCS

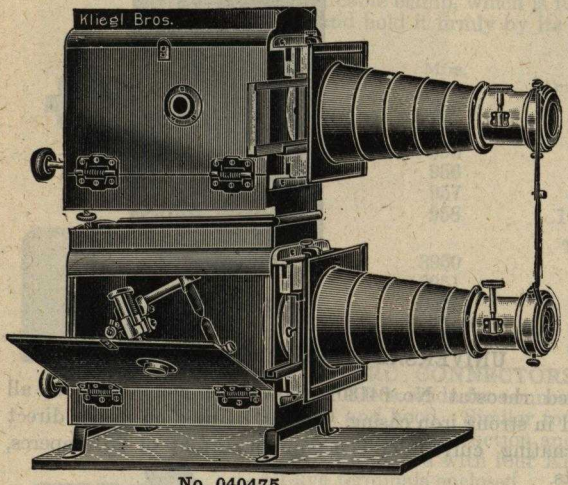
Solid

Trade No.	Dimensions Inches	Price per 1000	Trade No.	Dimensions Inches	Price per 1000
041620	1/2x12	$66.00	041631	7/16x 9 1/2	$44.00
041621	1/2x10	55.00	041661	7/16x 6	27.50
041622	1/2x 9 1/2	52.80	041663	3/8x12	51.70
041623	1/2x 8	44.00	041664	3/8x10	44.00
041625	1/2x 6	33.00	041665	3/8x 9 1/2	41.80
041626	1/2x 5 1/2	30.30	041666	3/8x 8 1/2	37.40
041627	1/2x 5	27.50	041667	3/8x 6	25.90
041628	1/2x 4 3/4	26.40	041668	3/8x 4 1/2	19.80
041629	7/16x12	55.00	041669	5/16x12	49.50
041630	7/16x10	46.20	041671	5/16x 8	34.10

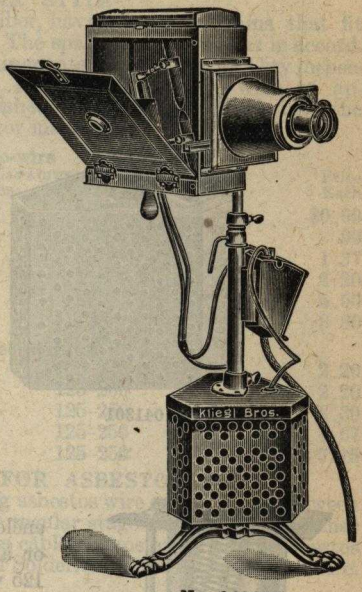
Cored

041632	1/2x12	69.30	041672	7/16x 9 1/2	47.30
041633	1/2x10	58.30	041673	3/8x12	55.00
041634	1/2x 9 1/2	56.10	041674	3/8x10	47.30
041635	7/16x12	58.30	041675	3/8x 9 1/2	45.10
041636	7/16x10	49.50	041676	5/16x12	52.80

STEREOPTICONS



No. 040475



No. 040476

DOUBLE DISSOLVING STEREOPTICONS

No. 255 double stereopticon, with iris dissolver, stands in a class by itself. It is accurate and steady, and is adapted for theater, school and institute entertainments. It is the result of constant experiment and research.

One lamp hood is mounted above the other in such a way as to make the whole a compact and efficient equipment. The hoods are made of Russian iron, well ventilated, and are furnished with our stereopticon hand feed arc lamp, No. 481. The lamp itself is the best of its kind for either direct or alternating current, and is adjusted by handle on rear of hood.

The condensers are 4½ inches in diameter, and the mounting of same deserves special attention; one condenser is fastened in the hood, the second is fastened into the aluminum condensing lense holder, which also carries the slide carrier and has grooves for the objective. Aluminum condensing lens holder slides in grooves on hood and is attached with set screws. This device permits the condensers to be changed to meet the requirements of the objectives.

Two half size objectives of the best quality, and iris dissolver for same, are supplied with No. 255, as well as two adjustable rheostats with switches, 25 feet of approved stage cable on each lamp and two slide carriers.

Trade No.	Mfrs. No.	Amperes	Voltage	Price Each
040475	255	25	125	$155.00

STEREOPTICONS

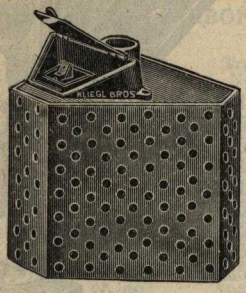
This stereopticon is the most compact and efficient stereopticon made, well adapted for lectures and traveling companies. In construction it is similar to our double dissolving stereopticon. It consists of metal hood, well ventilated, with hand feed arc lamp, for direct or alternating current. The condensers are 4½ inches in diameter; one is mounted in the hood, the second is fastened into the aluminum condensing lens holder which slides in grooves, and is attached to the hood by set screws.

The quarter size objective with which the apparatus is furnished, slides onto the aluminum holder, which also holds the slide carrier. The entire outfit is fastened by a movable attachment to a telescopic stand, with enclosed rheostat fastened to the bottom. Stereopticon is provided with enclosed switch, asbestos wires, and 25 feet of No. 10 approved stage cable.

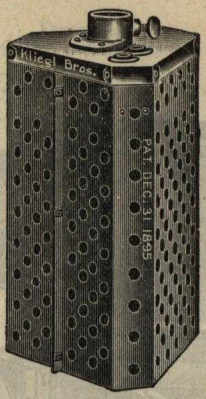
This stereopticon can be used as a spotlight by simply removing the aluminum condensing lens holder, and color changes can be made.

040476	260	25	125	55.00

ELECTRIC STAGE LIGHTING APPARATUS



No. 041301

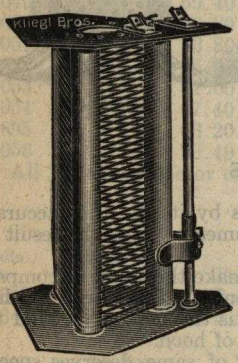


No. 041304

UNIVERSAL FIXED RHEOSTATS

Fixed rheostat No. 041301 shows the coil complete all enclosed in strong iron casing. It can be used on either direct or alternating current on a maximum current of 25 amperes, 125 volts.

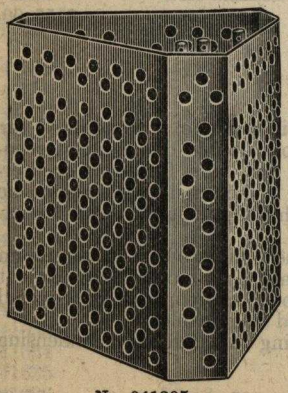
A resistance wire giving a specific resistance three or four times greater than that of German silver is wound around a triangular frame on porcelain tubes, and, as the wire heats but little, the temperature never attains a high degree. These rheostats are therefore the lightest and most compact on the market. Two terminal posts are provided, one for each end of the wire.



No. 041304
Interior View

The resistance wire extends through the iron frame and is fastened to special terminal post by set screws on the outside, which can be adjusted at any time without taking rheostat apart. This ingenious device avoids the breaking of the porcelain insulation under terminal post. These rheostats are regularly furnished with open box and lens box arc lamps.





No. 041305

Trade No.	Mfrs. No.	Amperes	Volts	Price Each
041301	500	25	125	$10.00
041302	501	15	125	10.00
041303	502	10	125	10.00
041306	516	25	220	22.00

UNIVERSAL ADJUSTABLE RHEOSTATS

No. 041304 adjustable rheostat shows the interior of the coil, and all enclosed; can be regulated to suit any voltage up to 125 volts. It is wound on the same principle as the fixed rheostat and is furnished with the sciopticon, so that the light can be properly adjusted to show views and pictures.

041304	511	25	52–125	12.00

No. 041305 shows 220-volt adjustable rheostat, having capacity of 25 amperes, which can be used on direct or alternating current on 52, 125 or 220 volts.

041305	515	25	52–220	24.00

KLIEGL STAGE CONNECTORS



No. 950

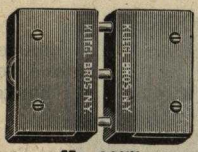
REGULAR STYLE

No. 955 is made of hard red fiber, having brass split pins that fit tightly and make good contacts. The spacing of the pins is in accordance with the Underwriters' requirements and New York City inspection. All live parts are enclosed. Provided on each end with an approved cable clamp, which is furnished with teeth which bite into the cable and hold it firmly by its outer insulation.



No. 955

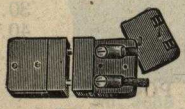
Trade No.	Mfrs. No.	Capacity Amperes	Volts	Size, Stage Cable	Price Each
		Two-wire			
086758	950	5	125	14	$0.99
086759	951	5	125	16	.99
086761	955	15	125	12	1.37
113001	956	30	125	10	2.20
113002	957	60	125	6	5.50
113003	958	100	125	2	8.80
		Three-wire			
113004	3950	5	125–250	14	2.20
113005	3951	5	125–250	16	2.20
113006	3955	15	125–250	14	3.30
113007	3956	30	125–250	10	4.67
113008	3957	60	125–250	6	7.15



No. 3955

ARC CONNECTORS, FOR ASBESTOS WIRE

No. 960 is made for connecting asbestos wire on arc lamps between rheostat and hood. Similar to the regular stage connector, except that it is heavier in construction and its cable clamps are for two asbestos wires. Furnished with four Kliegl Solderless Lugs for asbestos wire. All live terminals enclosed.



No. 960

086762	960	30	125	....	1.92

SIGN CONNECTORS

A small, neat device for connecting electric letters to signs which are changed frequently.



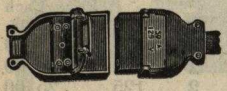
No. 971

086763	971	5	125	....	.22

AUTO CONNECTORS

This connector is made in two parts, the inner of hard fiber and the outer casing of aluminum. The inner fiber connection is made to hold No. 6 flexible stage cable. The outer casing is cast aluminum, which protects and encloses all live parts. Cable clamp doors are hinged, and provided with teeth which bite into the cable and hold it by its outer insulation. By means of a fixed center ridge the plug can only enter one way.

Suitable for heavy cable connections for theatrical purposes, as well as for garage stations for charging storage batteries for automobiles, etc.



No. 965

086764	965	50	125	....	4.40

MULTIPLE STAGE CONNECTORS

This connector is designed to take three separate connections from one feed cable.

113009	2950	5	125	14	3.30
113010	2951	5	125	16	3.30
113011	2955	15	125	12	4.67

BRANCHOFF CONNECTORS

The Kliegl Branchoff Connector is a device for taking several electric connections from one main feed cable without making splices on the cable. Splices weaken a cable no matter how perfectly made.

No. 990 is made in two parts of hard fiber; the main cable passes through the receptacle and into this the conductors are fastened by set screws to the female contacts. The cable is held firmly by its outer insulation, by means of an approved cable clamp.

The plug holding the male contacts is the regular No. 950 approved type. Plugs are interchangeable.



No. 2955



No. 990

Trade No.	Mfrs. No.	Description	Capacity Amperes	Volts	Price Each
113012	990	Complete.....	5	125	$2.70
113013	991	Receptacle only.....	5	125	2.20
113014	992	Plug for No. 14 cable.....	5	125	.50
113015	993	Plug for No. 16 cable.....	5	125	.50

STAGE POCKETS AND PLUGS



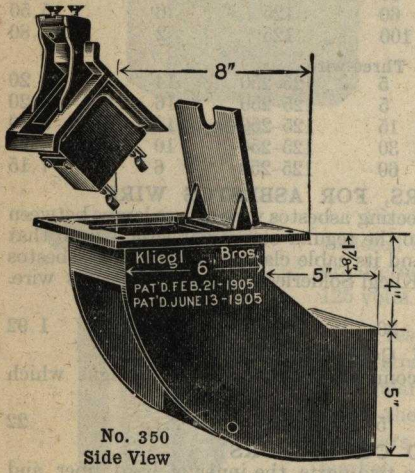
No. 365
Multiple Section Floor Pocket



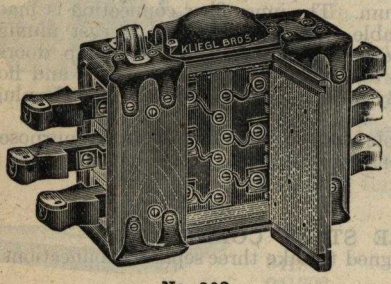
No. 310
Single Section Flush Wall Pocket



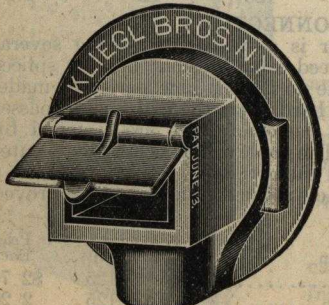
No. 307
Wall Pocket



No. 350
Side View



No. 392
Portable Stage Pocket



No. 305
Auto Charging Pocket



No. 301
Standard Plug

STAGE POCKETS

No. 355, flush pocket has two receptacles and plugs, one for arc lights and one for bunch lights. The plugs are not interchangeable.

Trade No.	Mfrs. No.	No. of Sections	Price Each with Plug
	50 Amperes, 250 Volts		
038651	350	1	$10.00
038652	355	2	20.00
038653	360	3	30.00
038654	365	4	40.00
038655	301	Extra plug	2.00

FLUSH WALL POCKETS

For use wherever a locked outlet box is needed. Protected by a dustproof door.

	50 Amperes, 250 Volts		
038656	310	1	10.00
038657	311	2	20.00
119156	312	3	30.00
119157	313	4	40.00
038655	301	Extra Plug	2.00

Add for lock and key, per pocket, $1.50.

WALL POCKETS AND PLUGS

Trade No.	Mfrs. No.	Amp.	Wire	Volts	Price, Each with Plug
119163	307	50	2	250	$ 8.00
119164	1307	100	2	250	16.00
119165	4307	200	2	125	25.00
119166	2307	50	3	250	17.00
119167	3307	100	3	250	30.00
119168	337	50	2	500	18.00
119169	1337	50	4	250–500	22.50

PORTABLE STAGE POCKETS

Lined with asbestos; polarities separated by slate, carrying bus bars and fuses on either side.

	50 Amperes, 125 Volts		
038669	390	2	9.00
038670	391	4	18.00
038671	392	6	27.00
038672	393	8	36.00
038673	394	10	45.00
038674	395	12	54.00
038675	301	Extra plug	2.00

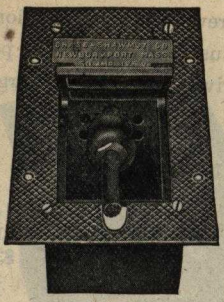
Add $2.00 for three-wire main.

AUTOMOBILE CHARGING POCKETS

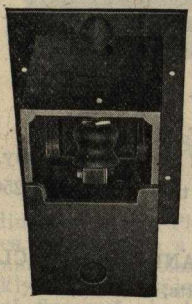
Attached to the wall by rear plates.

038660	305	1	10.00
038661	301	Extra plug	2.00

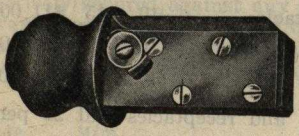
STAGE RECEPTACLES



No. 3655



No. 3655



No. 3657

CUSHING STAGE POCKETS AND PLUGS

These pockets, conforming to the latest Underwriters' rules, are fireproof and unfused. They are made suitable for carrying a current of 50 amperes at 125 volts, but if so desired can be used on 250 volts. All current-carrying parts are mounted on slate securely clamped in the box and are in a separate closed compartment. If desired, this slate base can be readily removed from the box after the pocket is installed by merely taking out two screws.

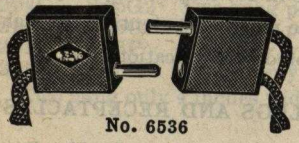
The section of the box which is open from the top has a clear passage through to prevent the accumulation of dirt. The bottom of the compartment enclosing the live metal parts is drilled for ¾-inch conduit. The lid of the box is so arranged that it cannot be left open. Notches are provided in the frame to allow the cable to pass through without danger of being injured when the lid is closed.

The pockets are made for two-wire circuits.

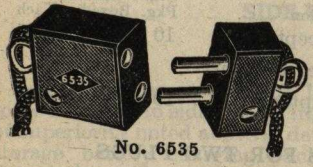
The plug is made of boxwood and is especially designed to withstand the rough usage of stage work. Being so shaped that it can enter the pocket but one way, it prevents the polarity being changed when used for D. C. arc lighting.

The handle of the plug is so recessed that a knot in the twin cord is securely held in place by a fibre bushing, thus preventing any strain on the wire terminals when plug is forcibly removed from pocket.

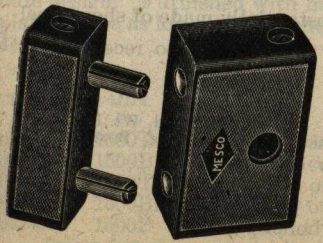
Trade No.	Mfrs. No.	Style Gangs Pocket	Price Each
042571	3655	1	$13.00
042572	3656	2	20.00
042573	3680	3	30.00
042574	3681	4	40.00
042575	3682	5	50.00
042576	3657	Plug only	3.00



No. 6536



No. 6535



No. 6540

STAGE CONNECTORS

Small Size

It will be found invaluable by demonstrators of electrical experiments, on the lecture platform, laboratories, etc.

Trade No.	Mfrs. No.	Amperes	Size Inches	Price Each
042568	6536	10	1⅞x1 1/16x⅞	$0.50

Medium Size

For connecting portables, fans, small motors, etc., it will be found very convenient, its simplicity recommending it for such purposes.

It is provided with two eye screws, one at each end, which can be used for anchoring the cord should it be deemed advisable to do so. Can also be looped together by this means, so that when separated the two parts, being close together, can be located and connected without delay.

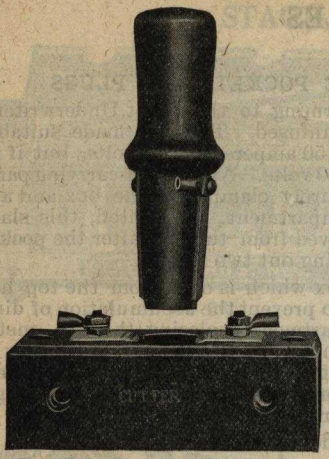
042569 6535 15 1⅞x1¼x¾ .60

Large Size

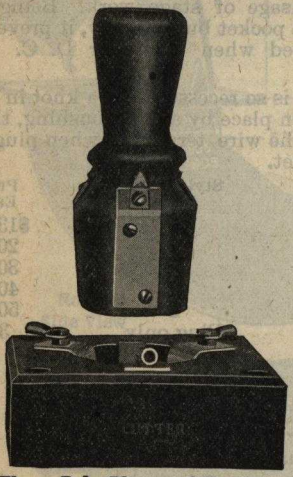
These connectors are very convenient for connections which have to be made and unmade frequently and rapidly. Therefore, they are well adapted for theatrical work, for storage battery connections in electrical vehicles, for trailer-light couplings on electric railways, and for large chandeliers in churches and theaters.

Made in accordance with the Underwriters' requirements, and will safely carry 25 amperes on 125-volt circuits.

042570 6540 25 2⅛x1⅞x¾ .80



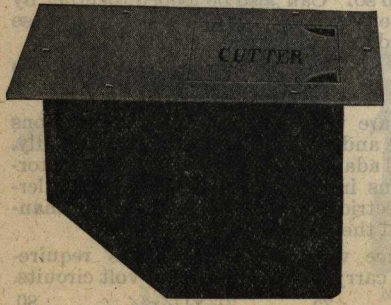
Two-Pole Plug and Receptacle



Three-Pole Plug and Receptacle



Wall Box



Floor Box

CUTTER PLUGS AND RECEPTACLES

The plugs are used wherever a plug connection is desired. They are largely used in connecting portable motors, electrically-driven tools and charging automobiles.

TWO-POLE PLUGS AND RECEPTACLES

50 Amperes, 125 Volts

Trade No.	Description	Std. Pkg.	Wt.,Lbs. Boxed	Price Each
22914	Plug and receptacle.....	15	5	$3.50
22915	Plug only.....	15	2	1.25
22916	Receptacle only.....	15	3	2.25
	50 Amperes, 250 Volts			
22917	Plug and receptacle.....	10	5	6.00
22918	Plug only.....	10	2	2.50
22919	Receptacle only.....	10	3	3.50

100-ampere plugs spaced for 250 volts only. For prices add 25 per cent to the 50 ampere 250 volt list.

THREE-POLE PLUGS AND RECEPTACLES

50 Amperes, 250 Volts, A. C. or D. C.

Trade No.	Description	Std. Pkg.	Wt.,Lbs. Boxed	Price Each
22920	Plug and receptacle.....	10	15	$11.00
22921	Plug only.....	10	3	4.00
22922	Receptacle only.....	10	12	7.00

For four-pole plugs and receptacles add 25 per cent to the above three-pole list. The three-pole plugs and receptacles are made in 100 ampere capacity, 250 volts, and the 50 ampere plugs for potentials as high as 600 volts. Prices quoted on application.

WALL BOXES FOR PLUGS AND RECEPTACLES

Trade No..	Description	Std. Pkg.	Wt.,Lbs. Boxed	Price Each
22923	For two-pole receptacles..	10	10	$2.25
30200	Box only for three and four-pole plug receptacles....	10	20	3.50

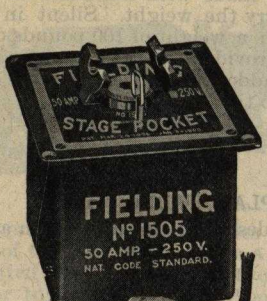
FLOOR BOXES FOR TWO PLUGS

These boxes are substantially made of sheet steel with open bottom and can be made to receive four plugs if desired.

Trade No.	Description	Std. Pkg.	Wt.,Lbs. Boxed	Price Each
22924	Box only, with cast iron cover.....	10	30	$4.75
22925	Box only, with boiler plate cover.....	10	30	8.00

FIELDING RECEPTACLES AND PLUGS

NATIONAL CODE STANDARD



No. 1505



No. 1500T

SECTIONAL MICA STAGE POCKETS

50 Amperes, 250 Volts

Fielding Receptacle Plugs are made of dry mica discs, without shellac or other similar substances, threaded on a steel mandrel, placed under heavy pressure and then turned down with a diamond tool. Polarity cannot be reversed, yet by parallel-band construction, a round and quickly entered plug is retained; rated at 50 amperes, but will not heat at 200 amperes; waterproof, fireproof, absolutely indestructible. Aluminum plug handle has bronze locking collar, firmly gripping by a rubber gasket the surface of cable, no knot necessary to tie, but positively secured against any strain coming on the terminal connections. Duplex closing covers operated by a patented device, giving independent control of the covers, make quick plugging possible with no danger of mashing the fingers from entering plug. Simple lifting of the ring inside of plate raises both covers—letting go, gravity drops them flush with the floor.

Flush Floor Type

Trade No.	Mfrs. No.		Size Plate Inches	Depth Inches	Price Each
012459	1505	Stage pocket and plug complete.....	9x9	8¼	$30.00
012460	1505G2	Two gang pocket with two plugs	13x9	8¼	60.00
012461	1505GR2	Two gang pocket only, no plugs.....	13x9	8¼	30.00
012462	1505P	Plug only with handle and locking collar		7½	15.00
012463	1505R	Pocket only	9x9	8¼	15.00

Two gang only 4 inches wider than one gang.

SIDE WALL RECEPTACLES AND PLUGS

50 Amperes, 250 Volts

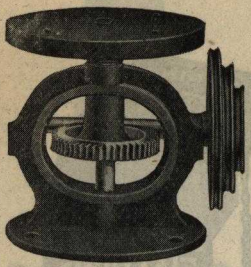
Fielding Receptacles Nos. 1500T and 1500B are designed for work where the receptacle is to be attached to side wall or iron column, switchboard panel, etc. They have all the points of superiority noted above in detail, and have been adopted as a standard by many railroads for storage battery charging panels. They are also used on garage switchboards of up-to-date design. Furnished with brass plate in place of heavy iron plate if desired. Size of brass plate can be as low as 5½ inches square. Depth from surface of plate to back of porcelain 4¾ inches.

Wall Type

Trade No.	Mfrs. No.		Conduit Enters From	Dimensions Length	Width	Depth	Price Each
012464	1500T	Receptacle complete	Top	6¾	6¾	5½	$25.00
012465	1500B	Receptacle complete	Bottom	6¾	6¾	5½	25.00
012466	1500TR	Receptacle only	Top	6¾	6¾	5½	12.50
012467	1500BR	Receptacle only	Bottom	6¾	6¾	5½	12.50
012468	1500P	Plug only, aluminum handle		9½	2½	...	12.50

Prices for gang receptacles in proportion.

WINDOW DISPLAY DEVICES

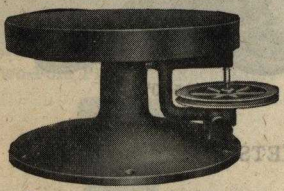


Display Table

SMALL DISPLAY TABLE No. 1

A revolving table for store windows and other purposes. Thoroughly well made with machine cut gears and ball bearings to carry the weight. Silent in operation, and easily run with a weight of 100 pounds on the table. Screw holes are provided so that a wooden top of any size desired may be added. Forty-eight turns of the belt wheel are required to turn the table once.

Trade No.	Space Occupied Inches	Height Inches	Wt., Lbs. Boxed	Price Each
44289	6½x6½	5¾	8	$6.00



Heavy Display Table

MEDIUM DISPLAY TABLE No. 2

Same as small table described above, but with a capacity of 250 pounds.

Trade No.	Diam. of Top, In.	Height Inches	Wt., Lbs. Boxed	Price Each
44295	7¼	9	16	$10.80

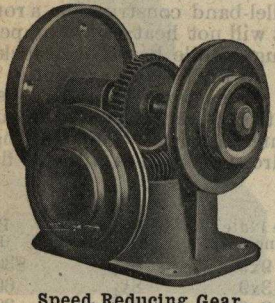
Pulley wheel is 6 inches in diameter for 3/16-inch round belt.

HEAVY DISPLAY TABLE No. 3

This table is for revolving displays weighing 1000 pounds or less, such as pianos, stoves, etc. Although of great capacity it runs very easily on ball bearings and can be operated by an electric motor of 1/16 horse power.

Trade No.	Diam. of Top Inches	Height Inches	Wt., Lbs. Boxed	Price Each
44290	14	8½	62	$21.60

Pulley wheel is 6 inches in diameter for ¼-inch round belt.



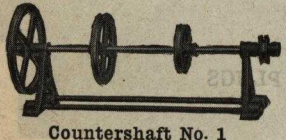
Speed Reducing Gear

SPEED REDUCING GEAR No. 1

An improved device by which the high speed of the motor is converted into a slow, powerful motion. The round plate may be removed if desired and direct connection made to shaft. The fast running pulley has three grooves, and the slow running pulley two grooves, thus giving a wide range of speeds. The reducing gear is often used with a large wooden disk attached to the round plate. This makes a revolving display with the table in a perpendicular position and is very effective.

Geared 48 to 1. Diameter of three-groove driving pulley, 2, 3 and 4 inches. Diameter of two-groove pulley, 2 and 4 inches.

Trade No.	Wt., Lbs. Boxed	Price Each
44292	10	$6.00



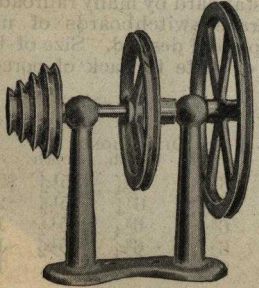
Countershaft No. 1

COUNTERSHAFTS

No. 1

The pulleys, with shaft and bearings, are very useful for connecting the motor with other machinery. The pulleys are bored and grooves turned true with the shaft, to which they are fastened with set screws, so that their position on the shaft may be changed. Shaft is ¼ inch in diameter and 12 inches long. Pulleys are 1, 2, 3 and 4 inches in diameter.

Trade No.	Wt. Lbs.	Price Complete
44291	2	$2.00



Countershaft No. 2

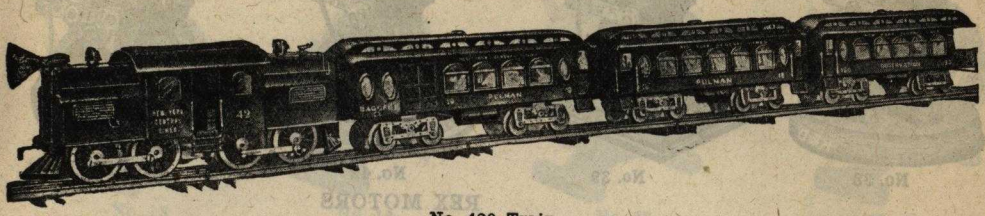
No. 2

This countershaft has a greater range of speeds than the No. 1 and is of heavier construction. It is very desirable as a speed reducer or speed accelerator. Pulleys grooved for 3/16-inch round belt. Shaft is 3/8 inch in diameter. Diameter of large pulley, 6 inches; medium pulley, 4 inches; cone pulley, 1, 1½, 2 and 2½ inches.

44294	3	2.50

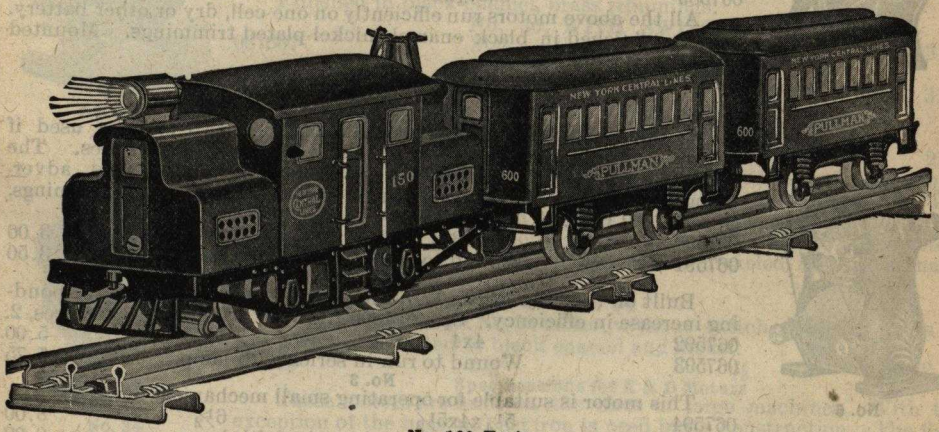
LIONEL ELECTRIC TOYS

ELECTRIC TRAINS



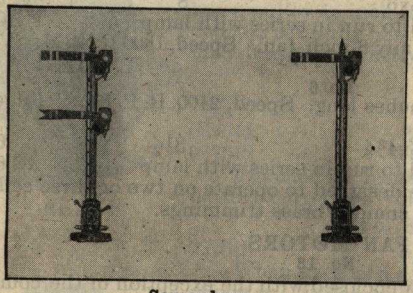
No. 420 Train

There are 37 different styles ranging in price from $4.00 to $50.00. The No. 420 illustrated is one of the best sellers and is a good representative of the Lionel line. The new catalogue illustrated in colors describes every locomotive and every train set as well as the accessories so dear to the heart of every boy. The Lionel line covers every possible desire or even whim exhibited by the buying public. For seventeen years Lionel Trains have been "Standard of the World."

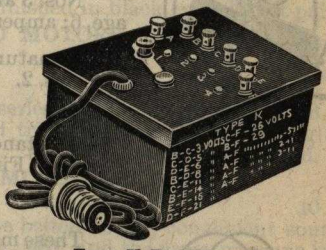


No. 160 Train

ACCESSORIES



Semaphore



Type K Transformer

We have many accessories including switches, crossovers, bumpers, station electric lights, semaphores, etc.

There are three other types of Multivolt transformers. The prices range from $3.40 to $8.00. Use them instead of dry cells where electric current is in house. Catalogue gives full details of voltages obtained, etc.

WE CARRY A VERY COMPLETE LINE OF THIS CLASS OF GOODS AND WILL BE PLEASED TO SEND UPON REQUEST A LIONEL TOY CATALOGUE WHICH SHOWS THE LINE COMPLETE.

K & D MOTORS



No. 38



No. 39



No. 42

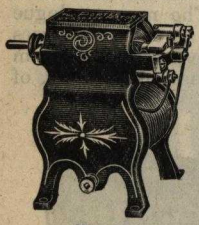

No. 1

REX MOTORS

No. 37, without Switch

Trade No.	Size Inches	Wt. Lbs.	Price Each
067586	3x3½x3½	¾	$1.00
	No. 38, with Switch		
067587	3x3½x3½	¾	1.20
	No. 39, without Switch		
067588	3x3¼x4	1	1.50
	No. 42, with Switch		
067589	3x3¼x4	1	1.75

All the above motors run efficiently on one cell, dry or other battery. They are finished in black enamel, nickel-plated trimmings. Mounted on polished wood base.


No. 3

STANDARD MOTORS

No. 1

Designed to run on a single cell, although two may be used if desired. If two are used, they should be connected in series. The motor develops sufficient power to propel mechanical toys, advertising devices, etc. Finished in black enamel, nickel-plated trimmings. Speed, 1800 R. P. M.

067590	3½x3½	1½	3.00
067591	Wound to run in series with lamp		3.50

No. 2

Built on the lines of No. 1, but larger and heavier, with corresponding increase in efficiency. Speed, 1800 R. P. M. Voltage, 4; amperes, 2.

067592	4x4	2¾	5.00
067593	Wound to run in series with lamp		5.75


No. 6

No. 3

This motor is suitable for operating small mechanical devices.

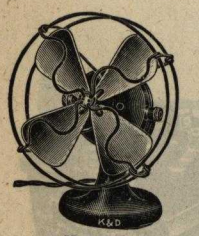
067594	5¼x4x5½	6½	8.00
067595	Wound to run in series with lamp		9.00

No. 4

Same type as No. 3, but larger and more powerful, with corresponding increase in efficiency.

067596	6x4½x6	8	9.00
067597	Wound to run in series with lamp		10.50

Nos. 3 and 4 will swing any 8-inch fan. Speed, 1800 R. P. M. Voltage, 6; amperes, 1.6.


No. 18

No. 6

Armature shaft is 3½ inches long. Speed, 2400 R. P. M. Voltage, 6; amperes, 2.

067598	3½x3½x4⅜	3½	6.00
067599	Wound to run in series with lamp		6.75

All standard motors are designed to operate on two or three cells of battery. Finished in black enamel, brass trimmings.

FAN MOTORS

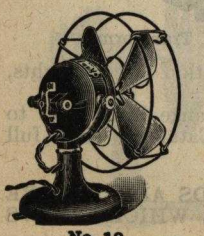
No. 18

These motors are entirely enclosed, with the exception of the commutator, which is easily accessible for cleaning, etc.

The fan is 6 inches in diameter, with guard of standard pattern. The trunnion suspension allows it to be tilted to any desired angle. A convenient switch is located in the base. It is entirely self-contained.

Finished in black enamel and nickel plate. Speed, about 2300 R.P.M. on current of 7 volts, 5 amperes. A battery of 20 cells, connected 5 in multiple, 4 in series should have a life of about 200 hours, actual use.

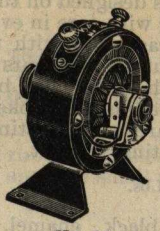
067600	Wound for batteries	6.50
067601	Wound to run in series with 110-volt D. C. lamp	8.00
067602	Wound to run in series with 110-volt A. C. 60-cycle lamp	8.00


No. 18

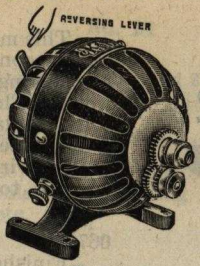
K & D MOTORS



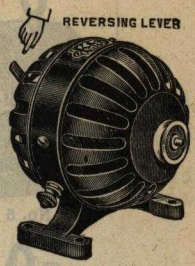
No. 13



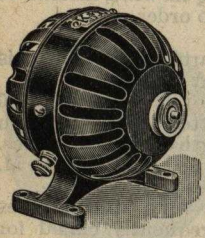
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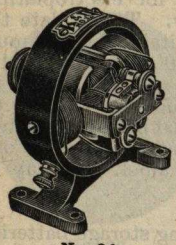
No. 36



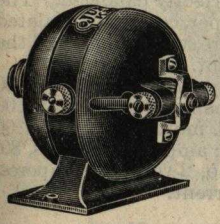
No. 35



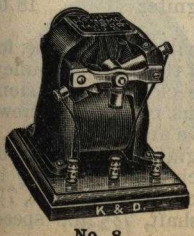
No. 35A



No. 34



No. 17



No. 8

No. 13

Trade No.	Height Inches	Weight Pounds	Price Each
067603	3⅜	1¼	$3.50
067604	Wound to run in series with 110-V. D. C. 16 c. p. lamp		4.50

No. 14

067605	3⅜	1⅛	2.50
067606	Wound to run in series with 110-V. D. C. 16 c. p. lamp		3.00

Finished in black enamel, brass trimmings.

No. 36, WITH SWITCH

067607	3¼	1	3.50

No. 35, WITH SWITCH

067608	3¼	1	3.00

No. 35A, WITHOUT SWITCH

This is the same as No. 36, without the reducing gears.

067609	3¼	1	2.50

Nos. 36, 35 and 35A are wound for battery current only and run to full efficiency on two or three dry, or other cells of similar capacity. The reversing and reducing speed features of these motors make them particularly desirable for propelling models, etc. If desired, these motors can be furnished with perforated end covers nickeled instead of enamelled, on special order.

No. 34

This is the same as No. 36 motor, without switch, reducing gears or end covers. Finished in black enamel and nickel.

067610	3¼	⅞	2.25

Specifications for K & D Motors

These motors are built on the lines of large machines. With the exception of the base, no cast iron is used in its construction. The field is made of the best charcoal iron; annular field coil carefully taped and shellaced. The armature is laminated, slot wound. Self lubricating bearings so constructed as to always be in perfect alignment, the cups having neat and efficient covers. Steel armature shaft with grooved brass pulley ⅝ inch in diameter. The commutator segments are of hard copper, carefully insulated with mica. Self-adjusting brushes. The machines are perfectly ventilated. Finished in black enamel, not paint.

No. 17 JUNO MOTORS

Trade No.	Size, Space Inches	Weight Pounds	Price Each
067611	3½ x 3½ x 3½	2	$5.00
067612	Wound to run in series with lamp		6.50

Finished in black enamel, nickel trimmings, standard winding for battery current, 4 volts, 1.5 amperes. Runs at about 2000 R. P. M.

No. 8 KENT DYNAMO OR MOTOR

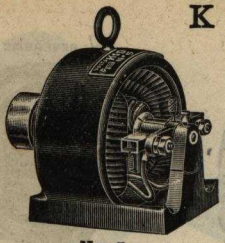
067613	5½ x 5½ x 6	8	10.00

When used as a dynamo, it may be belted to any convenient source of power. Different binding posts are used, and the armature runs in a different direction than when used as a motor. It has a drum armature; self-adjusting, woven-wire brushes, of the radial type. Self-oiling bearings. Finished in black enamel, with nickeled trimmings.

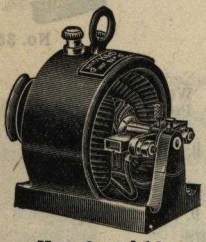
As a dynamo it will light from one to ten, 3 candle power lamps, from 2 to 12 volts; its capacity is about 2 amperes.

As a motor it will operate satisfactorily any small mechanism requiring light power, such as phonographs, moving signs, advertising devices, etc. On 6-volt circuit it requires about 1.5 amperes; speed, 1800 R. P. M. with average load; has two groove pulleys ⅝ and ⅞-inch, respectively. Length of shaft, 5½ inches.

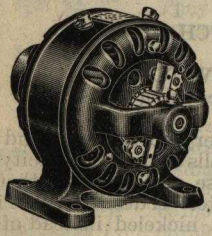
K & D MOTORS AND DYNAMOS



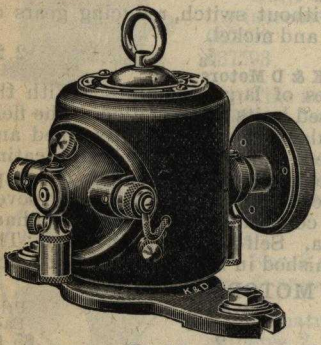
No. 5



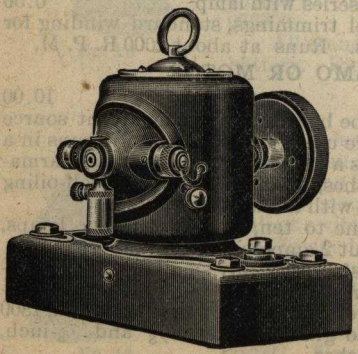
Nos. 9 and 19



No. 12



No. 10



No. 11

No. 5

This machine is designed on the lines of large machines, and is constructed with care in every detail. The field is of the ring type, cast solid with the frame; coils are form wound. The commutator segments are of hard copper, carefully insulated with mica. The brush holders are of the radial type on an adjustable yoke. These brushes are of woven wire and are self-adjusting. This motor is not adapted to alternating current.

Trade No.	Wt., Lbs.		Price Each
067614	9	Motor	$9.00

Finished in black enamel. Speed, 1800 R. P. M. on a current of 6 volts, 2 amperes, with average load. Length of shaft, 6 inches; diameter, ¼ inch. Grooved pulley, 1½ in. diameter. Flat face pulley, ¾ in. wide, instead of grooved, if desired. Special windings to order.

No. 9

The same frame, field, and other parts are used in this machine as in motor No. 5, but is shunt wound.

067615	9	Dynamo	9.00

Finished in black enamel. Fitted with 1½-inch grooved or flat pulley, as desired. Length of shaft, 6 inches. Occupies space 6x4¾x6 inches. At speed of 2200 R. P. M. the output is 36 watts (6 volts, 6 amperes).

It can be wound to give different volts and amperes within its capacity. Two windings frequently called for are: 3 volts, 13 amperes, and 2½ volts, 15 amperes.

No. 19

This dynamo has the same frame and fields as No. 5.

This machine is wound especially for electroplating, and meets the requirements admirably. To regulate the current flowing through the solution, a suitable rheostat must be used. No. 24-A rheostat was designed especially for this and serves the purpose perfectly.

067616	9	Plating dynamo	9.00

Furnished with 1½-inch grooved or flat pulley, as desired.

At speed of 2200 R. P. M. it generates a current of 2 volts, 6 amperes. Finished in black enamel. It may be wound to increase the amperes up to 15.

No. 12

This machine is designed for charging storage batteries.

The field is of the ring type, bi-polar, with coils form wound, thoroughly taped and shellacked.

The armature is of the drum type, slot wound, built up of best quality charcoal iron disks; perfectly balanced. The commutator segments are of hard copper, carefully insulated with mica. Brushes are of woven wire, with holders of the radial type, securing perfect adjustment.

067617	23	Charging dynamo	25.00
067618	23	Plating dynamo	25.00
067619	23	110-V. D. C. motor	25.00

Speed, R. P. M., 2000; voltage, 20; amperes, 4; watts, 80. It is also wound as a plating dynamo, 2 volts, 30 amperes, and as a motor for 110 volts direct current.

No. 10

A compactly designed and very efficient dynamo. It is entirely enclosed and moisture-proof, which makes it satisfactory for use in damp or exposed places.

067620	15	Gas engine igniter	18.00

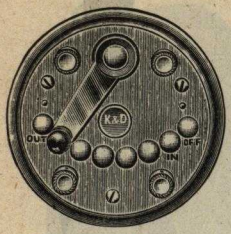
No. 11

No. 11 shows the K & D Igniter with tilting base, for tightening belt or adjusting pressure of the friction pulley. Within the range of its movement, the closest adjustment may be obtained. The adjusting means consist of screws acting in opposition to springs—effective and reliable.

067621	15	Gas engine igniter	20.00

Furnished with 2½, 3, 3½ or 4-inch friction pulley in place of grooved pulley, without extra charge. Height, 7½ in.; length of base, 6 in.; length of shaft, 7½ in.; speed. 1200 to 2500 R. P. M.; capacity, 50 watts.

K & D BATTERY MOTOR RHEOSTATS AND SWITCHES



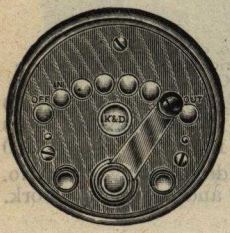
No. 24

No. 24

Battery Rheostat and Switch

Trade No.		Price Each
067622	Six steps; resistance, 5 ohms.....	$1.00

Polished wood base; polished nickel-plated trimmings; hard rubber handles. Suitable for regulating miniature battery lamps, speed of small motors, etc.



No. 24A

No. 24A

Rheostat and Switch

This rheostat was designed for use in connection with our No. 19 plating dynamo, to regulate the current flowing through the plating solution. It may, however, be used for any purpose within its capacity.

067623	Six steps; resistance, 4 ohms.....	1.00



No. 23

No. 23

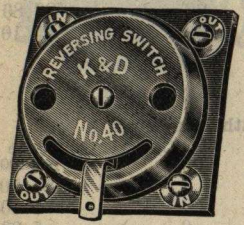
Improved Rheostat and Switch

Suitable for regulating miniature lamps, the speed of small motors, and a great variety of service which would be impossible to mention in detail.

Owing to the peculiar construction of this rheostat, the change of resistance takes place very gradually on movement of the lever; and not by sudden jumps, as in the ordinary construction. The resistance coil has approximately 160 convolutions, and as the rate of change in the resistance on movement of the lever is by single convolutions, it will be seen to admit of very fine adjustment.

The resistance coil may be entirely cut out without opening the circuit. The coil is made of a special high resistance wire, which is very strong, and will not corrode; no soldered connections with the resistance coil. The coil is air-cooled, and works on our maximum rated capacity at a remarkably low temperature.

Experimenters, dentists, surgeons, dermatologists, and all artisans and scientists, will find this a most satisfactory and efficient small rheostat and switch.



No. 40

067624	Resistance, 10 ohms; capacity, 2 amperes.....	1.00

Metal parts nickel-plated. Hard rubber handles. Bases, seasoned wood, polished.

Dimensions: 3¾ inches diameter; total thickness, including rubber handle, 1⅜ inches.

Directions: When the lever rests on the button marked "out," the coil is cut out, but the circuit is unbroken. To introduce resistance, move the lever in the direction shown by arrow, and vice versa. When the lever rests on the button marked "off" the circuit is open



No. 41

REVERSING SWITCHES

This is a new and neat little switch. It is suitable for use as a pole-changing switch in any position where the current to be carried does not exceed 15 amperes. It is also suitable as a starting, stopping and reversing switch for small motors.

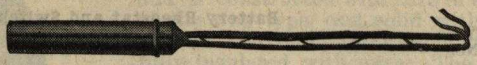
The base is of hard fibre; the exposed metal parts are nickel-plated.

067625	No. 40, with cover.....	.90
067626	No. 41, without cover.....	.75

DU PONT BLASTING MACHINES



Du Pont Push-Down Blasting Machine



Du Pont Electric Blasting Cap (Fuse)



Section of Gutta Percha Covered Electric Blasting Cap for Submarine Work



Du Pont Cap Crimper

DU PONT BLASTING MACHINES

Trade No.	Mfrs. No.	Cap., No. of Electric Blasting Caps	No. of Posts	Wt. Lbs.	Price Each	Trade No.	Mfrs. No.	Cap., No. of Electric Blasting Caps	No. of Posts	Wt. Lbs.	Price Each
15163	Pocket	Up to 4	2	4½	$15.00	15160	4	Up to 50	2	45	$37.50
15158	2	Up to 10	2	15	17.50	15161	5	Up to 100	2	53	90.00
15159	3	Up to 30	2	25	25.00	15162	6	Up to 150	2	38	120.00

Pocket type adapted for coal mining. No. 2 used in stump and boulder blasting, etc. No. 3 is standard size for quarry and mine. No. 5 is for severe use in quarry and contracting work. No. 6 is the newest model, of great power and light weight.

DU PONT ELECTRIC BLASTING CAPS (COPPER WIRES)

No. 6

Trade No.	Length of Wire, Feet	Price per 100	Trade No.	Length of Wire, Feet	Price per 100
013108	4	$7.00	013116	20	$16.60
013109	6	8.20	013117	22	17.90
013110	8	9.40	013118	24	19.20
013111	10	10.60	013119	26	20.50
013112	12	11.80	013120	28	21.80
013114	16	14.20	013121	30	23.10

No. 8

15139	4	8.00	15147	20	18.60
15140	6	9.00	15148	22	19.90
15141	8	10.00	15149	24	21.20
15142	10	11.00	15150	26	22.50
15143	12	12.00	15151	28	23.80
15145	16	14.00	15152	30	25.10

In ordering, specify number and length desired.

DU PONT ELECTRIC SQUIBS

With Copper Wires			With Iron Wires		
Trade No.	Length Feet	Price per 100	Trade No.	Length Feet	Price per 100
013122	4	$5.25	013125	4	$4.50
013123	6	6.45	013126	6	5.20
013124	8	7.65	013127	8	5.90
15164	10	8.85	.....	..	....
15165	12	10.05	.....	..	....

DU PONT BLASTING CAPS

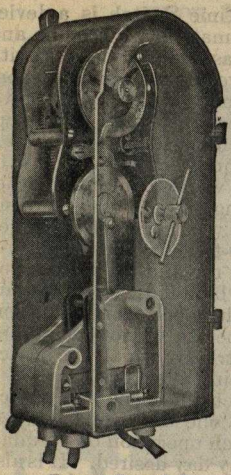
Trade No.	Mfrs. No.	Price per 1000	Trade No.	Mfrs. No.	Price per 1000
15154	6	$17.00	15156	8	$28.00

CAP CRIMPERS

Trade No.	Mfrs. No.		Price Each
013129	1	Cap crimpers, Du Pont.....	$0.65
013130	2	Cap crimpers, Du Pont.....	1.15

Connecting wire and leading wire, prices upon application.

CAMPBELL TIME SWITCHES



Types C and F

TYPE C—8-DAY, TWO OPERATIONS DAILY

Trade No.	Mfrs. No.	Cap. Amps.	Voltage	No. of Poles	Price Each
019636	101	30	250	2	$36.00
019637	102	60	250	2	38.50
019639	104	100	250	2	55.00
019640	105	150	250	2	65.00
019641	106	200	250	2	75.00
019642	107	250	250	2	90.00
019643	108	30	250	3	38.50
019644	109	60	250	3	42.00
019646	111	100	250	3	75.00
16291	112	200	250	3	95.00

Dimensions: Height, 14¼ in.; width, 6 in.; depth, 5 in.
Add 10 per cent for Sunday cut-out or four operations daily.

TYPE F—8-DAY, DOUBLE-THROW

019647	301	30	250	1	40.00
019648	302	60	250	1	42.00
019649	303	30	250	2	42.00
019650	304	60	250	2	45.00

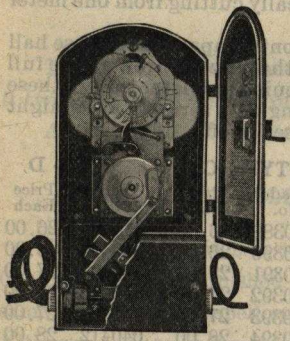
Dimensions: Height, 14¼ in.; width, 6 in.; depth, 5 in.
Constructed for use on two-rate meter service.
Add 10 per cent for Sunday cut-out or four operations daily.

TYPE J—8-DAY, TWO-CIRCUIT

Operates as follows: All circuits on; No. 1 off; No. 2 off; or all circuits off; No. 1 on; No. 2 on. Specify with order if latter alternative is desired.

019651	401	30	250	1	42.00
019652	402	60	250	1	45.00

Dimensions: Height, 14¼ in.; width, 6 in.; depth, 5 in.



Types J and K

TYPE K—8-DAY, THREE-CIRCUIT

Similar to Type J, operating three circuits instead of two.

019653	403	30	250	1	47.00
019654	404	60	250	1	49.00

TYPE E, OIL BREAK—8-DAY, TWO OPERATIONS DAILY

Is made to control series street lighting circuits, and will break circuits of any potential up to and including 4500 volts.

019655	201	25	2500	1	46.50
019656	202	25	4500	1	60.00
16287	203	25	2500	2	53.00
16288	204	25	4500	2	67.00

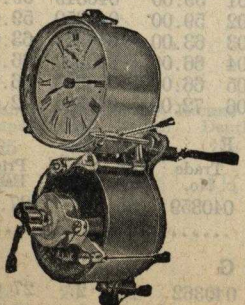
Dimensions: Height, 16½ in.; width, 8 in.; depth, 7 in.
Add 10 per cent for four operations daily.

TYPE A—1-DAY, ONE WINDING

Campbell Type A Time Switch may be installed anywhere that the snap switch may be used. The snap switch can be manually operated by the button, independent of the time switch mechanism. The clock can be removed to be wound and set. Each switch is finished in nickel and black enamel.

019657	1	10	250	2	8.40
019658	2	20	250	2	9.60
019659	3	35	250	2	10.80
019660	4	10	250	3	10.80
019661	5	20	250	3	12.00
019662	6	35	250	3	13.20

Dimensions: Height, 10 in.; width, 6 in.; depth, 4¼ in.



Type A

TYPE ES—8-DAY

Short-circuits one section of a series loop and at same time disconnects unused section from line.

16289	205	25	2500	1	60.00
16290	206	25	4500	1	73.00

TYPE SS—8-DAY

Switch and clock, removable and interchangeable. Two operations each 24 hours.

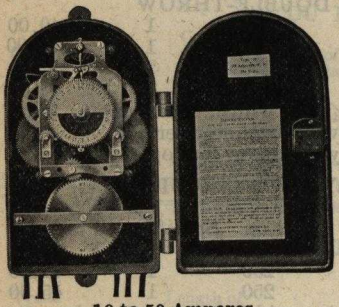
16292	701	20	250	1	30.00
16293	702	20	250	2	32.00

Dimensions: Height, 10¼ in.; width, 5½ in.; depth, 4¾ in.

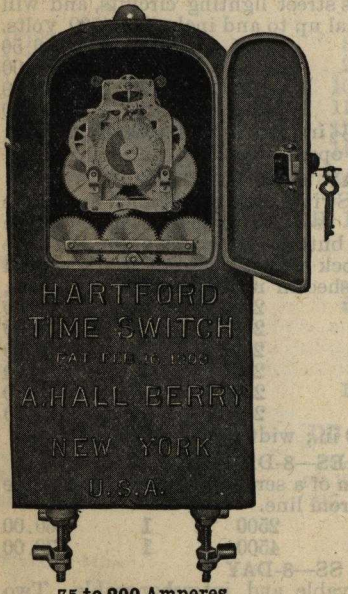
HARTFORD AUTOMATIC TIME SWITCHES



Door Closed



10 to 50 Amperes
Single and Double-Pole
10 to 35 Amperes
Triple-Pole
12x7½x3 Inches
Weatherproof Case with
Rubber Gasket



75 to 200 Amperes
Single and Double-Pole
50 to 200 Amperes
Triple-pole
19½x9¾x7½ Inches

250 VOLTS

The Hartford Automatic Time Switch is a device by which electric current is automatically turned on and off at such predetermined time as the user desires, with no further attention than the weekly winding. It consists of a high grade Seth Thomas Marine Clock and a standard electric switch so arranged that each, in its operation, is independent of the other. This permits perfect regulation of the clock and insures accuracy of operation as the clock has no work to perform other than its proper function of keeping time. The mechanism is enclosed in a dustproof and weatherproof japanned cast iron case, locking with sub-treasury lock.

Type B throws the switch on and off daily seven days per week at the hours for which it is set. It is provided with a cut-out by which the clock can be disconnected, allowing the clock to operate without throwing the switch. It also has a hand trip by which the switch can be operated without disturbing the clock.

Type C has a device by which the clock and switch are automatically disconnected one day in each week. While designed to omit the switch operation on Sunday, it can be set to disconnect on any day desired. It is also provided with hand trip for operating the switch.

Type D is similar to Type B, but is arranged to throw the switch on and off for two periods each day. This switch was designed especially to attract the attention of theatre patrons before and after the performance and save current in the interim.

Type E is designed for use in connection with two-rate meter service, automatically cutting from one meter to another at time desired.

Type G is designed to control apartment house hall lighting. It is so arranged that it will throw on the full number of lights in early evening and later throws these off, at the same time throwing on a series of a few night lights, throwing the second series off at dawn.

Cap. Amps.	No. of Poles	TYPE B Trade No.	TYPE B Price Each	TYPE C Trade No.	TYPE C Price Each	TYPE D Trade No.	TYPE D Price Each
10	1	040371	$24.00	040389	$26.00	040407	$26.00
10	2	040372	24.00	040390	26.00	040408	26.00
10	3	040373	25.00	040391	27.00	040409	27.00
20	1	040374	25.00	040392	27.00	040410	27.00
20	2	040375	25.00	040393	27.00	040411	27.00
20	3	040376	26.00	040394	28.00	040412	28.00
35	1	040377	26.00	040395	28.00	040343	28.00
35	2	040378	26.00	040396	28.00	040344	28.00
35	3	040379	27.00	040397	29.00	040345	29.00
50	1	040380	29.00	040398	31.00	040346	31.00
50	2	040381	29.00	040399	31.00	040347	31.00
50	3	040382	54.00	040400	56.00	040348	56.00
100	1	040383	57.00	040401	59.00	040349	59.00
100	2	040384	57.00	040402	59.00	040350	59.00
100	3	040385	60.00	040403	63.00	040351	63.00
200	1	040386	63.00	040404	66.00	040352	66.00
200	2	040387	63.00	040405	66.00	040353	66.00
200	3	040388	69.00	040406	72.00	040354	72.00

TYPE E

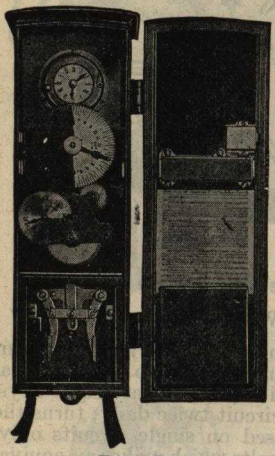
Trade No.	Cap. Amps.	No. of Poles	Price Each	Trade No.	Cap. Amps.	No. of Poles	Price Each
040355	10	1	$25.00	040359	35	1	$27.00
040357	20	1	26.00	.....	....	....	....

TYPE G

040361	10	1	27.00	040362	10	2	27.00
53146	35	1	42.00	53147	35	2	42.00

ANDERSON AUTOMATIC TIME SWITCHES

TYPE F—DOUBLE-POLE, SINGLE-THROW, 250 VOLTS



Type F

Trade No.	Mfrs. No.	Cap. Amps.	Dimensions, Inches Length	Width	Depth	Ship. Wt., Lbs.	Price Each
57532	11000	25	17½	5¾	4½	50	$36.00
57533	11001	50	17½	5¾	4½	50	40.00
57534	11002	75	17½	5¾	4½	55	55.00
57535	11003	100	20	8½	5½	85	150.00
57536	11004	200	27½	12	5	30	200.00

Type F switch can be furnished with cut-out to omit operation during Sunday or on a holiday.

Add $3.00 to list price for 25, 50 and 75-ampere and $5.00 to list for 100 and 200-ampere.

Saturday Night Extension Device

This attachment makes it possible to illuminate for a given time every night of the week but one, and on the night desired to continue the lighting for a longer period. Type F can be furnished with this attachment when specified.

Add $6.90 to list for 25, 50 and 75-ampere and $8.00 for 100 and 200-ampere.

Double Operation, Daily Attachment

Type F can be furnished to operate four times daily, that is, to close the circuit and open it twice each day, instead of once.

Add $6.90 to list for 25, 50 and 75-ampere and $8.00 for 100 and 200-ampere.

TYPE L—DOUBLE OR TRIPLE-POLE, HIGH TENSION, OIL BREAK

This type of switch is constructed for handling alternating current up to and including 6600 volts, and is furnished either two or three-pole. It is an oil break switch having the same high grade propelling mechanism and timepiece as used in all these time switches. Although primarily designed for constant potential circuits, this apparatus is also used extensively in connection with small constant current transforming apparatus where the lamps can safely be connected to the secondary coil of the transformer in its position of maximum voltage. The prices listed below are for complete apparatus, including oil chamber and sufficient oil to fill same to the working level.

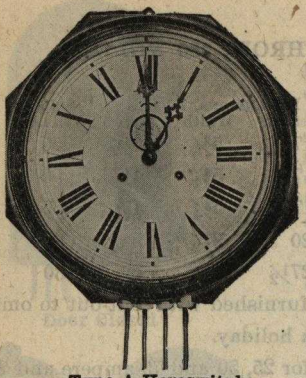
For Potentials not Exceeding 3300 Volts

Cap. Amps	Dimensions, Inches Length	Width	Depth	Weight Pounds	Double-Pole Trade No.	Mfrs. No.	Price Each	Triple-Pole Trade No.	Mfrs. No.	Price Each
25	20	10½	7¼	65	57537	11039	$60.00	57541	11043	$72.00
50	20	10½	7¼	65	57538	11040	65.00	57542	11044	80.00

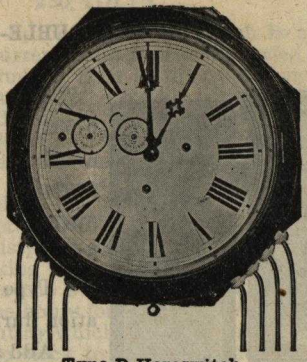
For Potentials not Exceeding 6600 Volts

25	20	11½	8	75	57539	11080	100.00	57543	11084	120.00
50	20	11½	8	75	57540	11081	110.00	57544	11085	135.00

HOROSWITCHES, COFFEE MILLS AND FLOOR POLISHERS



Type A Horoswitch



Type B Horoswitch

MATTHEWS HOROSWITCHES



Coffee Mill

This apparatus will automatically turn the lights on and turn them off again, at any time desired. All that is necessary is to set the indicators to the predetermined time, and wind it up once every eight days.

Type A Horoswitch will operate one circuit twice daily; turns the lights on and off each day. It can be used on single circuits only, and is made for 10 or 20 amperes and 250 volts which makes an equivalent of 2500 or 5000 watts.

Type B Horoswitch will operate two separate and distinct circuits, each entirely independent of the other. It will operate each circuit twice daily, turn the lights of each circuit on and off each day. It can be used on double circuits of 10 or 20 amperes and 250 volts each.

Description	10 Amperes Trade No.	10 Amperes Price Each	20 Amperes Trade No.	20 Amperes Price Each
Type A for Single circuits.....	148988	$52.00	148990	$54.00
Type B for Double circuits.....	148989	88.00	148991	90.00

Shipping weights: Type A, 30 pounds; Type B, 35 pounds.

STEEL-KUT COFFEE MILLS

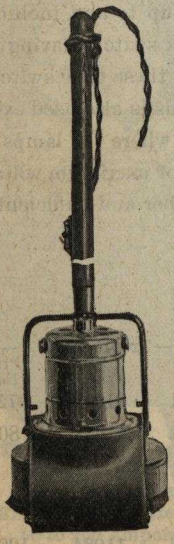
Intended to fasten on the kitchen wall within easy reach of an electric light socket. Simply place the whole beans in the hopper, press the switch and one is at liberty to do other duties while electricity cuts the coffee with tempered steel knives.

These mills are substantially constructed of white brass, handsomely nickel-plated.

Height over all, 30½ inches; width over all, 7 inches; weight, 7¾ pounds. Motor wound to operate on 115 volts 25 to 60 cycles A.C. or 115 volts D.C.

Trade No.	Description	Price Each
17175	Complete with cord and plug.....	$16.50

WAX-RITE FLOOR POLISHERS



Floor Polisher

Attach to any ordinary electric light socket and after applying the wax with the special applicator that goes with every machine simply let Wax-Rite glide slowly over it, securing a hard, smooth wax finished surface. It silently glides over the surface to be polished and with its massive bristle brush revolving at the rate of three thousand revolutions a minute, gives the floors a hard, glossy finish. Equipped with feed through switch located on the handle, making it possible to start and stop the motor instantly.

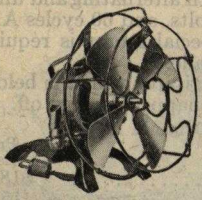
Motor is universal and will operate on either alternating or direct current at 110 volts. Has a 5-foot hickory handle and equipped with 7-inch round bristle brush. Handsomely finished in black japan and polished nickel. Length, exclusive of handle, 10½ inches; width, 7 inches; height 8 inches. Entire machine weighs 21 pounds.

17176 Complete with cord..... 35.00

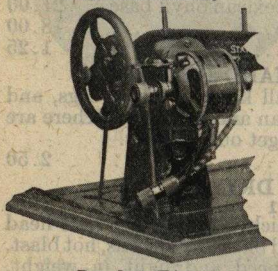
SEWING MACHINE MOTORS



Jack Rabbit Type Sewing Motor



Motor with Fan Attachment



Bracket Type



Tailor Type

JACK RABBIT TYPE SEW-E-Z SEWING MOTORS

These little motors change any sewing machine, old or new, into an electric self-operated labor saver. Very easily adjusted. No tools or screws. Just place the motor on the machine next to the wheel. Attach the plug to any electric light socket. Then place the little self-starter on the floor. A slight pressure of the toe starts the wheel. Motor is wound for operation on 110 to 120 volts on either A. C. or D. C., 25 to 60 cycles. A slight additional charge for other currents is made.

Trade No.		Price Each
90468	Complete, as described	$15.00

SEW-E-Z ATTACHMENTS

These consist of fan guard and blades, emery wheel and buffer. Simply remove the cork pulley from the motor and a twist of the wrist will attach the fan blade and guard, when Sew-E-Z will be instantly converted into an efficient fan motor.

A combination arbor is furnished, on which may be placed either the emery wheel or buffer. These are very effective for sharpening knives, scissors, etc., and for polishing silver ware.

58619	Fan attachment	2.50
58620	Combination emery wheel and buffer	1.50
63103	Cream whipper attachment	3.50

BRACKET TYPE SEW-E-Z SEWING MOTORS

The principle of these motors is exactly the same as that of the Jack Rabbit Type except that they are intended to attach permanently to the arm of the machine back of the head. They are so constructed that they may be turned in, when they will be readily dropped with the head when closing the machine.

There is a different style bracket to fit every type and model sewing machine. When ordering, be sure to specify type, model and manufacturer's name of machine.

58621	Any type, complete	15.00

TAILOR TYPE SEW-E-Z SEWING MOTORS

Tailor Type Sew-E-Z Motors are absolutely devoid of any complicated parts. They are light, portable, can be readily changed from one to another machine, and their current consumption and maintenance cost are negligible factors. They fit and operate perfectly practically all types and models of light tailor machines. They require neither bolts, clamps nor screws to fasten. They are simply placed on the machine with the little pulley next the hand wheel and the self-starter may be placed in any convenient position on the floor. All the operator has to do is to guide the sewing and regulate the speed by a slight pressure of the foot.

Size of Motor.—Diameter $3\frac{1}{8}$ inches, length $5\frac{1}{2}$ inches, length of shaft $7\frac{5}{32}$ inches, size of pulley $1\frac{1}{2}$ inches, uprights 6 inches, lowest position top edge of pulley 3 inches, highest position top edge of pulley 6 inches. Weight $4\frac{3}{4}$ pounds.

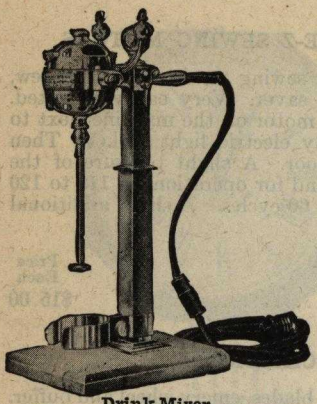
Motor wound for 115 volts, A. C. or D. C., 25 to 60 cycles. Watts, 41 at lowest speed; 70 at highest.

Gives speed of 300 to 1800 stitches per minute. Motor is reversible by simply reversing position of pulley and bobbin winder.

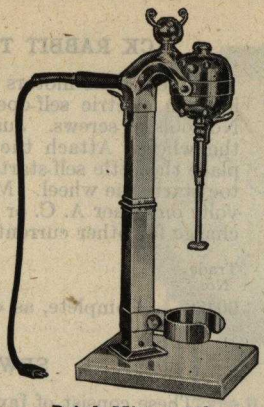
Shaft extension outside of motor is equipped with friction attachment for winding bobbins, thus eliminating the necessity of using old fashioned attachment. Motor liberally guaranteed forever against all defects in workmanship or material. Natural wear and tear not considered a defect.

58618	Complete, as described	24.00

DRINK MIXERS AND PORTABLE DRIERS



Drink Mixer with Non-detachable Agitator



Drink Mixer with Detachable Agitator



Whirlpool Mixer

CYCLONE DRINK MIXERS

The air-cooled motor operates on both alternating and direct current at a voltage of from 105 to 120 volts, and 60 cycles A. C. For other voltages and frequencies, a special motor is required for which a small additional charge is made.

The new model has a detachable agitator which is held in place by a spring ball clip, and can be snapped on and off.

With Non-detachable Agitator—Original Model

Trade No.	Description	Price Each
61220	Silver-plated, onyx base	$18.50
61221	Nickel-plated, marble base	15.50
	With Detachable Agitator—New Model	
12406	Quadruple silver-plated, Mexican onyx base	21.00
12407	Nickel-plated, marble base	18.00
12408	Extra agitators	1.25



Model No. 1 Cyclone Hair Dryer

WHIRLPOOL MIXERS—HAND-OPERATED

Designed for mixing drinks of all kinds, beating eggs, and whipping cream and dressings. Clean and sanitary. There are no complicated parts and nothing to get out of order.

12409	Complete	2.50

CYCLONE HAIR DRYERS

Model No. 1

The Cyclone Hair Dryer will quickly dry the heaviest head of hair. One turn of switch gives cold blast; two turns, hot blast.

The Cyclone is perfectly balanced and light in weight, assuring ease of operation. There is nothing to get out of order.

Designed to operate from any electric light socket, on either alternating or direct currents at a voltage of from 105 to 120 volts. Where the voltage is less than 105 or more than 120 volts, or where the frequency of alternations is greater than 60 cycles, a small additional charge will be made for this special outfit.



Model No. 2 Cyclone Hair Dryer

Trade No.		Price Each
61222	Complete, as described	$25.00

Model No. 2

Model 2 is similar to Model 1 in operation, but is somewhat different in design. The shape of the casing, however, is the same, being of a peculiar snail design which allows plenty of room for the fan and prevents the air from being choked.

90469	Complete, as described	16.50
90470	Plush-lined carrying case, extra	1.50

CYCLONE SHOE DRYERS

The Cyclone Shoe Dryer is portable, very light, efficient, durable, and fool-proof. Simple to operate. Has a hot and cold air blast and a universal support which fits any stand has a highly polished aluminum casing.

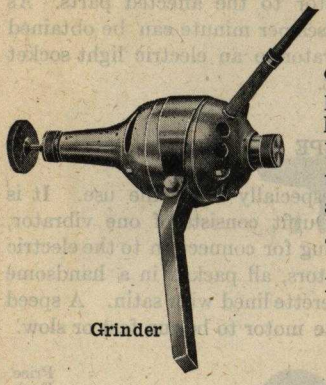


Cyclone Shoe Dryer

Trade No.		Price Each
61223	Complete, as described	$17.50

GRINDERS AND LATHE MOTORS

PORTABLE ELECTRIC GRINDERS

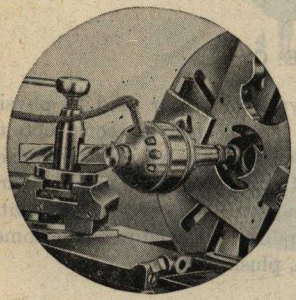


Grinder

Works equally well on internal or external jobs. Will grind out a 1¼-inch hole 4 inches deep. Carborundum and emery pencils can also be used for grinding out small holes. Used on lathes, shapers, or millers. A special feature is the dustproof bearing caps. Furnished complete with portable cord and attachment plug. Motor is universal, operating on both direct and alternating current.

Trade No.	H. P.	R. P. M.	Wt. Lbs.	Price Each
12410	1/12	10000	5½	$25.00

JEWELERS' LATHE MOTORS



Showing Grinder In Operation

These lathe motors are so constructed that the motor may be instantly reversed by simply turning the button in the switch and the speed regulation is so arranged that when the motor is running at high speed in one direction, when reversed it will run at slow speed in the opposite direction, making it of especial advantage to the manufacturing jeweler for drilling and tapping purposes.

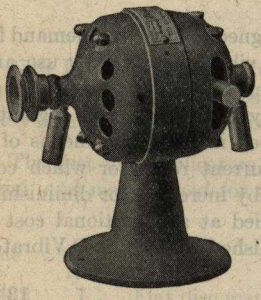
Large and powerful enough for the repair man, small enough to go on any bench and not be in the way.

No. 1 Model

The No. 1 Model Motor is designed to attach to the lathe bench and connect by belt to the lathe. The speed regulation is controlled by the carbon brush switch. There are eight speeds. Raise or lower the carbon brushes until the desired speed is furnished. To reverse motor simply turn snap switch to the right.

Outfit consists of motor, reversing switch and cord and plug. Motor dimensions: length 5½ inches, height 5½ inches, weight 2½ pounds.

Standard current 110 to 120 volts, 25 to 60 cycles alternating, 100 to 120 volts direct current. Current must be specified, otherwise alternating 60-cycle current motor will be furnished.



No. 1 Model Lathe Motor

Trade No.	H. P.	Description	Price Each
12411	1/20	Complete with 1-inch pulley	12.50

No. 2 Model

The No. 2 Model differs from the No. 1 Model in that the motor is universal and the speed regulation is controlled by the small foot pedal self-starter. A light pressure starts the motor slowly, the harder you press the faster the motor runs. To reverse the direction of the motor, change the position of the carbon brushes; raise or lower to obtain the direction of running desired.



No. 2 Model Lathe Motor

12412	1/20	Complete with self-starter speed regulator, 1-inch pulley, cord and plug.....	16.50

No. 3 Model

85863	1/12	Same as No. 2.....	22.00

NEW LIFE VIBRATORS



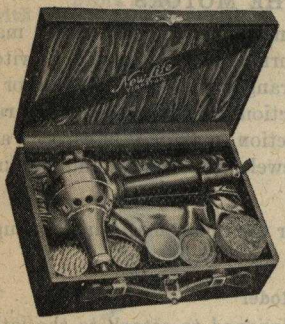
Type A

It is not possible to secure in any other way the wonderful stimulation that is produced by a few minutes' application of the New Life Vibrator to the affected parts. As many as ten thousand impulses per minute can be obtained by merely attaching the vibrator to an electric light socket and switching on the current.

TYPE A

This type is designed especially for home use. It is very compact and strong. Outfit consists of one vibrator, with cord and attachment plug for connection to the electric light fixture, and six applicators, all packed in a handsome carrying case of black leatherette lined with satin. A speed regulating switch permits the motor to be run fast or slow.

Trade No.		Price Each
90465	Complete as described.....	$17.50



Type C

TYPE C

This is the professional type of vibrator used by physicians, nurses and masseurs. It is of heavier construction and has a more powerful motor than the vibrator designed for home use. The deep penetrating vibrations make it particularly suitable for cases requiring energetic treatment. The vibrator and six applicators come packed in a handsome black leatherette carrying case, plush lined.

90467	Complete as described.....	25.00



Type D

TYPE D

This type was specially designed to meet the demand for a light, efficient and low-priced vibrator for family use and for the professional hair dresser or masseur who calls on patrons at their homes. This type has no speed regulator but it may be stopped or started instantly by means of a push button in the handle. A current regulator which controls the speed of the vibrator by increasing or diminishing the flow of current can be supplied at an additional cost of $1.50. Six applicators are furnished with Type D Vibrator.

15421	Complete as described.....	12.50



Type F

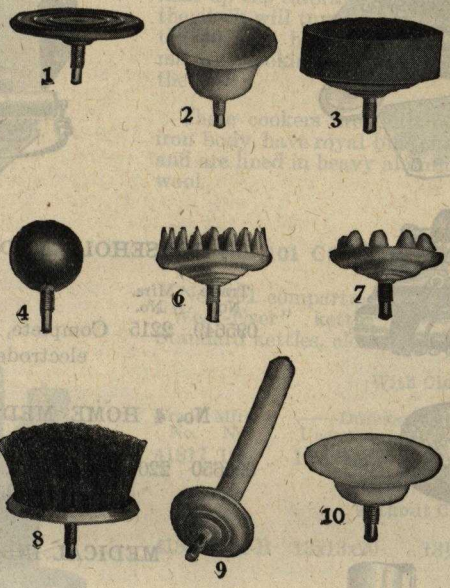
TYPE F

This style is similar in design to Type D, but is provided with a speed controlling device. Like all New Life Vibrators, the Type F gives both the rubbing and percussion strokes and is guaranteed against electrical and mechanical defects. Packed in black leatherette carrying case lined with satin.

15422	Complete as described.....	15.00

NEW LIFE VIBRATOR APPLICATORS

FOR NEW LIFE VIBRATORS

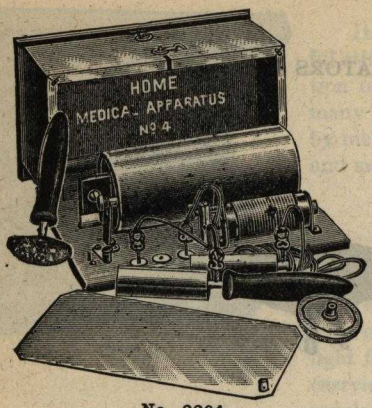


New Life Applicators have been found to be the most practical to fill every need of every case where vibration is advisable. Each is fitted with a little threaded stem, which may be readily screwed into the end of the shaft and quickly taken off and changed when desired.

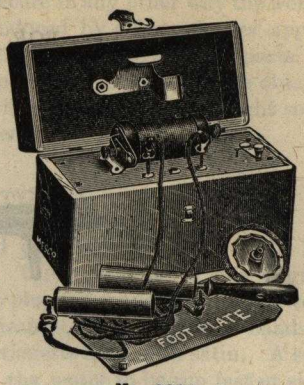
The first five applicators are included with every New Life Vibrator. Nos. 7, 8, and 9 are special, and may be had for the prices given below.

Trade No.	Mfrs. No.	Description	Price Each
086432	1	Flat disc made of hard rubber for rubbing and kneading the muscles of the body	$0.50
086433	2	Soft rubber, bell-shaped applicator, for face, neck, arms and bust	.50
086434	3	Velvet sponge for the face, especially adapted to the treatment of eyes, nose and throat	.75
086435	4	Round ball made of hard rubber, the most powerful applicator made for cases requiring vigorous treatment	.50
086437	6	Soft rubber. A favorite for treating skin and scalp	.50
086438	7	Soft rubber, 12-prong, similar to No. 6, except it has fewer prongs	.50
086439	8	Bristle brush. Wonderfully effective for scalp treatment	1.00
086440	9	Soft rubber rectal applicator	1.50
019032	10	Soft rubber, similar to No. 2, but larger	.50

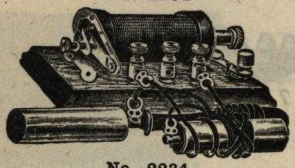
MEDICAL BATTERIES



No. 2204



No. 2215



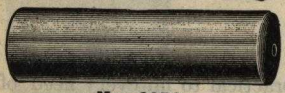
No. 2234



No. 2373



No. 2210



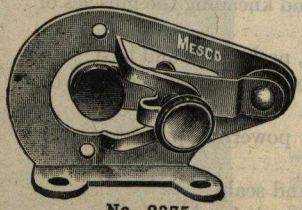
No. 2370



No. 2371



No. 2359



No. 2375



No. 2365

HOUSEHOLD MEDICAL APPARATUS

Trade No.	Mfrs. No.		Price Each
095649	2215	Complete, with battery and electrodes	$5.00

No. 4 HOME MEDICAL APPARATUS

095650	2204	Complete, with battery and electrodes	8.00

MEDICAL INDUCTION COIL

095651	2234	Complete, with electrodes and cords only	2.70

ELECTRODES

095652	2373	Sponge electrode	.24
095653	2210	Massage roller electrode ...	.70
095654	2370	Hand electrode, N. P.....	.20
095655	2371	Hand electrode, N. P.....	.20
095656	2374	Foot plate electrode.....	.40

CONDUCTING CORDS AND TIPS

095657	2358	Cords 3 feet long, per pair..	.40
095658	2362	Cords 4 feet long, per pair..	.50
095659	2359	Tips	.03

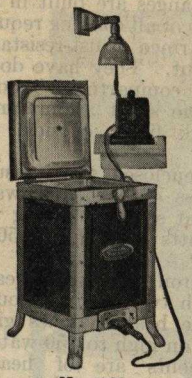
CURRENT INTERRUPTER

095660	2375	Same as used on medical batteries	.80

ELECTRODE HANDLE

095661	2365	Interchangeable.....	.15

STANDARD ELECTRIC COOKERS AND HOT PLATES



No. 101

All Standard Compartments accommodate one 8-quart single kettle or a nest of one 3-quart circular and two 2½-quart semi-circular kettles. No special wiring is needed to use Standard compartments. Attach to any lamp socket using alternating or direct current. Construction is the same as Standard ranges.

Place any food in the compartment and close the cover. Set the clock for a few minutes current, to heat up the calorator. At the expiration of that time the clock will turn off the 620-watt heater and turn on the 40 watt heater. The cooking heat will then remain at cooking temperature until it is desired to use the food.

These cookers are built of "Armco" rust-resisting iron body, have royal blue enamel and nickel trimmings and are lined in heavy aluminum. Insulation, mineral wool.

No. 101 COOKING COMPARTMENTS

No. 101 compartment includes one 3-quart circular "Wear-Ever" kettle, two 2½-quart semi-circular Standard kettles, clock and Y cord.



No. 201

With Clock

Trade No.	Mfrs. No.	Dimensions, Inches Uncrated	Dimensions, Inches Crated	Wt., Lbs. Net	Wt., Lbs. Ship.	Price Each
41817	101	13x13x20	13½x13½x22	36	55	$25.00

Without Clock

41818	101-B	13x13x20	13½x13½x22	36	55	17.50

No. 201 COOKING COMPARTMENTS

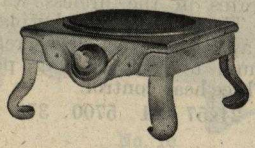
No. 201 compartment includes one 3-quart circular "Wear-Ever" kettle, two 2½-quart semi-circular Standard kettles, one 8-quart circular "Wear-Ever" kettle.

With Clock

41819	102	13x25x20	13½x22x26	66	98	37.00

Without Clock

41820	102-B	13x25x20	13½x22x26	66	98	29.50



No. 30

No. 30 HOT PLATES

Burner is 8½ inches in diameter. Three-heat control. Maximum watts, 1000.

41821	30	6x13¼x13¼	7½x14¾x14¾	.. 12	12.50



No. 40

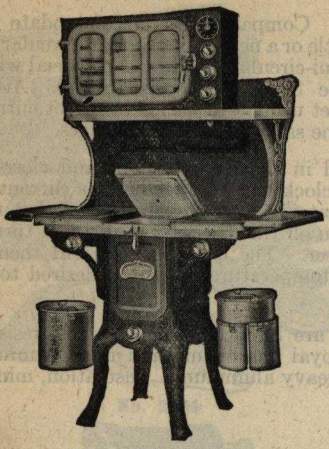
No. 40 HOT PLATES

There are two burners, each 8½ inches in diameter. Three-heat control. Maximum watts, 1000.

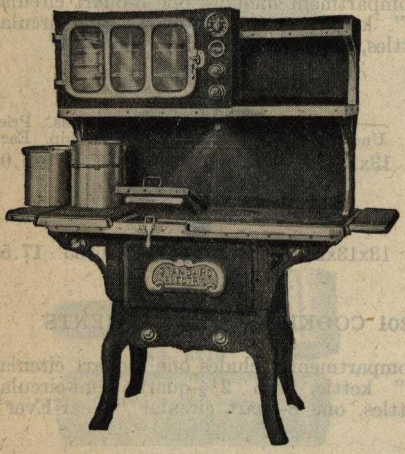
41822	40	6x13¼x13¼	7½x14¾x14¾	.. 24	21.00

Nos. 30 and 40 Hot Plates require special wiring.

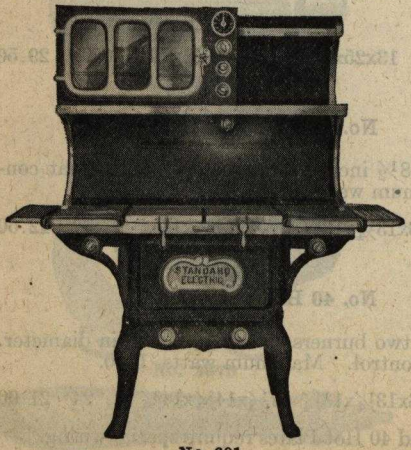
STANDARD ELECTRIC RANGES



No. 501



No. 619



No. 601

Standard Electric Ranges are built in sizes and types to meet the needs of all cooking requirements.

Bodies are of Armco rust-resistant iron, enameled inside and out. They have double wall insulated ovens and compartment cookers, all lined with heavy gauge sheet aluminum. Royal blue and velvet black finish outside, with full nickel trimmings.

Hot plates are of enclosed type, insulated on bottom to prevent loss of heat downward. Operated by multiple heat switches giving variations from 1500 or 1000 watts on high to 350 and 250 watts on low.

Ovens are lined throughout with heavy sheet aluminum, heated with two open coil burners, air heater type. Multiple heat switches give variations from 1000 watts on high to 250 watts on low.

Cooking compartments are of heavy sheet aluminum having double wall insulation. Heated with 660-watt, removable heater in bottom. They work on the heat storage principle to cook food in the fireless way.

An automatic clock operates on all heaters in the range, or any one, as desired. It may be set for a predetermined time, preventing overheating, burning of food, waste of current, etc.

Aluminum utensils are included with cabinet type ranges. Also lamp socket outlets, broiler pans and racks are provided.

No. 501

This is the cabinet type range, having aluminum lined oven and one cooking compartment for cooking with stored up heat. Two enclosed removable hotplates, 8½ inches in diameter, are wound for 1500 or 1000 watts on high, operated by multiple heat switches. Has automatic clock regulator, full set of "Wear-Ever" aluminum kettles, broiling pan, rack and lamp socket outlets.

Trade No.	Size Oven Inches	Floor Space Inches	Height Inches	Max. Watts	Wt. Lbs.	Price Each
99935	11x12x19	24x46	61	4500	270	$120.00

No. 619

This range has cabinet type oven with full glass front in door for visible baking. One cooking compartment operates in the fireless way with imprisoned heat. There are three hotplates for open cooking. Has automatic clock regulator, Wear-Ever aluminum utensils, broiling pan and racks for oven. Three-heat control.

99936 11x12x19 24x57 61 5700 370 140.00

No. 601

No. 601 ranges are of the same construction and finish as No. 619. There are two compartment cookers, used on heat storage principle and two enclosed type heaters for open cooking. The aluminum lined oven is operated by two open coil burners, air-heater type, multiple heat control. Includes automatic clock, regulator, a full set of Wear-Ever aluminum kettles, broiling pan and rack.

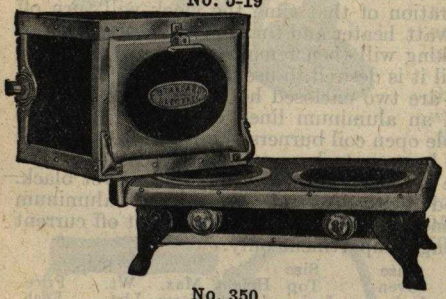
99937 11x12x19 24x57 61 5700 360 140.00

For full nickel and white or blue enamel finish add 10 per cent to list prices.

STANDARD ELECTRIC RANGES

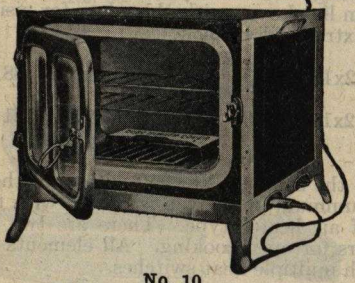


No. 5-19

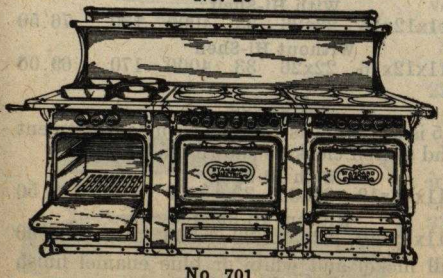


No. 350





No. 10



No. 701
Three Connecting Sections

No. 5-19

The No. 5–19 Model are of the usual gas range type, built to be used in localities where electric current is very inexpensive. Price is low and the size, large and roomy.

This model has polished cast iron tops, legs, oven doors and oven front, and ebonite finish. Other parts are of Armco Rust-resisting Steel, enameled royal blue. Oven is lined with heavy sheet aluminum and door has heat-treated glass fronts. All burners have master switch control and each unit has multiple heat switch, operating each individually. Standard open coil element in oven, both top and bottom. Has standard hot plate for open cooking. Oven has broiler and racks.

Trade No.	Size Oven In.	Size Top In.	Height In.	Max. Watts	Ship. Wt. Lbs.	Price Each
088223	11x12x19	20x30	62	5000	360	...

No. 4-19

No. 4–19 has large aluminum lined oven operated with open coil units, one in top and one in bottom. There is one multiple heat switch for each burner. Cooking surface has two hot plates instead of three as in No. 5–19.

088224 11x12x19 20x26 62 4000 300 ....

For full nickel and white or blue enamel finish add 10 per cent to list prices.

No. 350

No. 350 has aluminum-lined oven, with one open-coil air heater in top for broiling, toasting, etc. Oven is pivoted at outside corner and swings over hotplate, which is used when baking on bottom oven burner. With both burners on high, oven reaches maximum baking heat in four minutes. At option of user, oven can be swung on pivot and the use of two hotplates for other purposes may be had.

Trade No.	Size Oven, In.	Size Top, In.	Max. Watts	Ship. Wt., Lbs.	Price Each
088225	12½x9½x10	26x18	3000	100	$37.50

No. 10, OVENS

This is a portable, lamp socket warming oven with two burners.

Trade No.	Inside Size, In.	Max. Watts	Ship. Wt., Lbs.	Price Each
	With Clock			
088226	11x12x16	1320	80	$32.50
	Without Clock			
088227	11x12x16	660	80	$25.00

No. 20, OVENS

This is a quick baking oven with three-heat control.

Trade No.	Inside Size, In.	Max. Watts	Ship. Wt., Lbs.	Price Each
	Without Clock			
088228	11x12x19	2000	80	$45.00

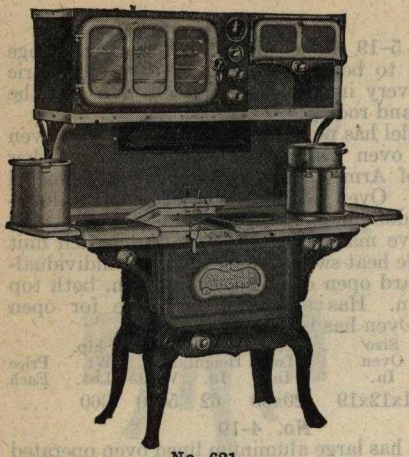
No. 701, LARGE HOTEL TYPE RANGES

Built in Connecting Sections

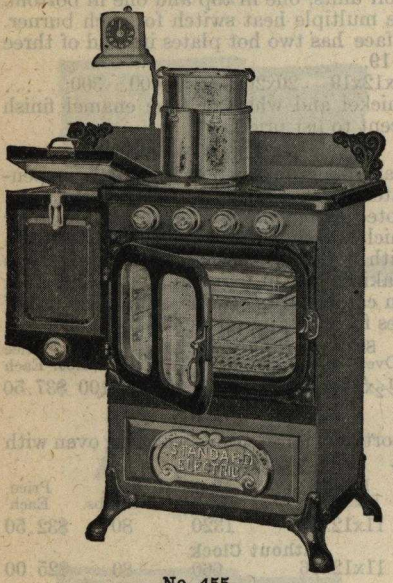
These ranges are built on the unit plan, so that one or more may be connected in alignment to meet the increased demand. It has a large interchangeable top, in which hot plates are inserted, varying in size from 8½ to 11 inches in diameter. Voltage from 1000 to 2000 with multiple heat control. Each oven is 24 inches wide, 16 inches high and 21 inches deep, heated by two removable type open coil air heaters, one on top and one on bottom.

Trade No.	Size of Top Inches	Total Height Inches	Max. Watts per Section	Wt., Lbs. per Section	Price per Sect.
088229	36x36	54	9000	480	....

STANDARD ELECTRIC RANGES



No. 621



No. 455



No. 550, with Hi-Shelf

No. 621

No. 621 is a double cabinet, visible oven range, with broiler and full, roomy top cooking surface. Combines in one construction a deep cooking compartment, operated on the fireless cooker principle, as well as oven and broiler, lined with heavy gauge sheet aluminum. Exterior parts are of ebony black and royal blue enameled finish. Has automatic clock regulator, lamp socket outlet and is furnished with full set of aluminum utensils.

Trade No.	Size Oven Inches	Floor Space Inches	Height Inches	Max. Watts	Wt. Lbs.	Price Each
46592	11x12x19	24x57	61	5700	390	$155.00

No. 455

An exclusive design, with one aluminum lined compartment cooker, operated in the fireless way with 660-watt enclosed heater and 40-watt auxiliary in bottom. Place any food you wish in the compartment, and close the cover. Set the clock for a few minutes current, to heat up the calorator. At the expiration of that time the clock will turn off the 660-watt heater and turn on the 40-watt heater. The cooking will then remain at cooking temperature until it is desired to use it.

There are two enclosed hotplates for open cooking, and an aluminum lined oven heated by two removable open coil burners of air heater type, with multiple heat control.

Range is finished in royal blue and velvet black. Equipped with set of Wear-Ever aluminum kettles and switch clock regulator to cut off current on cooking compartment only.

Trade No.	Size Oven Inches	Size Top Inches	Height Inches	Max. Watts	Ship. Wt. Lbs.	Price Each
46593	11x12x16	18x34	33	4600	190	$87.00

No. 550

No. 550 is of the same general construction as other models. Has three enclosed type hotplates for open cooking, with multiple heat switches and one aluminum lined oven with glass door for visible baking and extra large hi-shelf.

		With Hi-Shelf				
46594	11x12x19	22x30	33	5000	170	88.50
		Without Hi-Shelf				
46595	11x12x19	22x30	33	5000	170	81.00

No. 450

No. 450 is the same as No. 550 with or without hi-shelf. Aluminum lined oven is heated with two open coils of air heater type. There are two enclosed burners for open cooking. All elements are operated with multiple heat switches.

		With Hi-Shelf				
46596	11x12x16	22x26	33	4000	170	76.50
		Without Hi-Shelf				
46597	11x12x16	22x26	33	4000	170	69.00

No. 555

No. 555 is the same as No. 550 with compartment cooker and switch clock as shown on No. 455.

		With Hi-Shelf				
46598	11x12x19	22x30	33	5000	170	112.50
		Without Hi-Shelf				
46599	11x12x19	22x30	33	5000	170	105.00

For full nickel and white or blue enamel finish add 10 per cent to list prices.

AMERICAN BEAUTY ELECTRIC HEATING DEVICES



No. 6½B

AMERICAN BEAUTY IRONS

6½-pound

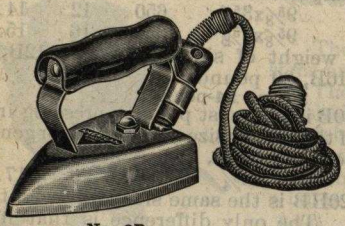
These famous irons represent the highest art of making electric flat irons. They are not only beautiful looking irons, finished in polished nickel, but have every refinement that can be put into an electric iron. They are suitable for all-around household or laundry work.

The service which they give to users is in every way as perfect as can be given by an electric iron.

Trade No.	Mfrs. No.	Size Inches	Watts Consumed	Wt. Lbs.	Price Each
054887	6½B	6½ x 3¾	525	6½	$6.00

Shipping weight, approximate, of single iron, 8¼ pounds; case lot of six, 53 pounds.

Above irons are made in the following standard voltage ranges: 95–104, 105–114, 115–125, 190–209, 210–229, 230–250. Can also be supplied for 32 volts at 50 cents added to list.



No. 3B

LITTLE BEAUTY IRONS

These beautiful and useful little electric irons are perfect for light ironing, such as handkerchiefs and laces. Because of their light weight they are most attractive to travelers.

Another useful feature of the Little Beauty is that curling iron tongs can be slipped into the stand, which comes with every iron, and heated quickly.

33586	3B	5⅞ x 3⅛	350	3	6.00

Shipping weight, case lot of six, 31½ pounds.

Above irons are made in the following standard voltage ranges: 95–104, 105–114, 115–125, 190–209, 210–229, 230–250. Can also be supplied for 32 volts at 50 cents added to list.



No. 65

AMERICAN QUALITY IRONS

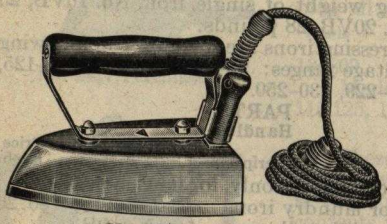
These irons embody some of the characteristics of the American Beauty and are first class in all particulars. The base is machine milled and polished, thus insuring a perfectly true and flat ironing surface. The heat is applied directly to and evenly distributed over the bottom plate. The contact pins are non-corroding, round and removable; can be replaced easily, if necessary, without taking the iron apart. The handle is securely fastened and remains cool. Suitable for all household requirements. Finished in polished nickel.

33589	65	6½ x 3¾	525	6½	5.00

Shipping weight, case lot of six, 53 pounds.

Above irons are made in the following standard voltage ranges: 95–104, 105–115, 116–125, 190–209, 210–229, 230–250. For 32-volt iron add $0.50.

Furnished complete with stand and cord, having detachable plug and lamp socket attachment plug.



No. 6RH

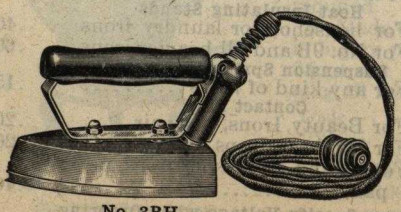
RITE-HEAT IRONS

These irons are low priced, yet are carefully made of the best materials, highly finished, and are very neat and attractive in appearance. Fully guaranteed. Suitable for household work.

33592	6RH	6½ x 3¾	525	6	5.00

Standard voltage ranges: 95–109, 110–125, 190–219, 220–250.

Shipping weight, case lot of six, 45 pounds.



No. 3RH

No. 3RH

These small irons are especially adapted for light ironing, such as handkerchiefs, laces, infants' clothes, etc. Handsomely finished in polished nickel.

33593	3RH	5⅞ x 3⅛	350	3	5.00

Standard voltage ranges: 95–109, 110–125, 190–219, 220–250.

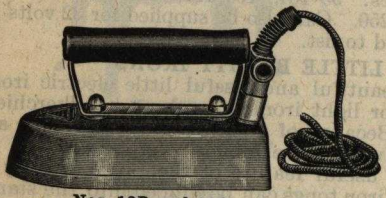
Shipping weight, case lot of twelve, 56 pounds.

Always Specify Voltage when Ordering

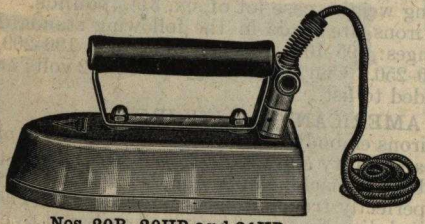
AMERICAN BEAUTY ELECTRIC HEATING DEVICES



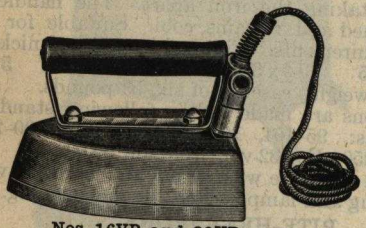
No. 9B



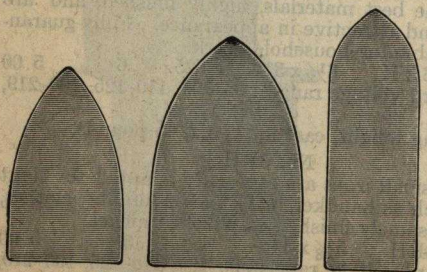
Nos. 12B and 16B



Nos. 20B, 20HB and 24HB



Nos. 16VB and 20VB



No. 9B — Nos. 16VB and 20VB — Nos. 12B, 16B, 20B, 20HB and 24HB

AMERICAN BEAUTY PRESSING IRONS

For shape of bottoms or ironing surface of these irons, see illustrations on this page.

9-pound

Particularly adapted for heavy laundry work and is used in hotel laundries and professional laundries where more heat is required than in ordinary ironing. Should not be attached to lamp socket.

Trade No.	Mfrs. No.	Size Inches	Watts Consumed	Wt. Lbs.	Price Each
33588	9B	7 3/16x4 1/4	675	9	$10.50

Shipping weight of single iron, 11¼ pounds; case lots of ½ dozen, 72 pounds.

12 and 16-pound

Adapted for light pressing of all kinds, such as coat work or ladies' tailor work. They are not suitable for very heavy pressing. Cannot be attached to lamp socket.

52485	12B	9 5/8x3 5/16	650	12	14.50
52486	16B	9 5/8x3 5/16	650	16	15.50

Shipping weight of single iron, No. 12B, 16 pounds; No. 16B, 20 pounds.

20 and 24-pound

The No. 20B is the most popular pressing iron because it is of the proper size and weight for general all-round work of tailors.

52487	20B	11 x3¾	750	20	17.00

The No. 20HB is the same size and weight as the No. 20B. The only difference is that it is arranged to give off a larger volume of heat.

52488	20HB	11 x3¾	1000	20	17.50

The No. 24HB is a very heavy pressing iron and is especially adapted for use by manufacturers on very heavy work.

52489	24HB	11 x3¾	1000	24	19.50

Shipping weight of single iron, Nos. 20B and 20HB, 25 pounds; No. 24HB, 30 pounds.

16 and 20-pound V Shaped

These irons, sometimes called pant irons, are large V shaped irons, made to give off a great volume of heat, and are adapted for heavy work of all kinds. Their shape is preferred by some because they are wide at the heel and not so long. Cannot be attached to lamp socket.

52490	16VB	8 1/2x5 5/8	1100	16	17.50
52491	20VB	8 1/2x5 5/8	1100	20	19.00

Shipping weight of single iron, No. 16VB, 25 pounds; No. 20VB, 28 pounds.

These pressing irons are made in the following standard voltage ranges: 95–104, 105–114, 115–125, 190–209, 210–229, 230–250.

PARTS

Handles

Trade No.	Description	Price Each
52492	Wood handle only, for household or laundry irons	$0.20
52493	Wood handle only, for No. 9B and all heavier irons	.25

In ordering, state Mfrs. No. of iron for which handles are intended.

Heat Insulating Stands

52494	For household or laundry irons	.40
52495	For No. 9B and all heavier irons	.60

Suspension Spring for Cords

52496	For any kind of irons	.15

Contact Pins

52497	For Beauty Irons, per pair	.20
52498	For Riteheat Irons, per pair	.20
52499	For 9B and all heavier irons, per pair	.40

Always Specify Voltage when Ordering

AMERICAN BEAUTY ELECTRIC HEATING DEVICES



No. 2316 Percolator



Tea Samovar



Teakettle



No. 2326 Percolator



No. 2417 Percolator



No. 2427 Percolator

COFFEE PERCOLATORS

These percolators are of the latest and most pleasing designs and there is a style to suit every taste.

They are made of heavy copper and beautifully finished in polished nickel, are lined with pure tin, have aluminum fittings, a safety fuse plug which prevents burning out the heating element and are supplied complete ready for attachment to any lamp socket, with a 6-foot gray silk cord, detachable plugs and a lamp socket attachment plug.

Trade No.	Mfrs. No.	Capacity Cups	Watts	Approx. Ship. Wt., Lbs.	Price Each
31804	2316	6	420	5	$10.00
31805	2326	6	420	10	13.50
131806	2417	7	420	5½	13.50
131807	2427	7	420	10	16.50
131808	2429	9	420	10½	18.50

No. 2429 is similar in appearance to No. 2427, but larger.

Plain trays in nickel finish, for any of the above, can be supplied. Prices on application.

Made in the following standard voltages: 95-104, 105-114, 115-125, 215-225, 235-245. The No. 2316 can also be supplied for special 32 volts at slight additional cost.

TEA SAMOVARS

Tea samovars are indispensable for perfect tea making. They are made of heavy copper, lined with pure tin and finished in highly polished nickel and are furnished complete with a 6-foot silk cord, detachable plugs and lamp socket attachment plug all ready for attachment to any lamp socket.

Trade No.	Mfrs. No.	Capacity Cups	Watts	Approx. Ship. Wt., Lbs.	Price Each
131809	2306	6	450	10	$17.50

Made in the following standard voltages: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.

TEAKETTLES

These devices are very efficient, having a special heating element which is directly attached to the inner wall and thus is very quick heating. It will bring to a boil one-half of its contents in about 3 or 4 minutes and full contents in from 5 to 6 minutes, starting everything cold.

They are intended primarily for tea making but may be be used for the innumerable purposes for which hot water is required.

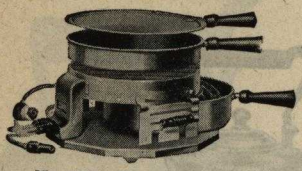
Made of heavy spun copper lined with pure tin and finished in highly polished nickel and furnished complete with stand, 6-foot silk cord, detachable plugs and lamp socket attachment plug all ready for attachment to any lamp socket.

Trade No.	Mfrs. No.	Capacity Quarts	Watts	Approx. Ship. Wt., Lbs.	Price Each
131810	5415	1	500	3¾	$15.00

Made in the following standard voltages: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.

Always Specify Voltage when Ordering

AMERICAN BEAUTY ELECTRIC HEATING DEVICES



No. 3375 Grill Complete

GRILLS

With this handsome electric grill a complete meal can be prepared right at the table. It boils, broils, toasts, fries or performs any cooking operation in the most satisfactory manner.

Made of sheet steel beautifully finished in polished nickel. Have re-inforced composition heat insulating legs that prevent marring or scorching the surface upon which they may be placed. Have ebony finished wood handles on two sides. Equipped with a three-heat, easily removable, practically indestructible open coil heating element.

Note the handsomely designed base, the ability to turn the broiling pan from side to side without removing it from the grill and the fact that the grill may be used as a toaster as well as a grill or stove.



No. 3375SO Grill only

No. 3375 grill complete is supplied with a deep broiler pan, a broiler plate, a shallow pan and a cover plate, a 6-foot 3-conductor cord with detachable plugs and a lamp socket attachment plug.

No. 3375SO is the grill only. It is supplied with a 6-foot 3-conductor cord with detachable plugs and lamp socket attachment plug.

Trade No.	Mfrs. No.	Diam. of Top, In.	Watts	Wt., Lbs. Net	Wt., Lbs. Ship.	Price Each
102207	3375	7½	660	5½	7½	$8.50
102208	3375SO	7½	660	5½	5½	7.00

Made in the following standard voltages: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250. Can also be supplied for special 32 volts at slight additional cost.



No. 2333 Chafing Dish

CHAFING DISHES

These chafing dishes are of the handsomest, most up-to-date designs. They are made of heavy spun copper beautifully finished in polished nickel, are double tin-lined, are equipped with safety fuse plugs which prevent burning out the heating element, have ebony finished wood handles and with ordinary care will last many years.

They are arranged for two heats—fast and slow—and are furnished complete, ready for attachment to any lamp socket, with a 6-foot gray silk cord, detachable plugs and lamp socket attachment plug.

Trade No.	Mfrs. No.	Capacity Pints	Watts	Approx. Ship. Wt., Lbs.	Price Each
102209	2333	3	420	10	$13.50
102210	2433	3	420	11	17.50



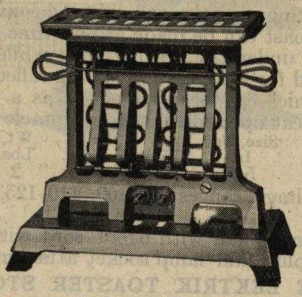
No. 2433 Chafing Dish

Plain trays in nickel finish, for either of the above, can be supplied. Prices on application.

Made in the following standard voltages: 95-104, 105-114, 115-125, 215-225, 235-245.

Always Specify Voltage when Ordering

AMERICAN BEAUTY ELECTRIC HEATING DEVICES



American Beauty Toaster

TOASTERS

Made entirely of sheet steel and are unbreakable. Finished in polished nickel and provided with four fibre heat insulating legs.

Trade No.	Mfrs. No.	Size, Inches Height	Length	Width	Watts	Net Wt., Lbs.	Price Each
028537	5825	7	8	4	440	1½	$6.00

Shipping weight, single toaster, 2½ pounds; case lots of 24, 60 pounds.

Made in the following standard voltage ranges: 95–104, 105–114, 115–125, 190–209, 210–229, 230–250. Can also be supplied for 32 volts at fifty cents added to list.



Combination Disc Stove

COMBINATION DISC STOVES

There are five distinct classes of household service that this device will give, any one of which can be varied in many ways. The device and all the utensils are finished in polished nickel, handles polished black.

It has three-heat regulation.

(1) Fries with skillet attachment. (2) Makes toast with toast holder. (3) Makes pancakes by attaching aluminum griddle plate. (4) Boils or stews with stew pan attachment. (5) As a plain disc stove it heats anything in a flat bottomed utensil.

Trade No.	Mfrs. No.	Diam. Inches	Watts	Wt. Lbs.	Price Each
33577	3310	6	600	8¼	$17.50

Approximate shipping weight, 9¾ pounds.

Made in the following standard voltages: 95–104, 105–114, 115–125, 190–209, 210–229, 230–250.



Combination Disc Stove Showing Parts

DISC HEATERS

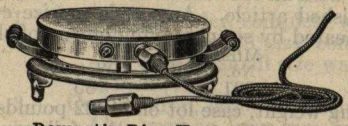
Domestic Type

Adapted for heating in a flat bottomed vessel. Compact in design, consists of a circular disc supported by a metal frame. Finished in polished nickel. Legs of stand are heat insulated. Attaches to lamp socket.

Trade No.	Mfrs. No.	Diam. Inches	Watts	Heat Reg.	Wt. Lbs.	Price Each
028527	3210	4	450	1	2	$5.50
028528	3221	5	550	1	2¾	6.50
028529	3231	6	600	1	3½	8.00

Shipping weight, single heaters, 4½ pounds; case lots of ½ dozen, 20 pounds.

Made in the following standard voltage ranges: 95–104, 105–114, 115–125, 190–209, 210–229, 230–250. Nos. 3210 and 3231 can also be made in 32 volts at fifty cents added to list.



Domestic Disc Heater

Industrial Type

These disc stoves are for heavier work than the Domestic type. They are used in laboratories or for industrial purposes or heavy work in the household or kitchen.

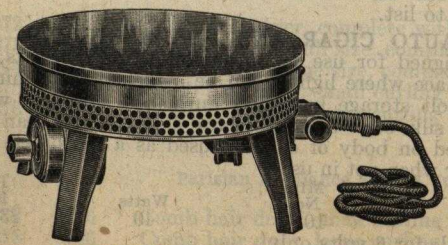
All sizes made with three-heat regulation, and each heater has an indicating snap switch and terminal box, detachable plug fitting into receptacle on disc stove; or line wires from outlet box on wall or at end of conduit can be attached to heater at terminal box.

Trade No.	Mfrs. No.	Diam. Inches	Max. Watts	Wt., Lbs. Net	Ship.	Price Each
33567	3240	8	1000	15	20	$19.00
33568	3245	10	1400	19½	29	23.00
33569	3250	12	1800	23	32	27.50

Made in the following standard voltages: 95–104, 105–114, 115–125, 190–209, 210–229, 230–250.

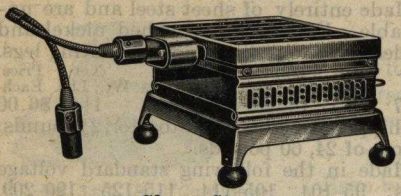
Plug and cord not included in prices.

Always Specify Voltage when Ordering.



Industrial Disc Heater

AMERICAN BEAUTY ELECTRIC HEATING DEVICES



Glower Stove

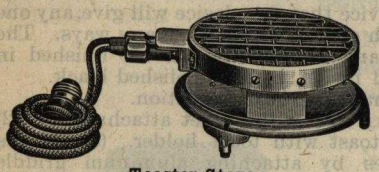
RITE-HEAT GLOWER STOVES

These small stoves are ideal for making toast or performing cooking operations quickly and conveniently. Two slices of toast can be made at one time or bread can be toasted under the heating coils while the top is being utilized for cooking. A sliding reflector plate is furnished which can be used either as a plate for reflecting the heat upwards or as a receptacle for toast.

Trade No.	Mfrs. No.	Size, Top In.	Watts	Std. Pkg.	Wt. Lbs.	Price Each
52568	3350	5x5	500	12	2	$4.50

Standard voltage ranges: 95–109, 110–125, 190–219, 220–250.

Furnished complete with 6-foot cord with detachable porcelain plug and lamp socket attachment plug.



Toaster Stove

TRIANGLE LEKTRIK TOASTER STOVES

With these toaster stoves of many uses a meal can be prepared right at the dining table. The heating coils are placed, so as to make two slices of toast at a time, one above and one below the heating coils. Or a slice of toast can be made below the heating coils and at the same time a flat bottomed utensil can be placed on top of the toaster stove.

These devices are made of sheet steel, finished in polished nickel. They are light in weight and unbreakable. Provided with three heat-insulating legs of fiber.

Furnished complete with cord and plug that can be attached to any ordinary lamp socket.

Trade No.	Mfrs. No.	Diam. Inches	Watts	Std. Pkg.	Wt. Lbs.	Price Each
90101	3320	6	550	12	1¼	$4.50

Standard voltage ranges: 95–109, 110–125, 190–219, 220–250. For 32-volt stoves add $0.50.



No. 111

AMERICAN BEAUTY CURLING IRON HEATERS

No. 111

No. 111 is for use in dressing room, etc. Finished in polished nickel and provided with a marbleized slate base.

Trade No.	Mfrs. No.	Opening Diam. In.	Watts	Ship. Wt, Lbs.	Price Each
020615	111	9/16	90	2½	$5.00

No. 112



No. 112

No. 112 is for use in dressing room or boudoir.

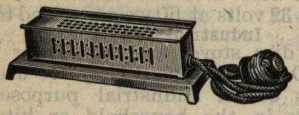
020617	112	9/16	90	3¾	6.00

TRIANGLE LEKTRIK CURLING IRON HEATERS

These curling iron heaters are very low priced, yet are made with all the care and skill necessary for a perfectly finished article. Any style or size curling iron may be heated by simply laying on top of the heater.

Trade No.	Mfrs. No.	Watts	Price Each
52567	601	85	$3.50

Shipping weight, case lot of 24, 22 pounds.



No. 601

Nos. 111 and 112 made in the following standard voltage ranges; 95–104, 105–114, 115–125, 190–209, 210–229, 230–250.

No. 601 made only in 100–125 volts.

No. 111 can also be made in 32 volts at 50 cents added to list.

AUTO CIGAR AND PIPE LIGHTERS

Designed for use in automobiles, motor boats, or any place where lighter can be attached to terminals of 6-volt storage battery. Furnished complete with green silk cord and protector sleeve which can be screwed on body of car and used as a receptacle for lighter when not in use.

Trade No.	Mfrs. No.	Watts	Price Each
90107	1020	40	$3.50

Made for 6 volts only.



Cigar and Pipe Lighter

PARISIAN ELECTRIC APPLIANCES

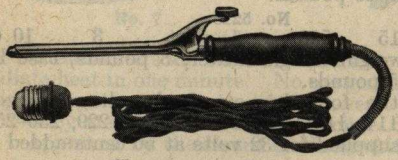


No. 1 Comb

PARISIAN ELECTRIC COMB HAIR DRIER

Dries the hair quickly without the slightest effort. It untangles kinks and knots without injuring the hair the slightest. It adds life and vigor to the hair and gives it that soft, fluffy, silky sheen so much desired.

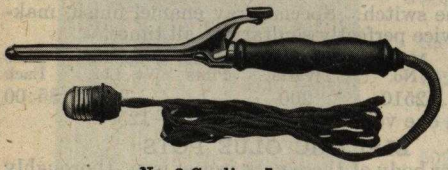
The Parisian Comb consumes 45 watts of electricity and dries hair in 15 minutes. The curling iron consumes 22 watts.



No. 2 Curling Iron

PARISIAN ELECTRIC CURLING IRON

This is one of the smallest electric curling irons made. Its smallness (in diameter) enables user to curl the short hairs that have always baffled the user to curl before. It is all ready for use—simply attach the cord to any convenient electric light socket. An even temperature is always maintained without danger of overheating and burning or sticking to the hair.



No. 3 Curling Iron

PARISIAN ELECTRIC WAVER

By detaching the shield on either size curling iron you have the Parisian Electric Waver which retains the heat at the proper even temperature indefinitely. It can be used as often as you like and positively will not injure the hair. There is no danger of scorching or singeing the hair. There is just enough heat to do the work properly and no more. The electricity is for heating only and cannot come in contact with the user.

Parisian Appliances in Cardboard Boxes

Trade No.	Mfrs. No.	Description	Price Each
90369	1	Comb hair drier, complete with cord	$4.50
90370	2	Curling iron, small size, complete with cord and detachable shield Also used as small size waver rod. Length 10½ inches, diameter, 5/16 inch	4.50
90371	3	Curling iron, large size, complete with cord and detachable shield. Also used as large size waver rod. Length, 12 inches, diameter, 3/8 inch	4.50

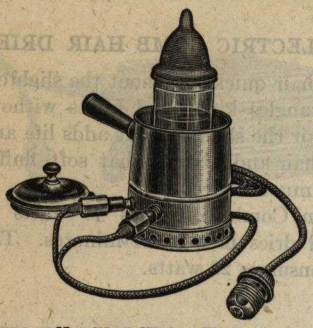
Parisian Appliances, in Jewel Cases

90372	15	Comb hair drier, complete with cord	6.00
90373	25	Curling iron, small size, complete with cord	6.00
90374	35	Curling iron, large size, complete with cord	6.00
90375	126	Comb hair drier, small curling iron, each complete with cord	12.00
90376	136	Comb hair drier, large curling iron, each complete with cord	12.00

Parisian Appliance Sets in Soft Plush Lined Leather Roll

90377	126	Comb hair drier, small curling iron, each with cord	12.00
90378	136	Comb hair drier, large curling iron, each with cord	12.00

AMERICAN BEAUTY ELECTRIC HEATING DEVICES



No. 5205 Water Heater

WATER HEATERS

These heaters are adapted for quickly heating small quantities of water or liquid, and for boiling eggs or food of any kind. They are extensively used by travelers and are desirable for use in the home, apartment or hotel. Will heat water more quickly than a disk stove or device of that kind.

Made of heavy copper, finished in polished nickel, with inner surface heavily tinned.

Water is brought to the boiling point in about five minutes.

No. 5205

Made of spun copper and finished in polished nickel.

Trade No.	Mfrs. No.	Watts	Capacity	Wt. Lbs.	Price Each
52536	5205	300	1 pint	1¾	$8.00

Shipping weight, single heater, 2½ pounds; case lot of 1 dozen, 40 pounds.

No. 5215

52537	5215	500	1 quart	3	10.00

Shipping weight, single heater, 3 pounds; case lot of 1 dozen, 65 pounds.

Made in the following standard voltage ranges: 95–104, 105–114, 115–125, 190–209, 210–229, 230–250. Can also be supplied for 32 volts at 50 cents added to list.



Baby Food Warmer

TRIANGLE LEKTRIK BABY FOOD WARMERS

A new device for heating the baby's food at any time of day or night.

Furnished with 10-foot cord and special feed through snap switch, making it unnecessary to leave the bed at night to prepare food for the baby. Simply prepare before retiring and place near bed. When wanted, turn on the switch. Special gray enamel finish, making the device perfectly sanitary at all times.

Trade No.	Mfrs. No.	Watts	Capacity Pints	Shipping Wt., Lbs.	Price Each
52542	2510	200	1	2	$5.00

Made in one voltage range only, 100–125.



Electric Glue Pot

ELECTRIC GLUE POTS

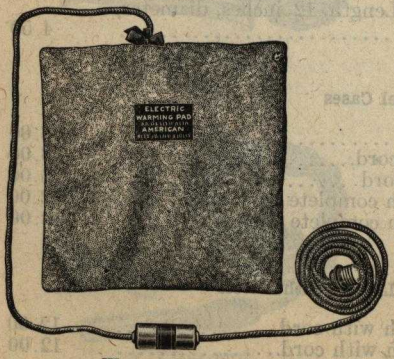
The outer body of these pots is cast iron, thoroughly galvanized before painting. The heating element is readily removable and is attached to the bottom of the inner cast iron receptacle thus allowing all heat generated to be efficiently utilized.

The inner vessel is of seamless copper, spun in one piece and is equipped with a bail and wiping rod.

They are arranged for three heats, with multiple series winding. Full heat maximum wattage, intermediate one half maximum and low heat one quarter maximum. The latter is arranged to give just enough heat to keep the glue contents at a proper working temperature.

Trade No.	Mfrs. No.	Capacity Quarts	Max. Watts	Heats	Ship. Wt., Lbs.	Price Each
52533	181	1	440	3	18	$18.50
52534	182	2	570	3	25	21.50
52535	145	4	880	3	50	32.00

Made in the following standard voltage ranges: 95–104, 105–114, 115–125, 190–209, 210–229, 230–250.



Warming Pad

WARMING PADS

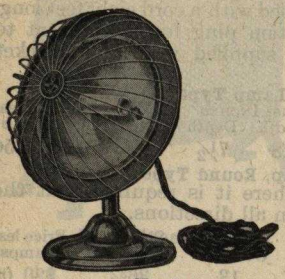
This thin, soft, pliable and flexible warming pad is designed to take the place of the ordinary cumbersome hot water bottle. Eiderdown covers.

Trade No.	Mfrs. No.	Size Inches	Max. Watts Consumed	Wt. Ozs.	Heat Reg.	Price Each
057225	1815	12x13	60	15	3	$8.25

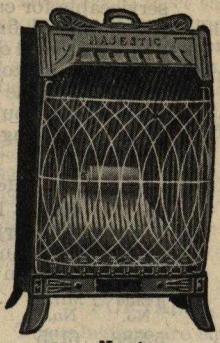
Made in the following voltage ranges: 95–125, 190–250.

Always Specify Voltage in Ordering Any of the Above.

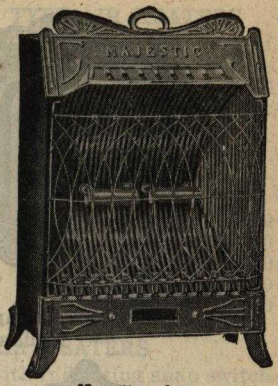
MAJESTIC ELECTRIC HEATERS



No. 7



No. 4

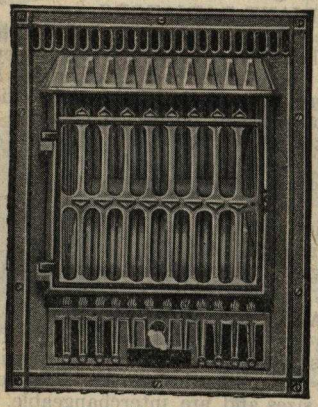


Nos. 5 and 6

These heaters are clean and odorless. They are operated by a push button or a switch, and radiate heat in one minute. No oxygen is consumed; the air is not changed in any way. Heating elements are guaranteed for one year.

They are economical in operation.

Approved by the Board of Underwriters.



No. 15

PORTABLE HEATERS

No. 7, Single-heating Unit, Height, 15½ Inches

A strong, compact heater, finished in oxidized copper with a 12-inch parabolical reflector of polished copper. Supplied with 8-foot cord and attachment plug.

Trade No.	Mfrs. No.	Watts	Weight, Pounds Net	Shipping	Price Each
59259	7	615	5	7¾	$7.50

Size of container, ready for shipment, 16x12¼x10 inches.

No. 4, Single-heating Unit, Size 19x11x7¾ Inches

59260	4	615	8	9	10.00

Size of container, ready for shipment, 19¾x11¾x8½ inches.

No. 5, Two-heating Units, Size 21½x13¾x9¾ Inches

59261	5	960	11¼	12¼	15.00

Size of container, ready for shipment, 22½x14¼x10½ inches.

No. 6, Three-heating Units, Size 25½x17x10 Inches

59262	6	1440	16¼	18	20.00

Size of container, ready for shipment, 22½x15x11 inches.

In Nos. 4, 5 and 6 the reflector is polished copper and the frame nickel-plated. Each is supplied with an 8-foot cord and attachment plug.

BUILT-IN HEATERS

Designed to be built in flush with the wall. The front may be had in nickel plate, brass or oxidized copper finish. The reflector is of polished copper.

No. 15, Two-heat

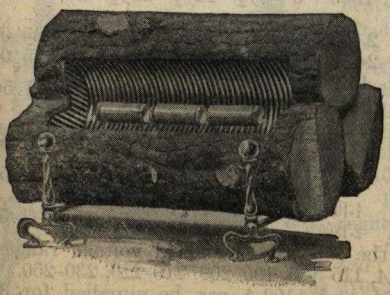
Dimensions: Front, 18x14 inches; body, 16¾x12¾x4¾ inches. Size of crate, 20x15½x6 inches.

59263	15	*615	18	23	20.00

No. 30, Three-heat

Dimensions: Front, 30¼x24½ inches; body, 27½x21½x7½ inches. Size of crate, 31¼x25½x9 inches.

59264	30	*615	36	50	30.00



No. 35

ELECTRIC LOGS

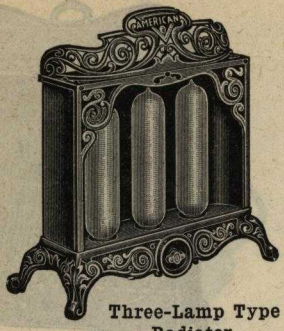
No. 35, Three-heat

Made of durable material, to be used in the ordinary fireplace. Reflector is of polished copper. Dimensions: 19x12x10 inches. Size of crate, 20½x13x11 inches.

59265	35	*615	35	64	35.00

*Wattage is for each heating element.

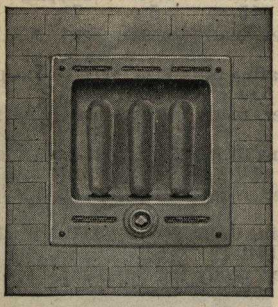
AMERICAN BEAUTY ELECTRIC HEATING DEVICES



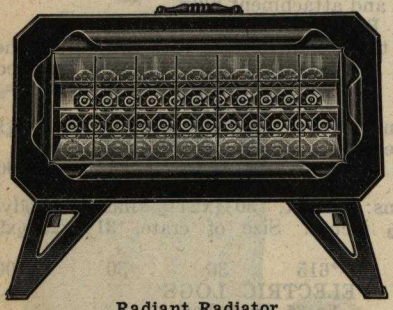
Three-Lamp Type Radiator



Round Type Radiator



Wall Type Radiator



Radiant Radiator



Radiant Burner Stove

PORTABLE LUMINOUS RADIATORS

Small portable luminous radiators, particularly serviceable for cases where a mild heat is desired.

Standard finish brush brass, but polished brass, polished nickel or oxidized copper can be furnished

Each radiator is supplied with a cord eight feet long, with detachable composition plug for attachment to the radiator, but is not supplied with lamp socket attachment plug.

Three-Lamp Type

Trade No.	Mfrs. No.	Dimensions, Inches Height	Width	Depth	Wt., Lbs. Net	Ship.	Price less Lamps
021131	6020	19	18	7½	..	37	$17.50

Three-Lamp, Round Type

Desirable in cases where it is required that the heat be thrown evenly in all directions.

Trade No.	Mfrs. No.	Height Inches	Diam., In. Over All	Shipping Wt., Lbs.	Price less Lamps
52588	6125	20	13	36¾	$20.00

WALL TYPE LUMINOUS RADIATORS

These radiators are to be permanently installed in the wall. Have copper reflector behind the lamps and air jacket between the copper reflector and the steel shell which fits into the wall. This air jacket acts as a heat insulation. Porcelain enamel finish.

Trade No.	Mfrs. No.	Dimensions, Inches Height	Width	Depth	Wt., Lbs. Net	Ship.	Price less Lamps
52587	6235	16¾	16⅞	5¼	28	70	$40.00

RADIANT RADIATORS

Can be attached to any lamp socket. Although not sufficient in themselves to heat a room, they are very satisfactory where extra heat is desired. Light in weight, and portable. Casing finished in oxidized bronze. Reflector plate of burnished copper. Furnished with 8 feet of brown silk cord and plugs.

Trade No.	Mfrs. No.	Dimens., Inches Length	Depth	Height	Watts	Net Wt., Lbs.	Price Each
90106	6210	16	8	11	600	4	$8.50

Made only in standard voltage ranges 95–104, 105–120, 190–209, and 210–240.

Shipping weight: Single device, 6¼ pounds; carton of six devices, 45 pounds.

RADIANT BURNER STOVES

These stoves are made with steel angle frame, sheet steel casings and short legs. Each burner is controlled by a three-heat indicating switch. The burners are made in two sizes and are interchangeable. The entire finish is black Japan. All sizes are equipped with terminal block to which feed wires may be attached.

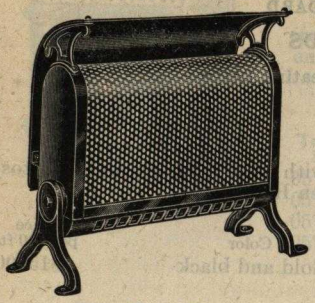
Single Burner Type

Trade No.	Mfrs. No.	Max. Watts	Heats	Dimens., Inches Height	Width	Length	Ship. Wt. Lbs.	Price Each
52593	1100-A	750	3	5½	11½	11½	17	$12.50
52594	1100-B	1000	3	5½	11½	11½	17	12.50
52595	1100-C	1800	3	5½	11½	11½	17	15.00
		Two Burner Type						
52596	1102-A	2- 750	3	5½	11½	22½	32	25.00
52597	1102-B	2-1000	3	5½	11½	22½	32	25.00
52598	1102-C	1-1000 1-1800	3	5½	11½	22½	32	27.50
		Three Burner Type						
52599	1103-A	3-1000	3	5½	11½	33½	51	37.50
52600	1103-B	2-1000 1-1800	3	5½	11½	33½	51	39.50
111729	1103-C	1-1000 2-1800	3	5½	11½	33½	51	41.50

Made in the following standard voltage ranges; 95–104, 105–114, 115–125, 190–209, 210–229, 230–250.

Nos. 1100-A and 1102-A can be supplied for 32 volts at slight additional cost.

AMERICAN BEAUTY ELECTRIC HEATING DEVICES



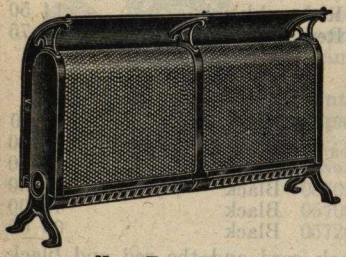
Navy Type Heater

AMERICAN BEAUTY NAVY TYPE AIR HEATERS

Designed to meet the demand for a low priced heater of high quality. By a simple arrangement any of these heaters can be installed either on a floor or on a wall. Very desirable for general use in homes, offices or factories. Sizes and other details on application. Made for one heat only.

With Deflector

Trade No.	Mfrs. No.	Watts	Net Wt., Lbs.	Price Each
109388	4712	750	8¾	$13.00
109389	4722	1000	9	14.50
109390	4730	1500	11¼	16.50
109391	4735	2000	16	23.00
109392	4755	3000	19¼	28.00



Navy Type Heater

PORTABLE TYPE AIR HEATERS

These heaters are equipped with indicating snap switch and terminal box. Detachable plug and cord can be supplied at slight extra cost, detachable plug fitting into receptacle on heater; or line wires from outlet box in wall or at end of conduit can be attached to heater at terminal box.

One-Heat

Trade No.	Mfrs. No.	Watts	Size Over All, In. Height	Length	Width	Wt., Lbs. Net	Ship.	Price Each
52846	4512	1000	18	20½	8½	20	30	$17.50

Detachable Plug for Above Heaters

Trade No.	Mfrs. No.	Description	Price Each
52798	806	.....	$1.00

Special Approved Heater Cord

52762	854	No. 12, twin conductor, per foot...	.24



Portable Air Heater

Three-Heat

Trade No.	Mfrs. No.	Watts	Size Over All, In. Height	Length	Width	Wt., Lbs. Net	Ship.	Price Each
52831	4530	1500	19	24½	8½	28	40	$22.50
52832	4535	2000	19	24½	8½	28	40	27.00
52833	4545	2500	19	24½	8½	28	40	30.00
52834	4555	3000	19	32½	10½	53	70	37.00
52836	4560	4000	19	32½	10½	53	70	42.00

Detachable Plug for Above Heaters

Trade No.	Mfrs. No.	Description	Price Each
52796	805	.....	$1.75

Special Approved Heater Cord

52765	857	No. 8, twin conductor, per ft.....	.60
52762	854	No. 12, twin conductor, per ft.....	.24



Plug No. 806



Plug No. 805

LABORATORY PLATES OR GRIDDLES

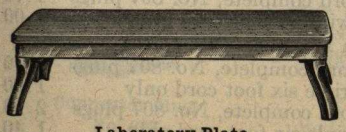
Adapted to cooking of griddle cakes, etc. Also used in laboratories, refining companies and in laboratories of steel works for heating sand baths, etc. The surface of the plate heats to about 600 degrees Fahr.

Trade No.	Mfrs. No.	Max. Watts	Width Inches	Length Inches	Heat Reg.	Wt. Lbs.	Price Each
057096	2720	860	9	12	3	14	$25.00
057097	2730	1290	9	18	3	32	35.00
057098	2740	1720	12	18	3	38	45.00
057099	2750	2580	12	24	3	50	55.00
057100	2770	3440	18	24	3	78	72.50
057102	2790	4300	18	30	3	100	90.00

Plates are furnished with 5-foot cord and three-heat regulation plug switch.

All of the above devices are made in the following standard voltage ranges: 95–104, 105–114, 115–125, 190–209, 210–229, 230–250.

Always Specify Voltage When Ordering



Laboratory Plate

AMERICAN BEAUTY ELECTRIC HEATING DEVICES

NATIONAL ELECTRICAL CODE STANDARD

FLEXIBLE CONDUCTOR CORDS

For Use with American Beauty Electric Heating Devices

GOLD AND BLACK CORD

This cord is used on American Beauty electric irons.

The cord is of fine copper wires braided together, covered with cotton, rubber and asbestos, and an outer braided covering of polished black yarn with Golden Rod silk yarn woven in.

Trade No.	Mfrs. No.	Size	Conductor	Color	Price per 100 ft.
52776	898	16	Twin	Gold and black	$15.00

RED AND BLACK CORD

This cord is used on American Quality, Rite-Heat and pressing irons. The triple conductor is used on glue pots and other three-heat devices.

52777	850–RB	16	Twin	Red and black	14.50
52778	851–RB	16	Triple	Red and black	21.75

BLACK CORD

Black cord is used on some of the larger devices.

52779	852	14	Twin	Black	18.00
52780	853	14	Triple	Black	27.00
52781	854	12	Twin	Black	24.00
52782	855	12	Triple	Black	34.50
52783	856	10	Twin	Black	45.00
52784	857	8	Twin	Black	60.00

The method of construction and the insulation on the black cord and the red and black cord is exactly the same as the gold and black cord.

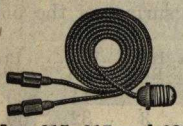
DETACHABLE CORDS



Nos. 830 and 860



No. 840



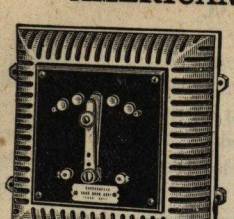
Nos. 815, 817 and 833



Nos. 820 and 823

Trade No.	Mfrs. No.	Color	Description	Price Each
		For Nos. 3B and 6½B Irons		
52785	830	Gold and black	Cord complete	$1.75
52786	831	Gold and black	Cord and No. 803 plug only	1.50
52787	832	Gold and black	Six foot cord only	1.00
		For No. 65 Iron		
52788	835	Red and black	Cord complete	1.75
52789	836	Red and black	Cord and No. 803 plug only	1.50
52790	837	Red and black	Six foot cord only	1.00
		For Nos. 3RH and 6RH Irons		
146255	840	Red and black	Cord complete	1.75
146256	841	Red and black	Cord and No. 804 plug only	1.50
146257	842	Red and black	Six foot cord only	1.00
		For No. 9B and All Heavier Irons		
146258	810	No. 14 black	Cord and No. 806 plug	2.05
146259	811	No. 14 black	Six foot cord only	1.15
		For No. 6210 Radiator		
146260	860	Brown silk	Cord complete	2.00
146261	861	Brown silk	Cord and No. 803 plug only	1.75
146262	862	Brown silk	Eight foot cord only	1.25
		For Nos. 3320-3350 Stoves		
146263	833	Red and green	Cord complete, No. 807 plugs	1.75
146264	834	Red and green	Twin, six foot cord only	1.00
		For Toasters, Percolators, Water Heaters, Etc.		
146265	815	Gray silk	Cord complete, No. 807 plugs	2.00
146266	816	Gray silk	Twin, six foot cord only	1.25
146267	817	Red and black	Cord complete, No. 807 plugs	1.75
146268	818	Red and black	Twin, six foot cord only	1.00
		For Chafing Dishes, Combination Disc and Other 3-heat Devices		
146269	823	Gray silk	Cord complete, No. 807 plugs	2.40
146270	824	Gray silk	Triple six foot cord only	1.60
146271	820	Red and black	Cord complete, No. 807 plugs	2.10
146272	821	Red and black	Triple six foot cord only	1.40

AMERICAN BEAUTY ELECTRIC HEATING DEVICES



Nos. 400-403

RHEOSTATS

By means of these rheostats or regulators, the temperature of irons or other devices can be regulated from full heat to just enough to keep them warm.

A separate rheostat is necessary for each iron or device.

For Regulating Devices Consuming from 400 to 1000 Watts

Trade No.	Mfrs. No.	Size Inches	For Devices Consuming not More than	Ship. Wt., Lbs.	Price Each
057071	400	10½x10	400 watts	9	$7.50
057072	401	10½x10	600 watts	9	7.50
057073	402	10½x10	800 watts	9	8.50
057074	403	10½x10	1000 watts	9	8.50

THREE-HEAT PLUG AND RECEPTACLE SWITCHES

National Electrical Code Standard



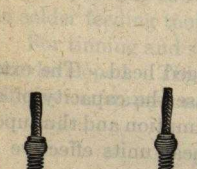
Three-Heat Switch

These plug switches are regularly supplied with glue pots, laboratory plates and griddles. The various heats are obtained by connecting the heating element in multiple or series, this result being obtained by merely inserting the plug in different positions.

Switches are made entirely of porcelain with heavy brass contacts. May be used for open or concealed wiring and have a capacity of 20 amperes at 250 volts.

Trade No.	Mfrs. No.	Description	Price Each
057086	812	Plug and receptacle complete....	$2.25
057087	813	Receptacle only.....	1.50
057201	814	Plug only	.75

DETACHABLE PLUGS



Plug No. 803 Plug No. 804

No. 803 is a composition, non-breakable plug used on Beauty Irons Nos. 3B and 6½B and on Luminous Radiators Nos. 6020, 6125 and 6270.

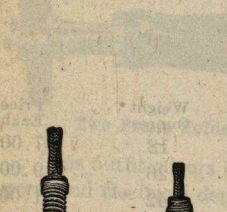
52792	803	Plug complete, with contact sleeves and non-kink spring..	.50
52793	803B	Contact sleeves only, per pair...	.20

No. 804 is a composition plug with metal support strips used on Riteheat Electric Irons.

52794	804	Plug complete, with contact sleeves and non-kink spring..	.50
52795	804B	Contact sleeves only, per pair..	.20

No. 805 is a large composition, non-breakable plug used on air heaters Nos. 4530 to 4560.

52796	805	Plug complete, with contact sleeves and non-kink spring..	1.75
52797	805B	Contact sleeves only, per pair..	.60



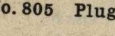
Plug No. 805 Plug No. 806

No. 806 is a large metal sheathed plug used on Beauty Irons Nos. 9B, 12B, 16B, 20B, 20HB, 24HB, 16VB and 20VB; air heaters Nos. 4510 and 4512; Industrial Disk Heaters Nos. 3240, 3245 and 3250.

52798	806	Plug complete, with contact sleeves and non-kink spring..	1.00
52799	806B	Contact sleeves only, per pair..	.40

PORCELAIN CONNECTOR PLUGS

Single-Pole



Connector Plug No. 807

These plugs are used on cords regularly supplied with domestic disk heaters and devices of this kind. They are made of porcelain and enameled in black or red.

52800	807	Single plugs complete, with contact sleeve and small spring	.25

NOTE.—In ordering plugs, state whether plugs are to be supplied complete or whether porcelain parts only are desired.

AMERICAN BEAUTY ELECTRIC SOLDERING IRONS



The details of construction on these soldering irons have been given the most careful attention. The element core and the shank of the copper tip are heat treated and will not readily corrode or oxidize. The heating element of nickel chromium ribbon, insulated with pure mica, is kept in intimate contact with the core by means of a patented compression winding. This prevents overheating of the element.

The exterior of the iron is perfectly smooth, there are no projecting screw heads. The finish is polished nickel with Circassian walnut finish wood handle. Iron is supplied complete with six feet cord and lamp socket attachment plug.

Copper tips are of standard size drawn copper rod, 3/8, 5/8 and 7/8-inch respectively in diameter. As the tip wears away it is possible to withdraw it from the core and most of the tip may thus be utilized.

It is to be noted that tips are straight rod and do not have an enlarged head. The extra copper or the increased diameter of an enlarged tip head does not increase the capacity of an electric soldering iron. The capacity depends entirely upon the watt consumption and thus upon the heat units supplied, together with a construction that makes such heat units effective at the point of the tip.

These soldering irons are of very simple construction and are made on the unit system so that every part is easily removable, replaceable and interchangeable. It can easily and quickly be taken apart by anyone.

Trade No.	Mfrs. No.	Watts	Diameter of Tip Inches	Outside Diameter Inches	Length Over All Inches	Weight Ounces	Price Each
53522	3138	100	3/8	5/16	12 1/16	18	$7.00
53523	3158	225	5/8	1 3/16	13 3/32	26	9.00
53524	3178	350	7/8	1 1/2	13 21/32	42	11.00

Made in the following standard voltage ranges; 95–104, 105–114, 115–125, 190–209, 210–229, 230–250.

Can also be supplied for 32 volts at fifty cents added to list.

Extra Copper Tips

Trade No.	Mfrs. No.	Description	Weight Ounces	Price Each
53525	3738	For use on iron No. 3138	2 1/2	$0.90
53526	3758	For use on iron No. 3158	7	1.50
53527	3778	For use on iron No. 3178	16	2.25

J. C. ELECTRIC SOLDERING TOOLS

The J. C. Electric Soldering Irons eliminate all old style methods by developing a direct heat which is approximately 3300° centigrade, the moment it touches the work.

A great saving of time and current is effected, superior work is accomplished, as the solder really welds itself to the work. It "gets in" instead of having only a surface grip. The simplicity and lightness of construction of the J. C. Electric Soldering Irons also mean increased production, with better and stronger work.

Each iron or equipment is especially designed for a certain class of work. All operate on from 5 to 10 volts, using high amperage. This low voltage is obtained from special transformers which are included with all alternating current equipments, or can be obtained from storage battery. For continuous work, alternating current equipment is preferable.

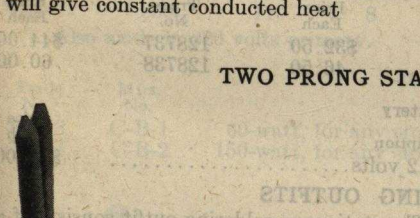
The standard soldering iron is constructed with two high-resistance carbons which form a direct heat at the point of contact. The instant the iron is placed on the object to be soldered these points glow with a white heat. This immediately heats the work, and the solder is then applied.

When the operation is finished, the current ceases to flow the moment the tool is taken from the work, as the circuit is opened. This is a great saving of current. The iron is always ready for instant use, and when the high-resistance carbon points become used they can be easily renewed at a small cost.

This same principle of closing the circuit between the two high-resistance points applies to the two handle portable outfit and also the stationary bench outfit, with the exception that instead of having two carbon points, the solder is used as one conductor through what is known as the solder feeding tool.

For tinning and soldering low-fusing metals such as zinc and lead a copper pointed iron has been developed. This copper point is attached in a very unique manner to the carbon points, and will give constant conducted heat

TWO PRONG STANDARD SOLDERING IRONS



Two Prong Soldering Iron

The prongs are made of solid bar brass with nickel-plated finish and are accurately machined throughout. The bushing is the highest heat-test molded asbestos and the handle is made of Bakelite. Six feet of heater cord with terminals, and special fused transformer having eight feet of cord with attachment plug, completes the alternating current equipment.

This outfit covers a great field of soldering, and is used by many central stations, manufacturers, and electrical departments for repairing and general work.

The high resistance carbon points are made to carry only the capacity they are rated for, namely, 150, 250 and 500 watts, and are guaranteed when using low voltage as per the ratings.

For Alternating Current—Complete with Transformer

Mfrs. No.	Watts	Voltage		60 Cycles		25 Cycles	
		Primary	Secondary	Trade No.	Price Each	Trade No.	Price Each
S-1	150	110	8	36842	$30.00	36845	$41.50
S-2	250	110	9	36843	44.00	36846	57.50
S-3	500	110	10	36844	44.00	36847	57.50

Also made in 220 volts primary.

For Storage Battery

Trade No.	Mfrs. No.	Description	Price Each
36848	S-B-1	Small size, for any storage battery up to 12 volts	$7.50
36849	S-B-2	Large size, for any storage battery up to 12 volts	8.50

J. C. ELECTRIC SOLDERING TOOLS

TWO-HANDLE PORTABLE SOLDERING OUTFITS



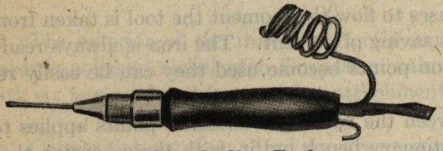
Single Prong Soldering Iron

The two-handle portable soldering outfit is composed of a single prong soldering tool and a solder-feeding tool.

The single prong soldering tool is similar in construction to the two-prong standard iron. It is shipped with a swivel extension holder which allows the use of heavier carbon points in a vertical position and is used for extra heavy work. When swivel extension holder is removed, the small carbon point can be attached, as illustrated, in a horizontal position for fine and light work.

The solder-feeding tool is shipped complete with solder already attached to holder, and to reload or refill all that is necessary is to feed through tube at top of handle next to the hook, the ordinary string solder, allowing the solder to extend about an inch and a half or two inches beyond the mouth of the feeder.

When soldering with this outfit the single prong point is brought to bear upon the object to be soldered and the solder-feeding tool is brought to bear upon the spot where needed. The instant the circuit is closed, the heating point glows with a white heat and runs the solder. This outfit is recommended for soldering of small lug terminals, wires behind switchboards, and automobile parts of all kinds.



Solder-feeding Tool

For Alternating Current—Complete with Transformer

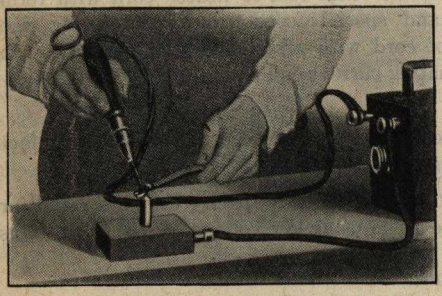
Mfrs. No.	Watts	Voltage Primary	Voltage Secondary	60 Cycles Trade No.	60 Cycles Price Each	25 Cycles Trade No.	25 Cycles Price Each
P-1	150	110	8	128735	$32.50	128737	$44.00
P-2	250	110	9	128736	46.50	128738	60.00

Also made in 220 volts primary

For Storage Battery

Trade No.	Mfrs. No.	Description	Price Each
128739	P-B-1	For any storage battery up to 12 volts	$10.00

STATIONARY SOLDERING OUTFITS



Stationary Soldering Outfit

The stationary soldering outfit consists of a solder-feeding tool and a bench attachment which is a block of carbon arranged to hold an upright carbon point. The carbon block can be fastened to the work bench permanently, and one wire from the secondary side of the transformer is connected to the block; the other is connected to the solder-feeding tool.

The work is placed upon the tip of the carbon point and the solder is brought to bear directly upon the spot where needed. Instantly the carbon tip glows with a white heat, running the solder on the surface required. When the object is soldered sufficiently, the solder-feeding tool is taken away and the current ceases to flow. The stationary soldering outfit is used in all cases where the work can be carried to the carbon point, such as lug soldering, etc.

For Alternating Current—Complete with Transformer

Mfrs. No.	Watts	Voltage Primary	Voltage Secondary	60 Cycles Trade No.	60 Cycles Price Each	25 Cycles Trade No.	25 Cycles Price Each
B-1	150	110	8	128740	$30.00	128742	$41.50
B-2	250	110	9	128741	44.00	128743	57.50

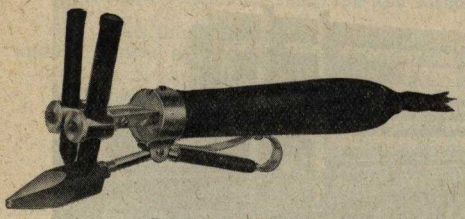
Also made in 220 volts primary.

For Storage Battery

Trade No.	Mfrs. No.	Description	Price Each
128744	B-B-1	For any storage battery up to 12 volts	$7.50

J. C. ELECTRIC SOLDERING TOOLS

COPPER POINTED IRONS



Copper Pointed Iron

The copper pointed iron is constructed along the same lines as the two-prong standard outfit, only it has a copper point attachment as illustrated. The copper point is brought in contact by releasing the catch on the spring, and when the contact is made it will take less than two minutes to heat the copper ready for work. The consumption of current is very small, as it is only necessary to use 60 watts on the small iron and 800 watts on the large iron, and will give heat quicker than it can be taken away in proportion to the size of work for which each iron is heated.

The copper pointed iron is especially designed for tinning, running of seams or soldering of low fusing metals such as zinc and lead which will not stand a direct heat, and also for fine magnetic wire soldering.

Any special pointed copper can be attached to this equipment, and if a special point is necessary send a drawing of the shape, or a sample, and it can be furnished.

For Alternating Current—Complete with Transformer

Mfrs. No.	Watts	Voltage Primary	Voltage Secondary	60 Cycles Trade No.	60 Cycles Price Each	25 Cycles Trade No.	25 Cycles Price Each
C-1	60	110	5	55147	$20.00	55150	$25.00
C-2	250	110	7	55148	35.00	55151	41.50
C-3	800	110	8	55149	50.00	55152	60.00

Also made in 220 volts primary.

For Storage Battery

Trade No.	Mfrs. No.	Description	Price Each
55153	C-B-1	60-watt, for any storage battery up to 12 volts	$10.00
55154	C-B-2	150-watt, for any storage battery up to 12 volts	10.00



6-oz. Tip



1½ oz. Tip

Half Actual Size

EXTRA CARBON POINTS

Trade No.	Description	Std. Pkg.	Price Each
55155	For use on 60 and 150-watt irons, ⅜ in. diam. x 3 in. long, with one end pointed	50	$1.00
55156	For use on 250 and 500-watt irons, ½ in. diam. x 6 in. long, with one end pointed	50	1.25

COPPER TIPS

Made from cold-rolled copper, in two standard sizes.

Trade No.	Description	Price Each
55157	150-watt 6 or 8-oz. tip	$1.50
55158	60-watt 1½-oz. tip	1.00

Special shapes made from specifications and attached at above prices.



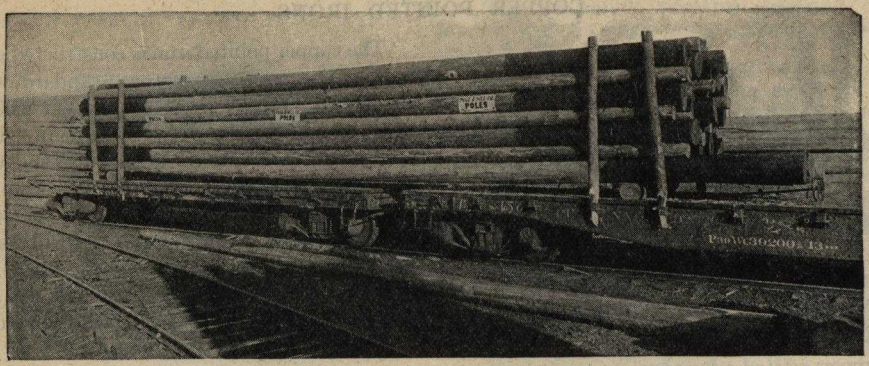
Special Transformer

SPECIAL TRANSFORMERS

J. C. Transformers are constructed for continuous duty at their rated capacity. Durability and lightness are combined, giving the best possible service.

Prices on extra transformers on application.

CEDAR POLES



N. W. C. A. SPECIFICATIONS COVERING NORTHERN WHITE CEDAR POLES

Standard Telegraph, Telephone and Electric Light Poles—Sizes 4-inch 20-foot and Upward

1. LIVE TIMBER.— All poles shall have been cut from live, green, growing Northern white cedar timber.
2. LIMIT OF MAXIMUM DEFECTS.— No pole shall contain both the maximum crook and the maximum butt rot.
3. PERCENTAGES OF MAXIMUM DEFECT.— Not more than 10 per cent of the number of pieces of any lot or shipment shall contain the maximum crook or butt rot.
4. VARIATION IN SIZES.— If not to exceed 2 per cent of the pieces in any lot or shipment are below the minimum size, and there is an equal number of pieces as large as the minimum of the next larger size, the shipment shall be considered as conforming to these specifications so far as size is concerned.
5. METHOD OF MEASURING TOPS.— Minimum size of tops shall be shown in table at top of following page. Diameter shall govern top sizes for lengths shorter than 16 feet and circumference shall govern top sizes for lengths 16 feet and longer.
6. LENGTHS.— Any pole 20 feet and longer may be short of its specified length ½-inch for each 5 feet of its length or it may be 6 inches longer than its specified length.
7. MANUFACTURE.— All poles shall be peeled and knots closely trimmed.
8. KNOTS.— Knots are permitted if sound, smoothly trimmed and do not plainly impair the strength of the pole.
9. SHORT KINKS.— Short kinks not permitted.
10. ROT.— (a) Sap or skid rot not permitted. (b) Poles 16 feet and longer having minimum top sizes, of the dimensions required, must have sound tops. Poles 16 feet and longer having tops 1 inch or more in circumference above the minimum top sizes, may have 1 pipe rot not more than ½ inch in diameter. (c) Butt and ring rot combined shall not exceed 10 per cent of the area of the butt.
11. TWIST.— Winding twist permitted unless very unsightly and exaggerated.
12. CAT FACES.— Cat faces permitted if sound, and if their distance from the top of the pole is not less than 20 per cent of the length of the pole in 30 feet and shorter poles, and 25 per cent on 35 feet and longer poles.
13. DISCOLORATION.— Discoloration not considered a defect under these specifications.
14. CROOK OR SWEEP.— 1. Poles 16 feet and longer. (a) Below ground line: Sweep not to exceed diameter of butt. (b) Above ground line: Reverse sweep and two way sweep, meaning a sweep in two planes allowed providing line drawn from center of pole at top to center of pole at ground line does not leave the pole at any point. One way sweep allowed not to exceed maximum shown in table below.
15. EXPLANATION OF TERM "GROUND LINE."— The meaning of this term is shown in table below.

Sweep and Ground Line

Length of Poles, Ft.	Maximum Sweep Bet. Points Top to Ground Line, In.	Ground Line No. of Ft. from Butt	Length of Poles, Ft.	Maximum Sweep Bet. Points Top to Ground Line, In.	Ground Line No. of Ft. from Butt
16, 18 & 20	4	4	50	10	6
25	5	6	55	11	6
30	6	6	60	12	6
35	7	6	65	13	6
40	8	6	70	14	6
45	9	6	..	..	..

CEDAR POLES

W. R. C. A. SPECIFICATIONS COVERING WESTERN RED CEDAR POLES

Standard Telephone, Telegraph and Electric Light Poles—Sizes 4-inch 20-foot and Upward

All poles must be cut from live, growing cedar timber, peeled, knots trimmed close, butts and tops sawed square, tops must be sound and must measure as follows in circumference:

POLES.— 4-inch top, 12 -inch circumference.
5-inch top, 15 -inch circumference.
6-inch top, 18½-inch circumference.
7-inch top, 22-inch circumference.
8-inch top, 25-inch circumference.
9-inch top, 28-inch circumference.
10-inch top, 31-inch circumference.

LENGTH.— Poles may be 6 inches longer or 3 inches shorter than specified length.

CROOK.— No pole shall have more than 1 crook, and this shall be 1 way only, the sweep not to exceed 1 inch to every 6 feet in length, to be determined in the following manner: Measurement for sweep shall be taken as follows: That part of the pole when in the ground (6 feet) not being taken into account in arriving at sweep, tightly stretch a tape line on the side of the pole where the sweep is greatest, from a point 6 feet from butt to the upper surface at top, and having so done, measure widest point from tape to surface of pole, and if, for illustration, upon a 30-foot pole said widest point does not exceed 5 inches, said pole comes within the meaning of these specifications.

BUTT ROT.— Butt rot in center, including small ring rot, shall not exceed 10 per cent of the area of the butt. Butt rot of a character which impairs the strength of pole above ground is a defect.

KNOTS.— Large knots, if sound and trimmed smooth, are not a defect.

DEAD OR DRY STREAKS.— A perfectly sound dead or dry streak shall not be considered a defect when it does not materially impair the strength of the pole.

APPROXIMATE NUMBER OF NORTHERN WHITE CEDAR POLES FOR CARLOAD

Size In.	Size Ft.	Number Min.	Number Max.	Size In.	Size Ft.	Number Min.	Number Max.	Size In.	Size Ft.	Number Min.	Number Max.	Size In.	Size Ft.	Number Min.	Number Max.
4	16	315	600	5	20	200	400	7	25	70	140	6	35	70	110
5	16	250	450	6	20	140	275	5	30	90	170	7	35	35	75
4	18	275	500	4	25	175	325	6	30	70	135	8	35	40	65
5	18	210	400	5	25	130	275	7	30	60	100	7	40	40	65
4	20	275	500	6	25	100	180	8	30	45	75	8	40	30	50
							Double Load								
7	45	50	80	8	45	40	65	..	..	..	...	.	..	..	..

APPROXIMATE NUMBER OF WESTERN RED CEDAR POLES FOR CARLOAD

4	20	440	600	5	25	220	300	6	30	100	170	7	35	80	110
5	20	326	444	6	25	176	240	7	30	100	125	8	35	65	95
6	20	232	316	7	25	136	184	8	30	80	100	7	40	80	100
4	25	294	400	8	25	110	150	6	35	100	125	8	40	65	90
							Double Load								
7	45	80	110	7	50	65	85	8	55	50	65	8	65	35	50
8	45	70	90	8	50	60	75	8	60	45	60	8	70	30	45

BUTT TREATMENT OF CEDAR POLES

Butt treatment adds many years to the life of the pole. Complete specifications covering every detail of this treatment will be mailed on request.

Specification A provides for a continuous submersion in hot Carbolineum for a minimum duration of 15 minutes.

Specification AA provides for a continuous submersion in hot Creosote for a minimum duration of 15 minutes.

Specification B provides for a continuous submersion in alternately hot and cold Creosote for a minimum duration of 6 hours.

GROUND LINE AND HEIGHT OF TREATMENT

Length of Poles Feet	Ground Line Feet	Height of Treatment Feet	Length of Poles Feet	Ground Line Feet	Height of Treatment Feet	Length of Poles Feet	Ground Line Feet	Height of Treatment Feet
16	3½	5	35	6	7½	60	7	8½
18	3½	5	40	6	7½	65	7½	9
20	3½	5	45	6½	8	70	7½	9
25	4½	6	50	6½	8	75	7½	9
30	5½	7	55	6½	8	80	7½	9

WASHINGTON FIR AND YELLOW PINE CROSS-ARMS



Specifications

Yellow Douglas fir: Straight-grained; close-grained, 85 per cent heart, free from bark, shakes, rot, rotten or unsound knots, loose heart, worm holes, large pitch-pockets, checks or wane, or sound knots larger than ¾ inch in diameter.

Mississippi Yellow pine: Genuine Mississippi long-leaf yellow pine, guaranteed every arm at least 75 per cent heart (or all heart, if so specified), and free from defects, except small, sound knots, not over 1 inch in diameter, measurements to be made at right angles to the longitudinal axis of the knot.

Standard grade yellow pine: Free from loose or unsound knots, or other defects which would injure the arm. Painted red or dipped in hot creosote oil.

ELECTRIC LIGHT ARMS, 3¼x4¼ INCHES

Fir Trade No.	Fir Wt., Lbs. per Arm	Pine Trade No.	Pine Wt., Lbs. per Arm	Length	No. of Pins	Spacings, Inches Center	Side	End	Length of Brace Inches	Price, per 100 Arms
07149	10.2	083514	13.2	3 ft.	2	28	....	4	25	$39.375
07150	13.6	083515	17.6	4 ft.	4	16	12	4	28	52.50
07151	17	083516	22.	5 ft.	4	18	17	4	28	65.625
07152	20.4	083517	26.4	6 ft.	4	22	21	4	32	78.75
07153	20.4	083518	26.4	6 ft.	6	16	12	4	32	78.75
07154	27.2	083519	35.2	8 ft.	6	18	17½	4	32	105.00
07155	27.2	083520	35.2	8 ft.	8	16	12	4	32	105.00
07156	29.9	083521	37.4	8½ ft.	10	16	9¾	4	32	118.13
07157	34	083522	44	10 ft.	8	17½	15¾	4	42	131.25
07158	34	083523	44	10 ft.	10	16	12	4	42	131.25
60126	34	121422	44	10 ft.	12	16	9⅝	3⅞	42	131.25
				RAILROAD ARMS, 3x4¼ INCHES						
071231	19.2	083525	24.6	6 ft.	4	22	21	4	32	73.125
37601	19.2	37625	24.6	6 ft.	6	16	12	4	32	73.125
071232	25.6	083526	32.8	8 ft.	6	18	17½	4	32	97.50
37602	25.6	37626	32.8	8 ft.	8	16	12	4	32	97.50
071233	32	083527	41	10 ft.	8	17½	15¾	4	42	121.875
37603	32	37627	41	10 ft.	10	16	12	4	42	121.875
				TELEPHONE ARMS, 2¾x3¾ INCHES						
07160	5	083528	6.5	24 in.	2	18	....	3	..	20.00
07161	6.25	083529	8.125	30 in.	2	24	....	3	..	25.00
60124	7.5	121407	9.75	36 in.	2	30	....	3	25	30.00
07163	8.75	083531	11.375	42 in.	4	16	10	3	28	35.00
07164	13	083532	16.8	62 in.	6	16	10	3	28	51.67
07165	17	083533	22.2	82 in.	8	16	10	3	28	68.33
07166	21.25	083534	27.625	102 in.	10	16	10	3	28	85.00
60125	25	121408	32.5	120 in.	12	16	9⅝	3⅞	28	100.00
				N. E. L. A. ARMS, 3½x4½ INCHES						
37604	12⅔	37628	15.83	38 in.	2	30	....	4	28	59.37
071234	22⅓	083536	27.92	67 in.	4	30	14½	4	38	89.06
071235	32	083537	40	96 in.	6	30	14½	4	38	118.75
071236	36⅔	083538	45.83	110 in.	8	30	12	4	38	148.44

SPECIAL ARMS

Fir Trade No.	Fir Wt., Lbs. per Lin. Ft.	Pine Trade No.	Pine Wt., Lbs. per Lin. Ft.	Size Inches	Price, per Lin. Ft.	Fir Trade No.	Fir Wt., Lbs. per Lin. Ft.	Pine Trade No.	Pine Wt., Lbs. per Lin. Ft.	Size Inches	Price, per Lin. Ft.
60113	2.5	121409	3.25	2¾x3¾	$0.10	60118	4.72	121416	5.95	3¾x5	$0.1750
60112	3.2	121410	4.1	3 x4¼	.12187	60119	5.4	121417	6.8	3¾x5¾	.20
60111	3.4	121411	4.4	3¼x4¼	.13125	60120	5	121418	6.33	4 x5	.18594
60114	4	121412	5	3½x4½	.14844	60121	6	121419	7.52	4 x6	.22135
60115	4.2	121413	5.3	3½x4¾	.15625	60122	6.75	121420	8.5	4¾x5¾	.25
60116	4.43	121414	5.57	3½x5	.16406	60123	7.4	121421	9.29	5 x6	.27344
60117	4.5	121415	5.67	3¾x4¾	.16667	.....	....	.....	....	.....	.....

In ordering cross-arms be very careful to specify just what is wanted, and if other than standard boring, send sketch or blue print with order. Arms specially made are of no use for general stock and cannot be returned if mistake is made in ordering.

All arms bored for one ⅝-inch center bolt unless otherwise specified.

Pin holes will be bored, unless otherwise specified, as follows: Electric light arms, 1½-inch; railroad arms, ⅝-inch; telephone arms, 1¼-inch; N. E. L. A. arms, 1½-inch. Any change required from standard spacings, pin holes or bolt holes as here given, must be distinctly specified on the order.

PINS AND BRACKETS



Wood Pin

WOOD PINS

Oak, Painted

Trade No.	Size Inches	Sack Contains	Wt., Lbs. per 1000	Price per 1000
053196	1¼x 8	250	300	$10.50
053197	1½x 9	250	400	13.50
	Locust, not Painted			
053198	1¼x 8	250	325	19.00
053199	1½x 9	250	450	28.00
42337	1½x12	100	600	55.00
42335	1½x12	100	650	60.00

No. 42337 has a 1-inch thread; No. 42335, 1⅜-inch thread.



Duplex Pin

TRANSPOSITION PINS

For use in connection with transposition glass insulators. Made from selected stock and with extra long thread.

	Oak, Painted			
053201	1¼x 9	250	350	12.00
42333	1½x10	250	450	17.00
	Locust, not Painted			
053203	1¼x 9	250	400	24.00
42334	1½x10	250	500	35.00

DUPLEX PINS

For use in connection with duplex pony and duplex deep groove insulators.

	Oak, Painted			
053204	1¼x11½	250	450	21.00
053205	1½x12	250	600	30.00
	Locust, not Painted			
053206	1¼x11½	250	500	40.00
053207	1½x12	250	650	60.00



Regular Wood Corner Pin

REGULAR WOOD CORNER PINS

Oak, Painted

Trade No.	Size Inches	Size of Bolts Inches	Sack Contains	Wt., Lbs. per 1000	Price per 1000
053208	1¼x8	⅜	250	600	$60.00
053209	1½x9	⅜	250	725	70.00
	Locust, not Painted				
42326	1¼x8	⅜	250	625	70.00
42327	1½x9	⅜	250	775	75.00

Corner pins are furnished complete, with bolt and washer.



Western Union Steel Pin

WESTERN UNION STEEL PINS

Plain and Galvanized

Trade No.	Size Inches	Sack Contains	Wt., Lbs. per 1000	Price per 1000
053212	½x9½	250	600	$137.50
053213	⅝x9½	250	950	175.00

WOOD BRACKETS

Oak, Painted

Trade No.	Mfrs. No.	Size Inches	Sack Contains	Wt., Lbs. per 1000	Price per 1000
42281	4	1½x2 x10	250	500	$16.50
42282	1	1½x2 x12	250	700	18.50
42283	3	1½x2¼x12	250	800	20.00
42336	L. D.	1⅝x2 x12	250	800	30.00
42284	2	2 x2¼x12	250	1000	40.00



Wood Bracket

WESTERN UNION BRACKETS

Oak, not Painted

42285	..	2 x2⅜x12	100	1100	28.00

MALLEABLE IRON PINS


No. 20


No. 21

PINS FOR WOOD CROSS-ARM—FLUTED SHANK

Trade No.	Mfrs. No.	Dimensions, Inches: Diam. of Pin	Lgth. of Shank	Length of Top	Diam. of Head	Wt., Lbs. per 100	Price, per 100: With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
012195	20A	¾	3	4¾	1	50	$6.00	$8.00	$5.00	$7.00
012196	20B	1	3	4¾	1	65	7.50	9.75	6.50	8.75
012197	20C	1¼	3	4¾	1	80	9.00	12.00	8.00	11.00
012198	20D	1½	3	4¾	1	90	10.50	14.00	9.50	13.00
012199	20E	1¼	4¼	4¾	1	105	12.50	17.00	11.50	16.00
012200	20F	1½	4¼	4¾	1	115	13.50	18.00	12.50	17.00

PINS FOR WOOD CROSS-ARM—PLAIN SHANK

012215	21A	1¼	3	4¾	1	100	9.00	13.00	8.00	12.00
012216	21B	1¼	4¼	4¾	1	120	12.50	17.00	11.50	16.00
012217	21C	1½	3	4¾	1	110	10.50	14.50	9.50	13.50
012218	21D	1½	4¼	4¾	1	140	13.50	18.50	12.50	17.50
012210	28A	1¼	4¼	4¾	1	125	12.00	17.00	11.00	16.00
012211	28B	1½	4¼	4¾	1	130	13.00	18.00	12.00	17.00
098676	28E	2	4¼	4¾	1⅜	150	15.00	20.00	14.00	19.00
098677	28H	4	4¼	4¾	1⅜	145	14.00	19.00	13.00	18.00

PINS FOR IRON CROSS-ARM—RIBBED SHANK

012207	29A	1¼	4¼	4¾	1	125	12.00	17.00	11.00	16.00
012208	29B	1½	4¼	4¾	1	140	13.00	18.00	12.00	17.00

For 1⅜-inch diam. thread add $2.00 per 100 to above prices.


No. 28


No. 29

PINS WITH METAL HEADS

For Telephone, Telegraph and Lighting Purposes

Trade No.	Mfrs No.	Dimensions, Inches: Diam. of Bolt	Diam. of Head	Length of Pin	Length of Bolt	Wt., Lbs. per 100	Price, per 100: With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
098697	44	½	1	4¾	4¾	85	$8.50	$12.00	$7.50	$11.00
098698	45	⅝	1	4¾	4¾	110	9.50	13.00	8.50	12.00
107801	44A	½	1	4¾	2	75	8.00	11.50	7.00	10.50
107802	45A	⅝	1	4¾	2	90	9.00	12.50	8.00	11.50

All have 1½-inch base. Nos. 44 and 45 are furnished with washers; Nos. 44A and 45A, without washers.


Nos. 44. 45


No. 1065

PINS FOR WOOD CROSS-ARMS

Fitted with ½x2-inch bolt below base, square nut and round washer.

Trade No.	Mfrs. No.	Dimensions, Inches: Size of Pin Hole	Pin Length Below Shoulder	Bolt Below Base	Length Above Shoulder	Size of Insu.	Wt., Lbs. per 100	Price, per 100: With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
107803	1065	1½	3⅜	2	4⅛	1	225	$19.00	$28.00	$18.00	$27.00
107804	1066	1¼	3⅜	2	4⅛	1	200	19.00	27.00	18.00	26.00
107805	1067	1½	4	2	5	1	300	31.00	43.00	30.00	42.00
107806	1068	1½	4	2	5	1⅜	325	33.00	46.00	32.00	45.00
107807	1069	1¼	4	2	5	1	275	30.00	41.00	29.00	40.00
107808	1070	1¼	4	2	5	1⅜	300	32.00	44.00	31.00	43.00
107809	1071	1½	5	2	5	1	350	33.00	46.00	32.00	46.00
107810	1072	1½	5	2	5	1⅜	375	35.00	50.00	34.00	49.00

HIGH TENSION PINS

Pin and bolt are one piece. Heads with slot for insertion are made solid or grooved for cementing.

Trade No.	Mfrs. No.	Dimensions, Inches: Diam. of Bolt	Diam. of Head	Length of Pin	Length of Bolt	Wt., Lbs. per 100	Price, per 100: With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
017917	439E	½	1	4½	5¼	140	$16.00	$21.00	$15.00	$20.00
017918	439H	½	1⅜	7½	5¼	160	22.00	28.00	21.00	27.00
017919	439A	⅝	1	4½	5¼	160	18.00	23.00	17.00	22.00
017920	439B	⅝	1⅜	7½	5¼	180	24.00	30.00	23.00	29.00
107811	439L	½	1	4½	1½	100	12.00	17.00	11.00	16.00
107812	439C	½	1⅜	7½	1½	120	18.00	24.00	17.00	23.00
107813	439D	⅝	1	4½	1½	110	14.00	19.00	13.00	19.00
107814	439K	⅝	1⅜	7½	1½	130	20.00	26.00	19.00	25.00

All have 2-inch base, except Nos. 439B, 439C, 439D and 439K, which have 1½-inch base.

Above pins furnished with insertion unless otherwise specified.

In ordering, specify whether japanned or galvanized finish is desired.


No. 439

MALLEABLE IRON PINS



No. 436

No. 436 HIGH TENSION INSULATOR PINS

Head and pin are in one piece with steel bolt. Heads with double slot for insertion are made solid or with grooves for cementing.

Slotted Head with Insertion

Trade No.	Mfrs. No.	Dimensions, Inches: Diam. of Bolt	Diam. of Thread	Length of Pin	Length of Bolt	Diam. of Base	Wt., Lbs. per 100	Price per 100 Pieces: Jap.	Galv.
107824	436A	5/8	1	4 3/4	2	3	170	$26.00	$33.00
107825	436B	5/8	1	5 1/2	2	2 3/4	190	27.00	35.00
107826	436C	3/4	1 3/8	5 1/2	2	2 3/4	210	29.00	38.00
107827	436D	5/8	1	6	2	3	190	28.00	36.00
107828	436E	3/4	1 3/8	6	2	3	210	33.00	42.00
107829	436F	5/8	1	7 1/2	2	3	215	30.00	39.00
107830	436H	3/4	1	7 1/2	2	3	240	35.00	45.00
107831	436K	5/8	1 3/8	7 1/2	2	3	240	33.00	43.00
107832	436M	3/4	1 3/8	7 1/2	2	3	290	36.00	48.00
107833	436P	3/4	1 3/8	9	2	3	300	37.00	49.00
107834	436R	3/4	1 3/8	10	2	3	340	40.00	56.00
107835	436S	3/4	1 3/8	18	2	4	600	60.00	85.00
107836	436T	1/2	1	4 3/4	1 1/2	1 1/2	100	16.00	20.00
107837	436V	1/2	1	4 3/4	1 1/2	1 1/2	90	15.00	18.00

For pins furnished without insertion deduct $1.00 per 100 from above prices.
Above pins can be furnished with leaded threaded heads for which add to above prices for 1-inch head, $25.00 per 100, and 1 3/8-inch head, $32.00 per 100.


No. 435

No. 435 HIGH TENSION INSULATOR PINS

Head and pin are in one piece with steel bolt.

Slotted Head with Insertion

107838	435E	5/8	1	4 3/4	6	3	180	26.00	33.00
107839	435F	5/8	1	5 1/2	6	2 3/4	200	27.00	35.00
107840	435H	3/4	1 3/8	5 1/2	6	2 3/4	225	29.00	38.00
107841	435K	5/8	1	6	6	3	200	28.00	36.00
107842	435M	3/4	1 3/8	6	6	3	225	33.00	42.00
107843	435P	5/8	1	7 1/2	6	3	225	30.00	39.00
107844	435A	3/4	1	7 1/2	6	3	250	35.00	45.00
107845	435R	5/8	1 3/8	7 1/2	6	3	250	33.00	43.00
107846	435S	3/4	1 3/8	7 1/2	6	3	300	36.00	48.00
107847	435D	3/4	1 3/8	9	6	3	310	37.00	49.00
107848	435B	3/4	1 3/8	10	6	3	350	40.00	56.00
107849	435C	3/4	1 3/8	18	6	4	600	60.00	85.00

For pins furnished without insertion deduct $1.00 per 100 from above prices.
Above pins can be furnished with leaded threaded heads for which add to above japanned prices for 1-inch head, $20.00 per 100, and 1 3/8-inch head, $24.00 per 100.
Above pins can be furnished with base curved at same prices.


No. 433

No. 433 HIGH TENSION INSULATOR PINS

Separate 3-inch head with steel bolt cast in same, so head separately can be cemented into insulator. Heads grooved horizontally and vertically to receive cement.

107850	433E	5/8	7/8	7	6	2 3/4	360	34.00	48.00
107851	433F	3/4	1 1/8	7	6	2 3/4	380	36.00	50.00
107852	433H	5/8	7/8	8 1/2	6	3	410	38.00	52.00
107853	433A	3/4	1 1/8	8 1/2	6	3	440	40.00	55.00
107854	433B	3/4	1 1/8	11 1/2	6	3	575	55.00	75.00
107855	433C	3/4	1 1/8	17 1/2	6	4 3/4	800	70.00	98.00
107856	433D	3/4	1 1/8	20 1/2	6	5	900	80.00	110.00

Above pins can be furnished with base curved at same prices.



No. 412

No. 412 HIGH TENSION INSULATOR PINS

Head and pin one piece with steel bolt. Solid head pin for cementing insulator.

107857	412A	5/8	7/8	4 3/4	6	2 3/4	180	26.00	33.00
107858	412B	5/8	7/8	5 1/2	6	2 3/4	200	27.00	35.00
107859	413C	5/8	7/8	6	6	3	200	28.00	36.00
107860	414D	3/4	1 1/8	6	6	3	225	28.00	36.00
107861	415E	5/8	7/8	7 1/2	6	3	225	30.00	39.00
107862	416F	3/4	1 1/8	7 1/2	6	3	250	35.00	45.00
107863	417H	3/4	1 1/8	9	6	3	310	37.00	49.00
107864	418K	3/4	1 1/8	10	6	3	350	40.00	56.00
107865	419M	3/4	1 1/8	14	6	4	400	47.00	63.00
107866	420P	3/4	1 1/8	18	6	4	600	60.00	85.00

Above pins can be furnished with base curved at same prices.
In ordering, specify whether japanned or galvanized finish is desired.

MALLEABLE IRON PINS



No. 1809

POLE TOP PINS

With Slotted Heads

Trade No.	Mfrs. No.	Dimensions, Inches: Length Over All	Space between Holes	Width of Flange	Size of Holes	Wt., Lbs. per 100	Price, per 100: With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
098696	1800	12	4	1	7/16	100	$12.00	$16.00	$11.00	$15.00
107780	1801	15	6	1	7/16	125	15.00	20.00	14.00	19.00
107781	1802	18	6	1	7/16	140	16.00	21.00	15.00	20.00
107782	1803	18	6	1 1/2	7/16	210	22.00	30.00	21.00	29.00
107783	1804	18	6	1 3/4	7/16	240	24.00	33.00	23.00	32.00
107784	1805	24	8	1 1/2	9/16	260	26.00	36.00	25.00	35.00
107785	1807	24	10	1 3/4	9/16	280	28.00	39.00	27.00	38.00
107786	1809	24	10	2	9/16	325	33.00	46.00	32.00	45.00
107787	1812	30	10	1 3/4	9/16	400	40.00	56.00	39.00	55.00
107788	1813	30	12	2	11/16	450	45.00	68.00	44.00	67.00
107789	1815	36	12	2	11/16	540	54.00	75.00	53.00	74.00
107790	1818	42	12	2	11/16	630	63.00	88.00	62.00	87.00
107791	1819	48	12	2	11/16	735	74.00	103.00	73.00	102.00
107792	1820	48	12	3	13/16	1000	100.00	140.00	99.00	139.00

Solid one-piece head for cement, same prices as above.

Add for separable head for 1 3/8-inch insulator, japanned, $13.00, and galvanized, $14.00 per 100.

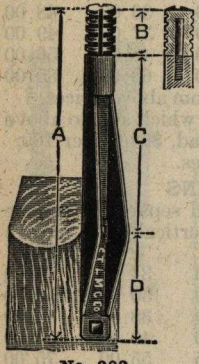
Add for separable head for 1-inch insulator, japanned, $12.00, and galvanized, $13.00 per 100.



No. 386

Trade No.	Mfrs. No.	Dimensions, Inches: Length Over All	Width	Depth	Size of Insulator	Wt., Lbs. per 100	Price, per 100: With Insertion Jap.	With Insertion Galv.	Without Insertion. Jap.	Without Insertion. Galv.
097324	386A	9	1 7/8	1 1/4	1	190	$19.00	$26.00	$18.00	$25.00
097325	386B	12	1 7/8	1 1/4	1	240	25.00	34.00	24.00	33.00
097326	386C	14	2	1 1/4	1	260	29.00	40.00	28.00	39.00
097327	386D	18	2 1/4	1 1/4	1	390	39.00	53.00	38.00	53.00
097332	386M	9	1 7/8	1 1/4	1 3/8	200	21.00	29.00	20.00	28.00
097333	386P	12	1 7/8	1 1/4	1 3/8	250	27.00	37.00	26.00	36.00
097334	386R	14	2	1 1/4	1 3/8	270	31.00	43.00	30.00	42.00
097335	386S	18	2 1/4	1 1/4	1 3/8	400	41.00	57.00	40.00	56.00

All heads measure 3 inches in length.



No. 383

Loose Heads, 3 Inches Long, 7/8-inch Diameter, for 1-inch Insulator

Trade No.	Mfrs. No.	Dimensions, Inches: Length Over All	Width	Depth	Size of Holes	Space bet. Holes	Wt., Lbs. per 100	Price, per 100 Pieces: Jap.	Galv.
098684	383A	9	2 1/4	1	9/16	6	275	$30.00	$37.00
098685	383B	12	2 1/4	1	9/16	6	325	36.00	35.00
098686	383C	14	2 1/4	1	9/16	6	375	40.00	51.00
098687	383D	18	2 3/8	1 1/8	9/16	6	475	50.00	65.00

Loose Heads, 3 1/2 Inches Long, 1 1/8-inch Diameter, for 1 3/8-inch Insulator

098688	383E	9	2 1/4	1	9/16	6	300	32.00	40.00
098689	383H	12	2 1/4	1	9/16	6	350	38.00	48.00
098690	383K	14	2 1/4	1	9/16	6	400	42.00	54.00
098691	383M	18	2 3/8	1 1/8	9/16	6	500	52.00	68.00
098692	383P	27 1/2	3 1/2	2 1/2	3/4	7	1200	120.00	165.00
098693	383R	33 1/2	2 1/2	2	7/8	12	1300	130.00	180.00

All loose heads are made with slots horizontal and vertical for cementing.



No. 382

Solid Heads, for Cementing in Insulator For 1, 1 1/8 or 1 3/8-inch Diameter Head

098680	382A	9	1 3/4	1	9/16	6	175	18.00	25.00
098681	382B	12	1 3/4	1	9/16	6	225	24.00	33.00
098682	382C	14	1 7/8	1 1/8	9/16	6	275	28.00	39.00
098683	382D	18	2 1/4	1 1/4	9/16	6	375	38.00	53.00
098694	382E	19 1/2	2 1/4	1 1/4	9/16	6	400	41.00	57.00
098695	382F	22 1/2	2 1/4	1 1/4	9/16	6	450	48.00	66.00

In ordering, specify diameter of head desired.

The above pole top pins listed with and without insertion will be furnished with insertion unless otherwise specified.

In ordering, specify whether japanned or galvanized finish is desired.

MALLEABLE IRON PINS



No. 18

No. 18 STEEL PINS

With Wood Top and Porcelain Base

These pins project entirely through wood and porcelain with oval head on top of same.

Trade No.	Mfrs. No.	Dimensions, Inches: Length Over All	Lgth. of Wood Top	Diam. of Bolt	Diam. of Porc. Base	Diam. of Thread	Lgth. of Pin	Base No.	Wt., Lbs. per 100	Price, per 100: Plain	Galv.
107877	18A	9½	2⅜	½	2¼	1	4⅝	1	120	$18.00	$23.00
107878	18B	9½	1¾	½	2⅝	1	4¾	2	140	18.80	24.80
107879	18C	10½	2⅜	½	2⅝	1	5⅜	2	150	19.30	25.80
107880	18D	8½	1¾	½	2¼	1	4	1	120	17.50	23.00
107881	18E	10½	2¼	⅝	2½	1⅜	4½	3	186	20.70	28.70
107882	18F	11	2¼	½	3	1⅜	5¾	4	190	19.70	28.20
107883	18G	11	2¼	⅝	3	1⅜	5¾	4	260	21.70	31.70
107884	18H	14½	2¾	⅝	4¼	1⅜	8¾	5	455	32.00	52.00
107885	18V	11	2¾	½	2⅝	1⅜	5¾	2	160	19.30	25.80
107886	18J	5½	1¾	½	2⅝	1	4¾	2	110	19.30	23.80
107887	18K	12½	3½	½	3	1⅜	7	4	220	21.70	30.20
107888	18L	12½	3½	⅝	3	1⅜	7	4	265	25.20	36.70
107889	18M	14½	4	⅝	3½	1⅜	9	7	425	35.00	55.00
107890	18N	6½	2¼	½	3	1⅜	5¾	4	220	17.70	24.70
107891	18W	8½	3½	½	3	1⅜	7	4	183	18.20	24.20
107892	18P	5½	2⅜	½	2¼	1	4⅝	1	105	16.50	20.00
107893	18R	6½	2⅜	½	2⅝	1	5⅜	2	115	18.80	23.30
107894	18S	10½	4	⅝	3½	1⅜	9	7	400	31.50	47.00
107895	18T	17	4½	¾	4¼	1⅜	10½	5	575	42.00	66.00
107896	18U	18	3½	¾	4½	1⅜	11½	42	780	47.00	77.00



No. 27



No. 8066

No. 27 HIGH STEEL TENSION PINS WITH WOOD TOP

Trade No.	Mfrs. No.	Dimensions, Inches: Length of Bolt	Length of Pin	Diam. of Bolt	Diam. of Base	Diam. of Thread	Wt., Lbs. per 100	Price, per 100: Plain	Galv.
012236	27A	1	5	½	2¼	1	....	$13.00	$15.00
012237	27B	5	4	½	1⅞	1	....	11.00	13.00
012238	27C	5	4½	½	1⅞	1	....	10.00	12.00
012239	27D	5½	5	½	2¼	1	....	14.00	16.00
012240	27E	5½	5	⅝	2¼	1⅜	....	17.00	20.00
012241	27F	5½	7	⅝	2½	1⅜	....	22.00	25.00
012242	27G	5½	8	⅝	2¾	1⅜	....	27.00	30.00
012243	27H	5½	9	⅝	3	1⅜	....	32.00	35.00

MALLEABLE IRON PIPE PINS



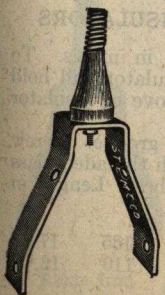
Pipe Pin for Cementing into Insulator

Trade No.	Mfrs. No.	For Pipe Size, In.	Diam. of Head Inches	Style Insulator	Height Above Center Pipe, In.	Wt., Lbs. per 100	Price, per 100: With Insertion Jap.	Galv.	Without Insertion Jap.	Galv.
107897	8066	1¼	1	Screw	5½	225	$21.00	$26.00	$20.00	$25.00
107898	8067	1	1	Screw	5½	225	21.00	26.00	20.00	25.00
107899	8068	1½	1	Screw	5½	230	22.00	27.00	21.00	26.00
107900	8069	2	1	Screw	5½	235	23.00	28.00	21.00	26.00
107901	8070	1	1	Screw	8	275	26.00	33.00	25.00	32.00
107902	8071	1¼	1	Screw	8	275	26.00	33.00	25.00	32.00
107903	8072	1½	1	Screw	8	300	27.00	34.00	26.00	33.00
107904	8073	2	1	Screw	8	305	28.00	35.00	27.00	34.00

Pipe pins can be furnished for cementing into insulator in all sizes listed above at the same prices as pins Nos. 8066–8073 without insertion.

STEEL RIDGE IRONS

With All-Wood Tops and Steel Bolt



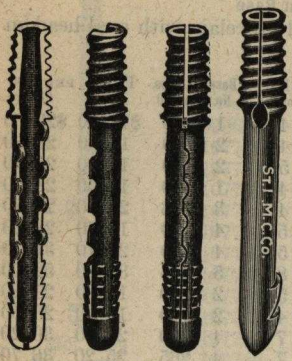
No. 348

Trade No.	Mfrs. No.	Dimensions, Inches: Height Over All	Height of Iron	Space Bet. Legs	Size of Iron	Height of Wood Top	Size of Insulator	Ship. Wt., Lbs. per 100	Price, per 100: Plain	Galv.
107905	348	11¾	7	6	⅛x2¼	4¾	1	275	$30.00	$25.00
107906	349	12⅜	7	6	⅛x2¼	5⅜	1	300	31.00	36.00
107907	468	13¾	8	7	3/16x2¾	5¾	1⅜	450	37.00	47.00
107908	469	15	8	7	3/16x2¾	7	1⅜	500	43.50	54.00
107909	470	11½	7	6	⅛x2¼	4½	1	250	30.00	35.00
107910	471	13¼	8	7	3/16x2¾	5¼	1	450	39.00	48.50
107911	472	12¾	8	7	3/16x2¾	4¾	1	475	36.50	45.00
107912	473	13⅜	8	7	3/16x2¾	5⅜	1	500	37.50	47.00
107913	474	17	8	7	3/16x2¾	9	1⅜	800	46.50	57.00

Ridge irons can be furnished of proper dimensions for porcelain bases with wood tops, or iron bases can be furnished if desired.

In ordering any of the above pins, specify finish desired.

MALLEABLE IRON PINS



No. 10 Mine Pin No. 8

No. 10 MINE SPLIT PINS

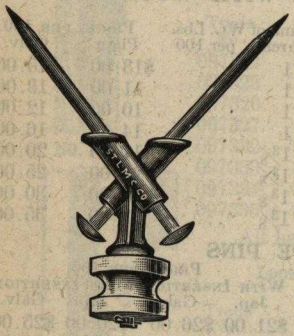
These pins are designed to carry insulators for wires in mines and are made in halves, serrated. A ¾-inch hole is drilled into coal or other material and both halves of these pins are driven into the hole together so that the threads on the heads will always come in proper alignment. The hooks at the bottom are tapered, being ¾ inch at bottom and ⅛ inch wider at the top, so as to firmly wedge into the coal or other material. The grooves between these hooks prevent pin from turning to right or left.

The heads of these pins have a slot to overcome expansion and the diameter of pin through the slot is 1/16 inch smaller than in the opposite direction, making the head slightly oval, but thereby taking care of all expansion.

The hole through the head of this pin has been carried downwardly through pin, so as to form proper drain and drip for carrying off water that may accumulate in the insulator.

These pins have been tested and are guaranteed to carry a lateral strain of over 600 pounds each.

Trade No.	Mfrs. No.	Dimensions Inches	Wt., Lbs. per 100	Price per 100 Plain
012897	10	¾x7½	60	$5.00



No. 13

No. 8 MINE SPLIT PINS

Pittsburgh Pattern

These pins are made in two pieces. They are the standard old style pins used for carrying insulators in mines.

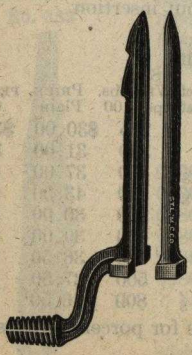
098701	8	¾x7½	90	7.00

MINE PINS AND INSULATORS

With Steel Spikes

For a very secure mine insulator these designs are recommended as the very best anchored brackets made. Two 8x⅜-inch steel spikes are driven in wall through the two 2x7/16-inch openings in bracket at a 90° angle from each other, and this method will be found to hold bracket even in clay soil. Only in the very hardest of material will it be found necessary to first drill 5/16-inch hole, putting bit through hole in bracket. In these brackets, wire is 4 inches from wall or ceiling.

Trade No.	Mfrs. No.	Description	Wt., Lbs. per 100	Price per 100
098702	11	Slot head, with insertion.....	150	$17.00
098703	11A	Slot head, without insertion...	150	16.00
098704	13	With No. 12 porcelain knob...	150	22.00



No. 899

TYPE A SAFETY MINE PINS AND INSULATORS

For supporting and insulating feeder wires in mines. To drive in wall or ceiling, in either position. Insulator will hold no water. Wires fastened on top or inside groove of insulator cannot fall from pin if it becomes detached.

Knob insulator, 2x1¾ inches, with 1¼-inch groove. Screw head standard 1-inch without insertion for 1-inch threaded glass or porcelain insulators. Length over all, 9 inches. Length in wall, 6 inches. Plain finish.

098705	898	With knob.....	135	17.00
098706	898A	Without knob.....	110	12.00
098707	899	1-inch threaded head for glass insulation	110	13.00

STEEL PINS AND RIDGE IRONS



Steel Pin with Wood Top

STEEL PINS WITH PARAFFINED ALL WOOD TOPS

Trade Number With Plain Bolt	Trade Number With Galv. Bolt	Mfrs. No.	Dimensions, Inches Diam. of Top	Diam. of Base	Length of Wood Top	Size of Bolt, In.	Wt., Lbs. per 100	Price per 100
42286	42301	10	1	1⅞	4½	½x 5½	55	$ 9.50
42287	42302	11	1	1⅞	4½	½x 9½	77	11.60
42288	42303	20	1	2¼	5½	½x 6½	70	10.30
42289	42304	21	1	2¼	5½	½x10½	90	12.40
42290	42305	22	1	2¼	5½	½x11½	97	12.90
42291	42306	30	1⅜	2¼	4	⅝x 9	117	15.00
42292	42307	40	1⅜	2¼	4½	⅝x10½	132	16.50
42293	42308	50	1⅜	2¼	5½	⅝x10½	142	16.80
42294	42309	60	1⅜	2¼	6½	⅝x12½	165	18.30
42295	42310	70	1⅜	2½	8	⅝x 9	148	17.10
42296	42311	71	1⅜	2½	8	⅝x14	188	20.50
42297	42312	80	1⅜	2¾	9	⅝x10½	172	19.60
42298	42313	81	1⅜	2¾	9	⅝x16	217	23.00
42299	42314	90	1⅜	2¾	9	¾x10½	225	25.50
42300	42315	91	1⅜	2¾	9	¾x16	290	30.50



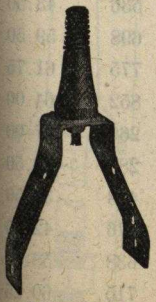
Steel Pin with Wood Top and Porcelain Base

STEEL PINS WITH PARAFFINED WOOD TOPS AND PORCELAIN BASES

Trade Number With Plain Bolt	Trade Number With Galv. Bolt	Mfrs. No.	Dimensions, Inches Wood Top Diam.	Wood Top Length	Porc. Base Diam.	Porc. Base Length	Size of Bolt, In.	Wt., Lbs. per 100	Price per 100
90395	90409	110	1	2¼	2¼	2¼	½x 5½	85	$12.10
90396	90410	111	1	2¼	2¼	2¼	½x 9½	110	14.00
90397	90411	120	1	2½	2⅝	3	½x 6½	120	14.80
90398	90412	121	1	2½	2⅝	3	½x10½	145	17.10
90399	90413	122	1	2½	2⅝	3	½x11½	150	17.50
90400	90414	140	1⅜	2¼	2¼	2¼	⅝x10½	160	18.70
90401	90415	150	1⅜	2¼	2⅝	3	⅝x10½	190	21.30
90402	90416	160	1⅜	3	3	3½	⅝x12½	225	24.20
90403	90417	170	1⅜	3	3½	5	⅝x 9	315	27.80
90404	90418	171	1⅜	3	3½	5	⅝x14	360	31.20
90405	90419	180	1⅜	3	3½	6	⅝x10½	400	33.80
90406	90420	181	1⅜	3	3½	6	⅝x16	425	37.10
90407	90421	190	1⅜	3	3½	6	¾x10½	440	39.60
90408	90422	191	1⅜	3	3½	6	¾x16	500	44.60

STEEL PINS WITH PARAFFINED WOOD TOPS AND CAST IRON BASES

Trade Number With Plain Bolt	Trade Number With Galv. Bolt	Mfrs. No.	Dimensions, Inches Wood Top Diam.	Wood Top Length	C. I. Base Diam.	C. I. Base Length	Size of Bolt, In.	Wt., Lbs. per 100	Price per 100
90423	90425	15	1	2¼	2	2¼	½x5½	80	$12.60
90424	90426	16	1	2¼	2	2¼	½x9½	105	14.60



Ridge Iron and Pin

GALVANIZED RIDGE IRONS

Trade No.	Mfrs. No.	Size of Stock, In.	Height Inches	Size of Pole, In.	Wt., Lbs. per 100	Price per 100
42330	1	⅛x2¼	7	6	140	$26.00
42331	2	3/16x2¾	8	7	300	52.00
90427	3	¼x2¾	8¼	7	450	74.00

Prices do not include pins.

PEIRCE PINS

Hot Galvanized



No. 71



No. 80

FORGED STEEL PINS

WITH 1-INCH SPRING THREAD

Long Shank Type, for Wood Cross-arms

Trade No.	Mfrs. No.	Diam. Inches	Length, Inches: Above Shoulder	Below Shoulder	Total	Wt., Lbs. per 100	Price per 100
75251	71	½	4¾	4¾	9½	81	$7.50
75252	74	½	4¾	5½	10¼	86	8.50
75253	80	⅝	4¾	4¾	9½	115	11.00
75254	81	⅝	4¾	5½	10¼	122	11.75
75255	81A	⅝	4¾	6½	11¼	129	12.50
75256	82	⅝	6	4¾	10¾	126	12.00
75257	84	⅝	6	5½	11½	132	12.50
75258	83	⅝	6	6½	12½	140	13.00
75259	95	¾	6	5	11	183	16.75
75260	90	¾	6	5¾	11¾	192	18.00
75261	91	¾	6	6¾	12¾	205	18.50



No. 90



No. 72

Short Shank Type, for Steel Cross-arms

75262	72	½	4¾	1¼	6	54	7.35
75263	86	⅝	4¾	1¼	6	85	10.00
75264	87	⅝	6	1¼	7¼	96	10.75
75265	93	¾	6	1½	7½	123	14.50

Lag Screw Type, for Poles

75266	73	½	4¾	3	7¾	65	7.35
75267	88	⅝	4¾	3	7¾	88	11.50
75268	89	⅝	7½	4	11½	120	13.00
75269	94	¾	6	4	10	130	16.00



No. 86



No. 93

FORGED STEEL PINS

With 1⅜-inch Malleable Iron Separable Thimbles

Trade No.	Mfrs. No.	Length Above Shoulder Inches	Length of Bolt Inches	Diameter, Inches: Shoulder	Above Shoulder	Below Shoulder	Wt., Lbs. per 100	Price per 100
75278	2806	6	6¾	2½	1	¾	320	$28.50
75279	2807	7	6¾	2½	1	¾	343	30.00
75280	2808	8	6¾	3¼	1¼	¾	483	41.00
75281	2809	10	6¾	3¼	1¼	¾	536	43.50
75282	2810	12	6¾	3¾	1½	¾	698	59.50
75283	2811	14	6¾	3¾	1½	¾	775	61.75
75284	2812	16	6¾	3¾	1½	¾	852	64.00
75285	2813	6	1½	2½	1	¾	260	27.00
75286	2814	7	1½	2½	1	¾	283	28.50
75287	2815	8	1½	3¼	1¼	¾	423	39.50
75288	2816	10	1½	3¼	1¼	¾	476	42.00
75289	2817	12	1½	3¾	1½	¾	638	58.00
75290	2818	14	1½	3¾	1½	¾	715	60.25
75291	2819	16	1½	3¾	1½	¾	792	62.50



No. 73 No. 88 No. 94

PEIRCE PINS

Hot Galvanized

WITH DRAWN STEEL SEPARABLE THIMBLES



Assembly for Flat Top Wood Arms

The new Peirce Forged Steel Pin for high voltage insulators is a development of the original Peirce forged steel pin construction, with an important change. A drawn steel separable thimble has replaced the malleable iron thimble. This change has made possible a very much greater strength in the pin than can be secured with a pin of any other type of construction, and a strength which is uniform in all lengths of the pin.

Each of the series is made in two distinct types: The long bolt pin for wood arms and the short bolt pin for steel arms. The pin is a solid forging from a single block of steel, and has neither welds nor joints.

FORGED STEEL PINS FOR WOOD ARMS



Assembly for Round Top Wood Arms

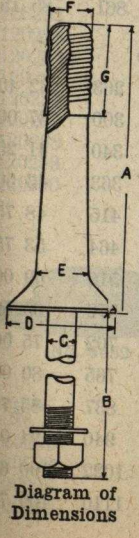


Diagram of Dimensions

Trade No.	Mfrs. No.	Dimensions, Inches A	B	C	D	E	F	G	Wt., Lbs. per 100	Price per 100
1500-pound Series for Insulators with 1-inch Bore										
120187	5102	3½	5½	¾	2¼	.94	27/32	2	217	$26.50
120188	5104	4	5½	¾	2¼	.98	27/32	2	231	28.00
120189	5106	4½	5½	¾	2¼	1.02	27/32	2	246	29.50
120190	5108	5	5½	¾	2¼	1.05	27/32	2	261	31.00
120191	5110	5½	5½	¾	2¼	1.08	27/32	2	278	32.75
120192	5112	6	5½	¾	2¼	1.12	27/32	2	297	34.75
120193	5114	7	5½	¾	3	1.15	27/32	2	388	44.25
120194	5116	8	5½	¾	3	1.22	27/32	2	435	49.25
1500-pound Series for Insulators with 1⅜-inch Bore										
120195	5118	4	6½	¾	2½	1.16	1 7/32	2½	285	32.90
120196	5120	5	6½	¾	2½	1.20	1 7/32	2½	318	36.15
120197	5122	5½	6½	¾	2½	1.22	1 7/32	2½	334	37.05
120198	5124	6	6½	¾	2½	1.23	1 7/32	2½	351	39.05
120199	5126	7	6½	¾	3	1.26	1 7/32	2½	417	48.00
120200	5128	8	6½	¾	3	1.30	1 7/32	2½	445	51.40
120201	5130	9	6½	¾	3	1.33	1 7/32	2½	515	56.05
120202	5132	10	6½	¾	3	1.36	1 7/32	2½	568	60.90
120203	5134	11	6½	¾	3½	1.38	1 7/32	2½	652	67.90
120204	5136	12	6½	¾	3½	1.41	1 7/32	2½	699	71.65
120205	5138	13	6½	¾	3½	1.44	1 7/32	2½	746	74.65
120206	5140	14	6½	¾	3¾	1.48	1 7/32	2½	824	81.00
120207	5142	15	6½	¾	3¾	1.51	1 7/32	2½	877	85.25
120208	5144	16	6½	¾	3¾	1.58	1 7/32	2½	932	89.80
3000-pound Series for Insulators with 1⅜-inch Bore										
120209	5146	4	8½	1	2½	1.26	1 7/32	2½	425	42.40
120210	5148	5	8½	1	2½	1.30	1 7/32	2½	462	47.00
120211	5150	5½	8½	1	2½	1.35	1 7/32	2½	503	51.25
120212	5152	6	8½	1	2½	1.37	1 7/32	2½	525	53.50
120213	5154	7	8½	1	3	1.41	1 7/32	2½	577	58.75
120214	5156	8	8½	1	3	1.47	1 7/32	2½	626	63.75
120215	5158	9	8½	1	3	1.53	1 7/32	2½	678	69.00
120216	5160	10	8½	1	3	1.57	1 7/32	2½	734	75.50
120217	5162	11	8½	1	3½	1.63	1 7/32	2½	864	85.00
120218	5164	12	8½	1	3½	1.68	1 7/32	2½	927	90.00
120219	5166	13	8½	1	3½	1.74	1 7/32	2½	999	95.75
120220	5168	14	8½	1	3¾	1.80	1 7/32	2½	1102	104.00
120221	5170	15	8½	1	3¾	1.86	1 7/32	2½	1184	110.60
120222	5172	16	8½	1	3¾	1.92	1 7/32	2½	1271	119.75

PEIRCE PINS

Hot Galvanized

WITH DRAWN STEEL SEPARABLE THIMBLES

FORGED STEEL PINS FOR STEEL ARMS



Assembly for Steel Arms

1500-pound Series for Insulators with 1-inch Bore

Trade No.	Mfrs. No.	Dimensions, Inches A	B	C	D	E	F	G	Wt., Lbs. per 100	Price per 100
120233	5101	3½	1¾	¾	2¼	.94	27/32	2	158	$22.50
120234	5103	4	1¾	¾	2¼	.98	27/32	2	173	24.00
120235	5105	4½	1¾	¾	2¼	1.02	27/32	2	188	25.50
120236	5107	5	1¾	¾	2¼	1.05	27/32	2	202	27.00
120237	5109	5½	1¾	¾	2¼	1.08	27/32	2	220	28.75
120238	5111	6	1¾	¾	2¼	1.12	27/32	2	239	30.75
120239	5113	7	1¾	¾	3	1.15	27/32	2	330	40.25
120240	5115	8	1¾	¾	3	1.22	27/32	2	376	45.25

1500-pound Series for Insulators with 1⅜-inch Bore

120241	5117	4	1¾	¾	2½	1.17	1 7/32	2½	215	28.25
120242	5119	5	1¾	¾	2½	1.20	1 7/32	2½	247	31.50
120243	5121	5½	1¾	¾	2½	1.22	1 7/32	2½	263	32.40
120244	5123	6	1¾	¾	2½	1.23	1 7/32	2½	280	34.40
120245	5125	7	1¾	¾	3	1.26	1 7/32	2½	346	43.35
120246	5127	8	1¾	¾	3	1.30	1 7/32	2½	394	46.75
120247	5129	9	1¾	¾	3	1.33	1 7/32	2½	444	51.40
120248	5131	10	1¾	¾	3	1.36	1 7/32	2½	496	56.25
120249	5133	11	1¾	¾	3½	1.40	1 7/32	2½	582	63.25
120250	5135	12	1¾	¾	3½	1.43	1 7/32	2½	628	67.00
120251	5137	13	1¾	¾	3½	1.46	1 7/32	2½	675	70.00
120252	5139	14	1¾	¾	3¾	1.50	1 7/32	2½	753	76.35
120253	5141	15	1¾	¾	3¾	1.53	1 7/32	2½	805	80.60
120254	5143	16	1¾	¾	3¾	1.56	1 7/32	2½	861	85.15

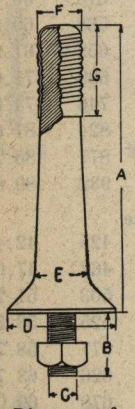


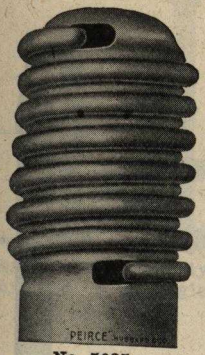
Diagram of Dimensions

3000-pound Series for Insulators with 1⅜-inch Bore

120255	5145	4	2	1	2½	1.25	1 7/32	2½	263	32.40
120256	5147	5	2	1	2½	1.30	1 7/32	2½	300	37.00
120257	5149	5½	2	1	2½	1.33	1 7/32	2½	340	41.25
120258	5151	6	2	1	2½	1.35	1 7/32	2½	363	43.50
120259	5153	7	2	1	3	1.41	1 7/32	2½	415	48.75
120260	5155	8	2	1	3	1.47	1 7/32	2½	464	53.75
120261	5157	9	2	1	3	1.53	1 7/32	2½	516	59.00
120262	5159	10	2	1	3	1.59	1 7/32	2½	572	65.50
120263	5161	11	2	1	3½	1.65	1 7/32	2½	702	75.00
120264	5163	12	2	1	3½	1.70	1 7/32	2½	765	80.00
120265	5165	13	2	1	3½	1.76	1 7/32	2½	837	85.75
120266	5167	14	2	1	3¾	1.82	1 7/32	2½	940	94.00
120267	5169	15	2	1	3¾	1.88	1 7/32	2½	1022	100.60
120268	5171	16	2	1	3¾	1.94	1 7/32	2½	1110	109.75

PEIRCE PINS

Hot Galvanized



No. 5025

SPRING THREAD SEPARABLE THIMBLES

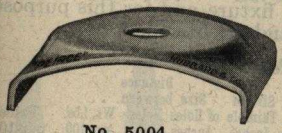
While the cementing of thimbles to insulators is advocated as being the most dependable method, there are instances where this is not desirable. To meet this condition with the Peirce Forged Steel Pin, this spring thread thimble has been developed.

The thimble is drawn from sheet steel, with interior threads to fit on the pin. The exterior of the thimble is fitted with the Peirce spring thread. It is made in two sizes, for insulators with 1 and 1⅜-inch bores. No. 5020 thimble fits on pins Nos. 5101 to 5116, and No. 5025 thimble on pins Nos. 5117 to 5172, inclusive.

Trade No.	Mfrs. No.	Insulator Bore Inches	Wt., Lbs. per 100	Price, per 100 When Ordered Separately	Price, per 100 When Ordered with Pins
120279	5020	1	16	$10.00	$4.00
120280	5025	1⅜	25	12.00	5.00

The list prices shown for the 5100 series pins include the drawn steel separable thimble. If the spring thread separable thimble is desired instead of the drawn steel thimble, the difference between the cost of the two is used as shown in the second list above.

PRESTEEL CROSS-ARM SADDLES



No. 5004

These cross-arm saddles are used with Peirce Forged Steel Pins on round top cross-arms. Besides giving a firm seat for the pin, they help prevent the splitting of the arm when subjected to heavy strains. They are pressed from sheet steel and are, consequently, very strong and stiff. The Peirce Forged Steel Pin with this saddle will hold a greater strain than a curved base malleable iron pin, because there are no sharp edges to cut into the wood.

Trade No.	Mfrs. No.	Width of Cross-arm Inches	Size of Pin Hole Inches	Wt., Lbs. per 100	Price per 100
120281	5001	3¼	¾	62	$5.50
120282	5002	3½	¾	68	5.75
120283	5003	3¾	¾	74	6.00
120284	5004	4	¾	80	6.30
120285	5005	5	¾	100	7.70
120286	5011	3¼	1	62	5.50
120287	5012	3½	1	68	5.75
120288	5013	3¾	1	74	6.00
120289	5014	4	1	80	6.30
120290	5015	5	1	100	7.70

PRESTEEL CENTERING WASHERS



No. 5032

These washers are used on the lower end of the Peirce Forged Steel Pin to center the pin when the pin is used on an existing cross-arm with holes bored for wood pins.

Trade No.	Mfrs. No.	To Fit in Hole Diameter Inches	Size of Pin Hole Inches	Wt., Lbs. per 100	Price per 100
120291	5030	1¼	¾	12	$1.60
120292	5031	1¼	1	12	1.60
120293	5032	1½	¾	13	1.70
120294	5033	1½	1	13	1.70

PEIRCE POLE TOP PINS

Hot Galvanized



No. 3000



No. 3012



No. 3022



No. 3030



No. 3060

While pole top pins of any desired weight, length and hole spacing can be furnished, the sizes shown below cover usual practice for most types of construction. Many engineers are now insulating the ground wire from the high tension fixture and for this purpose are using pole top pins in place of standard bayonets.



No. 3046



No. 3050



No. 3070

SPRING THIMBLE

Trade No.	Mfrs. No.	Material	Length Inches	Size of Thimble Inches	Size of Holes Inches	Distance between Holes Inches	Wt., Lbs. per 100	Price per 100
75341	3000	1x½-in. channel	18	1	7/16	4	140	$32.00
75342	3010	1x½-in. channel	12	1	7/16	4	74	19.00
75343	3012	1x½-in channel	18	1	7/16	4	140	32.00
75344	3020	Two 1¾-in. channels	18	1⅜	11/16	8	369	66.00
75345	3022	Two 1¾-in. channels	25	1⅜	11/16	8	480	82.00
75346	3023	Two 1¾-in. channels	36	1⅜	11/16	10	725	116.00
75347	3030	2x2x3/16-in. angle	18	1	11/16	8	366	55.00
75348	3031	2x2x3/16-in. angle	24	1	11/16	8	488	73.00
75349	3033	2x2x3/16-in. angle	36	1	11/16	10	732	87.00
75350	3035	2x2x¼-in. angle	48	1	11/16	12	1276	140.00
75351	3040	No. 10 pressed steel	18	1	11/16	8	227	45.00
75352	3041	No. 10 pressed steel	18	1⅜	11/16	8	227	45.00
75353	3045	No. 10 pressed steel	24	1	11/16	8	303	61.00
75354	3046	No. 10 pressed steel	24	1⅜	11/16	8	303	61.00
75355	3050	1¼-in. steel pipe	18	1⅜	11/16	8	336	60.00
75356	3052	1¼-in. steel pipe	24	1⅜	11/16	8	448	76.00
75357	3054	1¼-in. steel pipe	36	1⅜	11/16	10	672	107.00
75358	3056	1¼-in. steel pipe	48	1⅜	11/16	12	896	134.00

DRAWN STEEL SEPARABLE THIMBLE

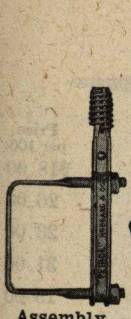
75359	3060	1¼-in. steel pipe	18	1⅜	11/16	8	336	65.00
75360	3062	1¼-in. steel pipe	24	1⅜	11/16	8	448	81.00
75361	3064	1¼-in. steel pipe	36	1⅜	11/16	10	672	112.00
75362	3066	1¼-in. steel pipe	48	1⅜	11/16	12	896	139.00

CAST IRON SEPARABLE THIMBLE

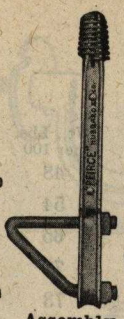
75363	3070	1¼-in. steel pipe	18	1⅜	11/16	8	336	65.00
75364	3072	1¼-in. steel pipe	24	1⅜	11/16	8	448	81.00
75365	3074	1¼-in. steel pipe	36	1⅜	11/16	10	672	112.00
75366	3076	1¼-in. steel pipe	48	1⅜	11/16	12	896	139.00

PEIRCE CLAMP PINS

Hot Galvanized



Assembly for Wood



Assembly for Angle



Assembly for Pipe

WOOD CROSS-ARM TYPES

Pins are made from one-piece channel steel bent double to form slot for cross-arm strap. They are furnished with separable thimbles and with Peirce Spring Threads. We recommend the latter for insulators up to 33000 volts, as on the smaller sizes of insulators the cost of cementing may thus be avoided. If in doubt as to the length of pin necessary for a high tension insulator, add to the length of insulator bore one half the diameter of the lower skirt. The sum will give the minimum height of pin above cross-arm.

Trade No.	Mfrs. No.	Size of Channel Inches	Height Above Arm, In.	Size of Thimble Inches	Std. Pkg.	Wt., Lbs. per 100	Price per 100
75178	4300	Sheet	4¾	1*	200	67	$16.00
75179	4400	¾	4¾	1*	200	120	19.00
75180	4401	¾	4¾	1*	200	105	18.00
75181	4402	¾	6	1*	200	145	24.00
75182	4500	1	8	1⅜*	150	225	28.00
75183	4502	1	10	1⅜*	150	253	34.00
75184	4504	1	12	1⅜*	100	280	39.00
75185	4506	1¼	14	1⅜*	100	345	44.00
75186	4508	1¼	16	1⅜*	100	376	50.00
75187	4600	1	8	1⅜†	150	226	30.00
75188	4602	1	10	1⅜†	150	254	36.00
75189	4604	1	12	1⅜†	100	281	41.00
75190	4606	1¼	14	1⅜†	100	346	46.00
75191	4608	1¼	16	1⅜†	100	377	52.00
75192	4700	1	8	1⅜‡	150	224	30.00
75193	4702	1	10	1⅜‡	150	252	36.00
75194	4704	1	12	1⅜‡	100	279	41.00
75195	4706	1¼	14	1⅜‡	100	344	46.00
75196	4708	1¼	16	1⅜‡	100	375	52.00



No. 4300



No. 4400



No. 4500

All of the above pins will fit arms 4x5 inches and smaller, except No. 4401, which fits arms 3½x4½ inches and smaller.

STEEL CROSS-ARM TYPES

The use of these pins is recommended for Bo-Arrow High Tension Arms as being stronger, lighter and cheaper than any pin of the through bolt type. Pins of these types can be furnished to special dimensions and with clamps to fit any desired size or shape of angle, channel, beam, pipe or rail section.

75197	4000	1	8	1⅜†	150	195	24.00
75198	4002	1	10	1⅜†	150	221	30.00
75199	4004	1	12	1⅜†	100	248	35.00
75200	4006	1¼	14	1⅜†	100	309	40.00
75201	4008	1¼	16	1⅜†	100	340	46.00
75202	4100	1	8	1⅜*	150	194	22.00
75203	4102	1	10	1⅜*	150	220	28.00
75204	4104	1	12	1⅜*	100	248	33.00
75205	4106	1¼	14	1⅜*	100	309	38.00
75206	4108	1¼	16	1⅜*	100	340	44.00
75207	4200	1	8	1⅜‡	150	193	24.00
75208	4202	1	10	1⅜‡	150	219	30.00
75209	4204	1	12	1⅜‡	100	247	35.00
75210	4206	1¼	14	1⅜‡	100	308	40.00
75211	4208	1¼	16	1⅜‡	100	339	46.00



No. 4600



No. 4700

No. 4000

The above clamp pins are for angle up to 3x3 inches, and for pipe up to 1½-inch.

ANGLE CLAMPS

75212	161	⅝-in. bolt, for 3-in. angle	100	6.00

PIPE CLAMPS

75213	165	⅝-in. bolt, for 1¼-in. pipe	160	10.00



No. 4100



No. 4200



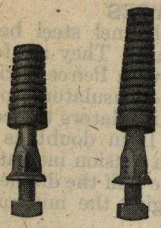
No. 161



No. 165

*Pierce spring thread thimble.
†Cast separable thimble.
‡Drawn steel separable thimble.

HUBBARD STEEL PINS AND BRACKETS

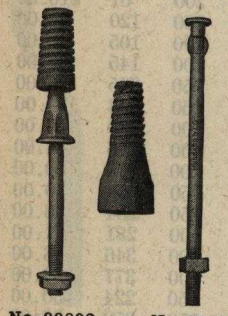


No. 99888 No. 99889

STEEL PINS

Trade No.	Diam. Inches	Length, Inches Above Shoulder	Length, Inches Below Shoulder	Wt., Lbs. per 100	Price per 100
99888	½	4	1	48	$18.00
99889	½	5	1	54	26.00
99890	⅝	4	1	65	23.00
99891	⅝	5	1	73	31.00
99892	½	4¼	5	73	19.00
99893	⅝	4¼	5	110	25.00

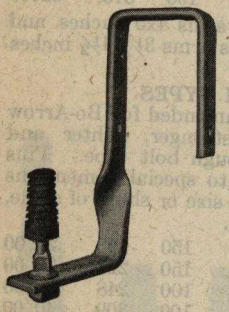
Last two sizes are Western Union standard.



No. 99892 No. 99894

STEEL PINS, ALL WOOD TOP

Trade No.	Size of Wood Top, In. Diam. Top	Diam. Bottom	Length	Size of Bolt, In. Diam.	Length	Length of Bolt below Top, In.	Wt. Lbs. per 100	Price per 100
99894	1	1⅞	4½	½	5½	1	52	$24.00
99895	1	2¼	5¼	½	6½	1¼	60	25.00
99896	1⅜	2¼	4½	⅝	5½	1	90	28.50
99897	1⅜	2¼	5¼	⅝	6½	1¼	115	30.50
99898	1	1⅞	4½	½	9½	5	72	26.30
99899	1	2¼	5¼	½	10½	5¼	80	28.00
99900	1	2¼	5¼	½	11½	6¼	88	28.70
99901	1⅜	2¼	4½	⅝	9½	5	135	33.50
99902	1⅜	2¼	4½	⅝	10½	6	160	36.00
99903	1⅜	2¼	5¼	⅝	10½	5¼	165	37.50
99904	1⅜	2¼	6½	⅝	12½	6	190	42.00
99905	1⅜	2½	8	⅝	14	6	225	52.00
99906	1⅜	2¾	9	⅝	16	7	250	56.00

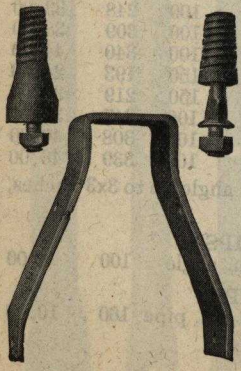


No. 99907

TRANSPOSITION BRACKETS

Trade No.	Mfrs. No.	Size of Steel Inches	For Cross-Arms Size, Inches	Wt., Lbs. per 100	Price per 100
99907	C-14-B	1¼x5/16	3 x4	235	$56.50
99908	3549A	1¼x5/16	3¼x4¼	235	56.50
99909	3549B	1½x⅜	3¼x4¼	360	72.50

All punched for ½-inch pins. Pins not included in price.



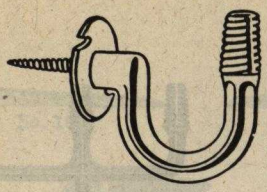
No. 99910

RIDGE IRONS

Trade No.	Size of Steel Inches	Dimensions, Inches Height	Between Legs	Hole for Pin	Hole for Legs	Wt., Lbs. per 100	Price per 100
99910	2¼x⅛	7	6	9/16	9/16	200	$52.50
99911	2¾x3/16	8	7	11/16	9/16	285	65.00

Prices on ridge irons given above do not include pins.

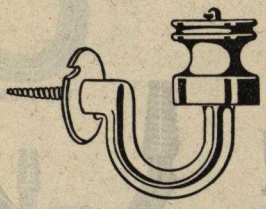
LINE MATERIAL CO. BRACKETS



Nos. 1800, 1801

ONE UNIT SCREW BRACKETS

These brackets are extremely convenient. No tools or extra screws are required. Can be put up in less than a minute. When the bracket is screwed up tight, the wide flange digs into the wood and puts fricuion on the screw threads.



Nos. 2000 to 2003

House Brackets

Trade No.	Mfrs. No.	Description	Price per 100
133522	1800J	Japanned	$53.00
133523	1801G	Galvanized	56.00
		House Brackets with No. 700 Insulators	
133524	2000J	Japanned	65.00
133525	2001G	Galvanized	69.00
		House Brackets with No. 800 Insulators	
133526	2002J	Japanned	59.00
133527	2003G	Galvanized	64.00
		Transformer Brackets	
133528	2300J	Japanned, with No. 22 screw	42.00
133529	2301G	Galvanized, with No. 22 screw	47.00
133530	2320J	Japanned, with ½-inch lag screw	49.00
133531	2321G	Galvanized, with ½-inch lag screw	50.00
		Transformer Brackets with No. 700 Insulators	
133532	2020J	Japanned, with No. 22 screw	60.00
133533	2021G	Galvanized, with No. 22 screw	63.00
133534	2030J	Japanned, with ½-inch lag screw	70.00
133535	2031G	Galvanized, with ½-inch lag screw	73.00



Nos. 2300 to 2321



Nos. 2020 to 2021

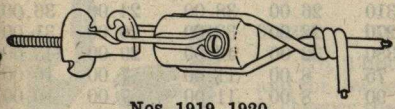
HOOKS AND KNOBS

Japanned

133536	1815J	Complete, as shown, with No. 800 insulator	16.80
133537	1816J	Screw hook only	10.00
		Galvanized	
133538	1818G	Complete, as shown, with No. 800 insulator	18.80
133539	1819G	Screw hook only	12.00
133540	1820G	Knob and strap only	6.80



Nos. 1815 to 1820

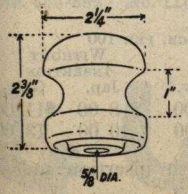


Nos. 1919, 1920

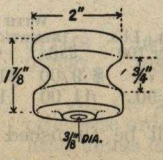
HOOKS AND STRAIN INSULATORS

Galvanized

133541	1919G	Complete, as shown, with strain insulator	23.00
133542	1920G	Insulator and strap only	13.00



No. 700



No. 800

PORCELAIN SPOOLS

Used in connection with brackets and racks on this and another page.

Brown Glazed

133543	700	Used on service racks and brackets	9.00
133544	800	Used on service racks and brackets	7.00

MALLEABLE IRON POLE TOP BRACKETS



No. 860



No. 6C



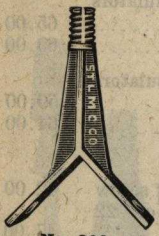
Nos. 140, 140E, 140H



Nos. 141, 141E, 141H



Nos. 139, 139E



No. 292



Nos. 290, 291



Nos. 280, 280E, 280H
No. 279, 3-Pin



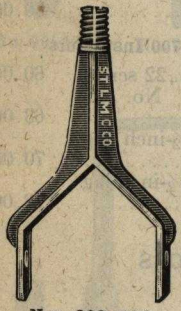
No. 151



No. 143

POLE TOP SCREW BRACKETS

Trade No.	Mfrs. No.	No. of Pins	Dimensions, Inches Size of Screw	Above Screw	Space Bet. Heads	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	Galv.	Without Insertion Jap.	Galv.
107565	860	1	2x5/16	4¾	....	75	.....	.....	$ 6.00	$10.00
017673	6C	1	3x½	8	....	250	.....	.....	20.00	30.00
012298	140	1	3x½	4¾	....	65	10.00	12.00	9.00	11.00
107566	140E	1	3x½	6	....	80	12.00	15.00	11.00	14.00
107567	140H	1	3x½	8	....	100	14.00	18.00	13.00	17.00
012299	141	2	3x½	4¾	6	130	16.00	20.00	14.00	18.00
107568	141E	2	3x½	4¾	9	160	19.00	25.00	17.00	23.00
107569	141H	2	3x½	4¾	12	190	22.00	30.00	20.00	28.00
098712	139	3	3x½	4¾	4½	165	24.00	29.00	21.00	26.00
107570	139E	3	3x½	4¾	6	200	26.00	34.00	23.00	31.00



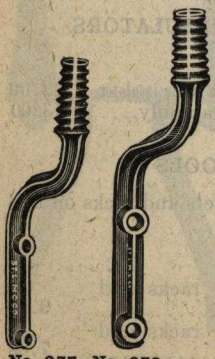
Nos. 293, 294

POLE TOP RIDGE BRACKETS

Trade No.	Mfrs. No.	Dimens., Inches Above Angle	Space Bet. Heads	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	Galv.	Without Insertion Jap.	Galv.
017678	292	8	....	200	$25.00	$35.00	$24.00	$34.00
017674	290	4	....	140	14.00	20.00	13.00	19.00
017676	291	6	....	150	15.00	21.00	14.00	20.00
017734	280	4¾	14	350	29.00	43.00	27.00	41.00
107571	280E	4¾	10	310	26.00	38.00	24.00	36.00
107572	280H	4¾	6	270	22.00	33.00	20.00	31.00
107573	279	4¾	6	380	32.00	46.00	29.00	43.00
017671	151	4¾	....	75	8.00	11.00	7.00	10.00
012301	143	4	....	90	8.00	11.00	7.00	10.00
017680	293	8	....	250	31.00	39.00	30.00	38.00
017682	294	8	....	250	31.00	41.00	30.00	40.00

POLE TOP SIDE BRACKETS

Trade No.	Mfrs. No.	Dimens., Inches Total Length	Size of Flange	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	Galv.	Without Insertion Jap.	Galv.
107574	277	8	¾	75	$ 9.00	$12.00	$ 8.00	$11.00
107575	278	9	1	90	11.00	14.00	10.00	13.00

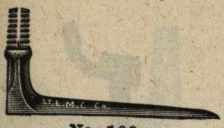


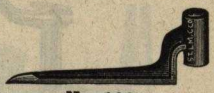
No. 277 No. 278

All of the above brackets will be furnished with insertion unless otherwise ordered.

In ordering, specify whether japanned or galvanized finish is desired.

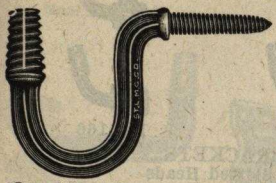
MALLEABLE IRON BRACKETS

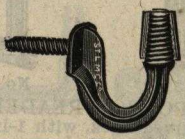

No. 100


No. 101


No. 102


No. 103


Nos. 466, 467


No. 310


No. 109


No. 2


Nos. 111, 112

WALL BRACKETS

Flat Backs, for High or Low Tension Wires

All have 1-inch slotted heads.

Trade No.	Mfrs. No.	Exten. Inches	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
012244	100	3	90	$11.00	$15.00	$10.00	$14.00
017666	101	3	180	.....	.....	16.00	20.00
012245	102	3	85	11.00	15.00	10.00	14.00
012246	103	3	90	11.00	15.00	10.00	14.00
107587	466	4	100	13.00	17.00	12.00	16.00
107588	467	4¾	150	20.00	26.00	19.00	25.00
098725	310	3	150	18.00	22.00	17.00	21.00
012250	109	3	85	8.50	13.00	7.50	12.00
107589	2	3	65	.....	.....	7.00	10.50
098750	111	3	125	15.00	21.00	14.00	20.00
012252	112	3	120	10.60	13.00	9.60	12.00
012247	104	3	150	11.00	16.00	10.00	15.00
012249	106	3	150	13.00	18.00	12.00	17.00
017684	107	3	200	19.00	27.00	18.00	26.00
107590	253	4½	85	13.00	17.00	12.00	16.00
107591	254	6	100	13.00	17.00	12.00	16.00
107592	255	9	130	19.00	24.00	18.00	23.00
107593	656	4	100	11.00	16.00	10.00	15.00
107594	657	4½	140	16.00	21.00	15.00	20.00
107595	658	6	340	35.00	48.00	34.00	47.00
107596	659	7	365	36.00	49.00	35.00	48.00
107597	660	7	390	41.00	56.00	40.00	55.00
107598	661	13	570	58.00	81.00	57.00	80.00
107599	662	18	800	81.00	113.00	80.00	112.00
				Oak Head		Locust Head	
012251	110	3	85	10.00	13.00	12.00	15.00


No. 104


No. 106


No. 107


Nos. 253, 254, 255


Nos. 656-662


No. 110

No. 2 bracket has the new cruciform head, with rubber washer, and for low tension wires this bracket will give entire satisfaction and is cheaper than No. 109.

POLE BRACKETS

Curved Back, with 1-inch Slotted Heads

012248	105	3	100	11.00	16.00	10.00	15.00
017687	108	3	110	19.00	27.00	18.00	26.00


No. 105


No. 108

All the above brackets will be furnished with insertion unless otherwise ordered, except No. 110, which will be furnished with oak head unless locust is specified.

In ordering, specify whether japanned or galvanized finish is desired.

MALLEABLE IRON BRACKETS



No. 171
No. 194, 2-Pin



No. 334C



No. 331C



No. 198



No. 166

POLE SPREADER BRACKETS

Curved Back, with 1-inch Slotted Heads

Trade No.	Mfrs. No.	No. of Pins	Dimens., Inches: Extension	Space Between Heads	Width of Flange	Wt. Lbs. per 100	Price, per 100: With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
107611	*171	3	3½	6½	1¾	350	$38.00	$49.00	$35.00	$46.00
107612	*194	2	3½	6½	1¾	240	27.00	34.00	25.00	32.00
107613	334C	3	4½	6½	1	280	35.00	46.00	32.00	43.00
107614	331C	2	4½	12	1	200	27.00	36.00	25.00	34.00
107960	198	3	5	6½ and 9	1¾	480	48.00	60.00	45.00	57.00
107615	166	3	5	6½ and 9	1	280	37.00	47.00	34.00	44.00

Also made with flat back for wall construction.
Furnished with insertion unless otherwise ordered.



Nos. 547, 557



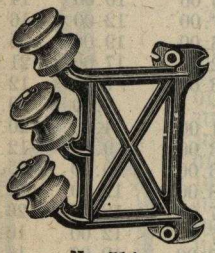
No. 527
No. 528, 4-Pin

POLE AND WALL SECONDARY RACKS

FOR HIGH TENSION WIRES

Trade No.	Mfrs. No.	No. of Pins	Dimens., In.: Extension	Wire Spacing	Wt., Lbs. without Knobs per 100	Price, per 100 without Knobs: Jap.	Galv.	Knobs Extra per 100
			Curved Back, for Poles					
107625	546	2	4	5	185	$19.00	$26.50	$8.00
107626	547	3	4	5	265	27.00	37.50	8.00
107627	548	4	4	5	350	35.00	49.00	8.00
			Flat Back, for Walls					
107628	556	2	4	5	185	19.00	26.50	8.00
107629	557	3	4	5	265	27.00	37.50	8.00
107630	558	4	4	5	350	35.00	49.00	8.00
			Corner Brackets					
107631	536	2	4	5	285	34.00	45.50	8.00
107632	537	3	4	5	365	44.00	58.50	8.00
107633	538	4	4	5	450	54.00	72.00	8.00
			Wall Brackets					
107634	526	2	8	5	285	34.00	45.50	8.00
107635	527	3	8	5	365	44.00	58.50	8.00
107636	528	4	8	5	450	54.00	72.00	8.00
			Pole Center Brackets					
107637	513	2	10	5	500	60.00	80.00	8.00
107638	514	3	10	5	725	87.00	116.00	8.00
107639	515	4	10	5	980	114.00	153.00	8.00

Size of knobs, 3 inches long, 3½ inches wide, ⅝-inch hole, 1¾-inch groove.



No. 514



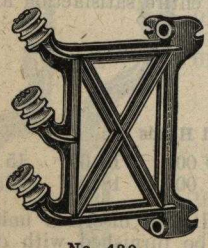
Nos. 414 and 417

POLE AND WALL DISTRIBUTING RACKS

FOR TELEPHONE WIRES

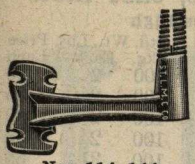
Trade No.	Mfrs. No.	No. of Pins	Dimensions, Inches: Extension	Size of Flange	Size of Hole	Wt., Lbs. with Knobs per 100	Price, per 100 with Knobs: Jap.	Galv.
			Curved Back, for Poles					
107616	413	2	3½	1 and 2¾	½	120	$20.00	$24.00
107617	414	3	3½	1 and 2¾	½	175	29.00	34.00
107618	415	4	3½	1 and 2¾	½	225	38.00	46.00
			Flat Back, for Walls					
107619	416	2	3½	1 and 2¾	½	120	20.00	24.00
107620	417	3	3½	1 and 2¾	½	170	29.00	34.00
107621	418	4	3½	1 and 2¾	½	225	38.00	46.00
			Curved Back, for Poles					
107622	429	2	10	1 and 2¾	½	400	56.00	72.00
107623	430	3	10	1 and 2¾	½	625	87.00	112.00
107624	431	4	10	1 and 2¾	½	750	106.00	136.00

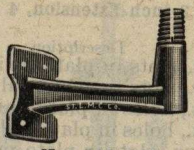
Size of knobs, 1½ inches long, 1½ inches wide, 5/16-inch hole.
In ordering, specify if japanned or galvanized finish is desired.

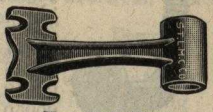


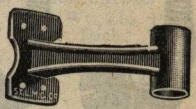
No. 430
No. 429, 2-Pin
No. 431, 4-Pin

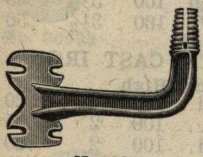
MALLEABLE IRON BRACKETS

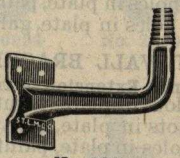

Nos. 114, 144

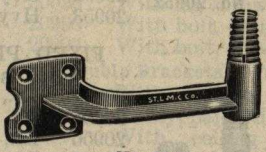

Nos. 115, 145

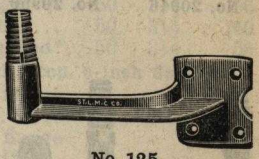

Nos. 116, 116E, 146, 146E

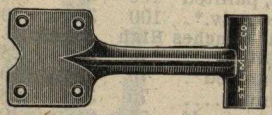

Nos. 118, 118E 147, 147E


No. 120


No. 122


No. 124


No. 125


No. 128—Right
No. 128—Left

WALL BRACKETS

For High Tension Wires

Trade No.	Mfrs. No.	Extension Inches	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
097350	114	6	180	$15.00	$21.00	$14.00	$20.00
097352	115	6	200	17.00	23.00	16.00	22.00
021008	116	6	200	....	....	15.00	22.00
097353	116E	6	200	....	....	15.00	22.00
021016	118	6	200	....	....	16.00	23.00
097354	118E	6	240	....	....	16.00	23.00
021024	120	6	180	16.00	22.00	15.00	21.00
021026	122	6	175	18.00	24.00	17.00	23.00
021028	124	6	220	19.00	26.00	18.00	25.00
021031	125	6	220	19.00	26.00	18.00	25.00
097355	128R	6	250	....	....	18.00	26.00
097356	128L	6	250	....	....	18.00	26.00
021036	126	6	200	21.00	29.00	20.00	28.00
021039	129	6	250	....	....	20.00	30.00
021041	127	6	175	21.00	27.00	20.00	26.00


No. 126

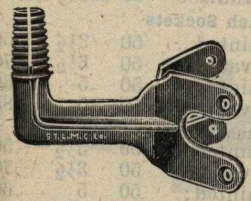

No. 129

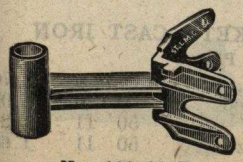

No. 127

WALL AND CORNER BRACKETS

For High and Low Tension Wires

Trade No.	Mfrs. No.	Extension Inches	No. of Pins	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
021001	144	10	1	250	$29.00	$37.00	$28.00	$36.00
021005	145	10	1	360	29.00	39.00	28.00	38.00
021012	146	10	Wood	300	....	....	28.00	38.00
107651	146E	10	Wood	300	....	....	28.00	38.00
021020	147	10	Wood	280	....	....	28.00	37.00
107652	147E	10	Wood	280	....	....	28.00	37.00
107653	130	5	1	230	19.00	25.00	18.00	26.00
012296	133	5	Wood	280	....	....	26.00	35.00
107654	133E	5	Wood	280	....	....	26.00	34.00
017100	136	5	1	205	25.00	31.00	24.00	30.00


Nos. 130, 136

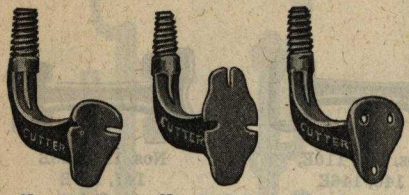

Nos. 133, 133E

Slotted heads are always furnished with insertion unless otherwise ordered.

In ordering, specify whether japanned or galvanized finish is desired.

CUTTER POLE LINE MATERIAL

SCHEDULE F

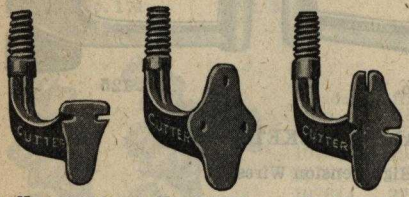


No. 20946 No. 20950 No. 20952

FIXED PIN POLE BRACKETS, CAST IRON

3-inch Extension, 4 Inches High

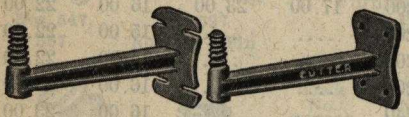
Trade No.	Description	Std. Pkg.	Wt., Lbs. Each	Price Each
20946	Lt., slots in plate, painted.	100	2	$0.20
20947	Lt., slots in plate, galv.*..	100	2	.35
20948	Lt., holes in plate, painted.	100	2	.20
20949	Lt., holes in plate, galv.*..	100	2	.35
20950	Hvy., slots in plate, painted	100	3½	.35
20951	Hvy., slots in plate, galv.*.	100	3½	.50
20952	Hvy., holes in plate, painted	100	3½	.35
20953	Hvy., holes in plate, galv.*.	100	3½	.50



No. 20954 No. 20956 No. 20958

FIXED PIN WALL BRACKETS, CAST IRON

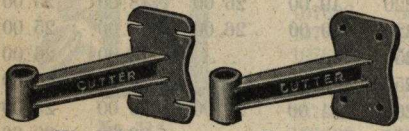
	3-inch Extension, 4 Inches High			
20954	Lt., slots in plate, painted.	100	2	.20
20955	Lt., slots in plate, galv.*...	100	2	.35
20956	Lt., holes in plate, painted.	100	2	.20
20957	Lt., holes in plate, galv.*...	100	2	.35
20958	Hvy., slots in plate, painted	100	3½	.35
20959	Hvy., slots in plate, galv.*.	100	3½	.50
	6-inch Extension, 4 Inches High			
20960	Slots in plate, painted....	75	3½	.28
20961	Slots in plate, galvanized*.	75	3½	.40
20962	Holes in plate, painted....	75	3½	.28
20963	Holes in plate, galvanized*	75	3½	.40
	10-inch Extension, 4 Inches High			
20964	Slots in plate, painted.....	50	5¼	.55
20965	Slots in plate, galvanized*.	50	5¼	.85
20966	Holes in plate, painted....	50	5¼	.55
20967	Holes in plate, galvanized*	50	5¼	.85



No. 20960 No. 20962

PINLESS WALL BRACKETS, CAST IRON

	6-inch Extension, 1¼-inch Sockets			
20968	Slots in plate, painted.....	75	3½	.30
20969	Slots in plate, galvanized*.	75	3½	.48
20970	Holes in plate, painted....	75	3½	.30
20971	Holes in plate, galvanized*	75	3½	.48
	10-inch Extension, 1¼-inch Sockets			
20972	Slots in plate, painted.....	50	5¼	.55
20973	Slots in plate, galvanized*.	50	5¼	.85
20974	Holes in plate, painted....	50	5¼	.55
20975	Holes in plate, galvanized*	50	5¼	.85



No. 20968 No. 20970

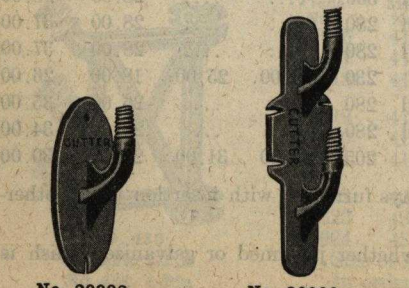
CORNER BRACKETS, CAST IRON

Suitable for brick and concrete buildings as well as for wooden beams.



No. 20976 No. 20980

	Fixed Pin			
20976	5-inch extension, painted..	50	3½	.50
20977	5-inch extension, galvanized*	50	3½	.70
20978	8-inch extension, painted..	50	5	.60
20979	8-inch extension, galvanized*	50	5	.85
	Pinless, 1¼-inch Sockets			
20980	5-inch extension, painted..	50	3½	.50
20981	5-inch extension, galvanized*	50	3½	.70
20982	8-inch extension, painted..	50	5	.60
20983	8-inch extension, galvanized*	50	5	.85
	Pinless, 1½-inch Sockets			
20984	5-inch extension, painted..	50	3½	.50
20985	5-inch extension, galvanized*	50	3½	.70
20986	8-inch extension, painted..	50	5	.60
20987	8-inch extension, galvanized*	50	5	.85



No. 20988 No. 20990

HEAVY CABLE BRACKETS, CAST IRON

	With Wall Plates			
20988	Single pin, painted	50	6	.70
20989	Single pin, galvanized* ...	50	6	1.00
20990	Double pin, painted	50	11	1.20
20991	Double pin, galvanized*...	50	11	1.60

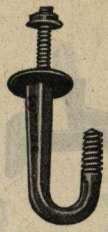
*Includes final coat of black enamel.

CUTTER POLE LINE MATERIAL

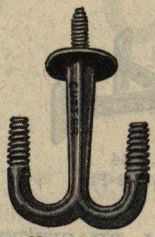
SCHEDULE F


No. 20992


No. 20994

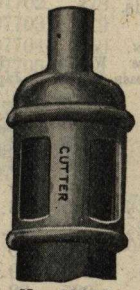

No. 20996


No. 20998

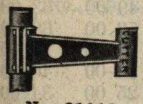

No. 21000

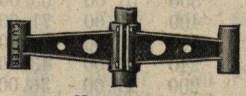

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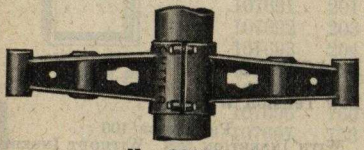

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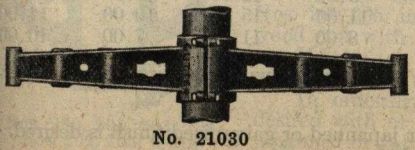


No. 21008


No. 21018


No. 21022


No. 21026


No. 21030

CEILING BRACKETS, CAST IRON

For ceilings, bridges, mines, etc.

Single Brackets, 4-inch Drop, 3-inch Spread

Trade No.	Description	Std. Pkg.	Wt., Lbs. Each	Price Each
20992	With ceiling flange only, painted	50	3½	$0.40
20993	With ceiling flange only, galvanized* ...	50	3½	.56
20994	With lag screw, painted	50	3½	.40
20995	With lag screw, galv*.	50	3½	.56
20996	With bolt, painted....	50	3½	.40
20997	With bolt, galvanized*	50	3½	.56

Double Brackets, 4-inch Drop, 6-inch Spread

20998	With ceiling flange only, painted	50	5	.48
20999	With ceiling flange only, galvanized*....	50	5	.68
21000	With lag screw, painted	50	5	.48
21001	With lag screw, galv*..	50	5	.68
21002	With bolt, painted....	50	5	.48
21003	With bolt, galvanized*	50	5	.68

INSULATOR PINS, CAST IRON

21004	1¼-inch butt, 3¼ inches, below shoulder, 4¼ inches above shoulder, painted ...	100	3	.30
21005	Same as No. 21004, galv*	100	3	.44
21006	1½-inch butt, 4½ inches below shoulder, 4⅞ inches above shoulder, painted.....	100	5	.36
21007	Same as No. 21006, galv*	100	5	.56

POLE TOPS, CAST IRON

Furnished with 1½-inch sockets and finished with a high grade black paint enamel.

21008	For 4-inch wood pole..	50	10	.90
21009	For 5-inch wood pole..	50	12	1.20
21010	For 6-inch wood pole..	50	14	1.50
21011	For 7-inch wood pole..	50	16	2.20
21012	For 8-inch wood pole..	50	18	2.50
21013	For 2-inch (bore) pipe.	50	7	.70
21014	For 2½-inch (bore) pipe.	50	8	.90
21015	For 3-inch (bore) pipe.	50	10	1.10
21016	For 4-inch (bore) pipe.	50	12	1.20
21017	For 5-inch (bore) pipe.	50	14	1.50

STANDARD FEEDER ARMS, CAST IRON

Single Wire

21018	For 3-inch (bore) pipe.	50	18	1.00
21019	For 4-inch (bore) pipe.	50	19	1.10
21020	For 5-inch (bore) pipe.	50	20	1.40
21021	For 6-inch (bore) pipe.	50	21	1.60

Two-wire

21022	For 3-inch (bore) pipe.	25	23	1.60
21023	For 4-inch (bore) pipe.	25	24	1.75
21024	For 5-inch (bore) pipe.	25	25	1.90
21025	For 6-inch (bore) pipe.	25	26	2.10

Four-wire

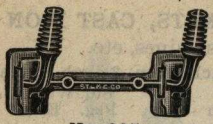
21026	For 3-inch (bore) pipe.	25	28	2.10
21027	For 4-inch (bore) pipe.	25	29	2.20
21028	For 5-inch (bore) pipe.	25	30	2.40
21029	For 6-inch (bore) pipe.	25	31	2.60

Six-wire

21030	For 4-inch (bore) pipe.	25	34	3.00
21031	For 5-inch (bore) pipe.	25	35	3.36
21032	For 6-inch (bore) pipe.	25	36	3.50
21033	For 7-inch (bore) pipe.	25	38	3.64

*Includes final coat of black enamel.

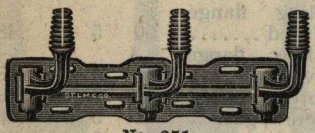
MALLEABLE IRON PINS



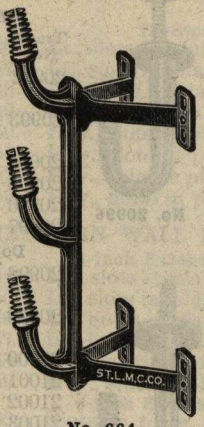
No. 335
No. 336, 3-Pin



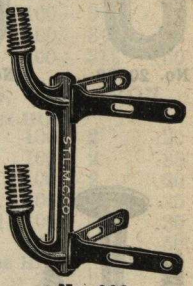
No. 607
No. 606, 3-Pin



No. 351
No. 350, 2-Pin
No. 352, 4-Pin



No. 664
No. 663, 2-Pin

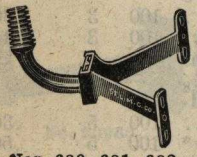


No. 666
No. 667, 3-Pin

WALL BRACKETS

For High and Low Tension Wires

All have 1-inch slotted heads.



Nos. 680, 681, 682

Trade No.	Mfrs. No.	No. of Pins	Dimens., In. Extension	Dimens., In. Space Bet. Heads	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
098716	335	2	3	7	175	$21.00	$28.00	$19.00	$26.00
098717	336	3	3	7	280	33.00	44.00	30.00	41.00
017691	607	2	3	12	375	42.00	60.00	40.00	58.00
017693	606	3	3	9	480	63.00	83.00	60.00	80.00
098718	350	2	3	7	275	35.00	46.00	33.00	44.00
098719	351	3	3	6½	400	48.00	64.00	45.00	61.00
098720	352	4	3	6½	550	64.00	86.00	60.00	82.00
107665	680	1	4	....	175	25.00	32.00	24.00	31.00
107666	681	1	5	....	200	29.00	37.00	28.00	36.00
107667	682	1	6	....	225	32.00	41.00	31.00	40.00
107668	663	2	8	9	350	51.00	65.00	49.00	63.00
107669	664	3	8	6½	400	56.00	71.00	53.00	68.00
107670	666	2	4	9	350	51.00	65.00	49.00	63.00
107671	667	3	4	6½	400	56.00	71.00	53.00	68.00
107672	330	2	3½	12	145	25.00	31.00	23.00	29.00
107673	333	3	3½	6½	240	33.00	43.00	30.00	40.00
107674	331F	2	4½	12	200	27.00	36.00	25.00	34.00
107675	334	3	4½	6½	290	35.00	46.00	32.00	43.00



No. 333
No. 330, 2-Pin



No. 331F
No. 334, 3-Pin

Nos. 330 and 333 have ¾-inch flange; Nos. 331 and 334, 1-inch flange. Holes, 5/16 inch.

ROOF BRACKETS

For High and Low Tension Wires

Trade No.	Mfrs. No.	Length Inches	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
017669	149	6½	130	$11.00	$14.00	$10.00	$13.00
012300	142	6	100	9.00	12.00	8.00	11.00
098714	137	9	140	11.00	15.00	10.00	14.00
017667	148	4	90	8.00	11.00	7.00	10.00



No. 149

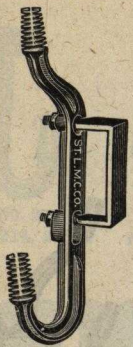


Nos. 142, 137, 148

All the above brackets will be furnished with insertion unless otherwise ordered.

In ordering, specify whether japanned or galvanized finish is desired.

MALLEABLE IRON BRACKETS



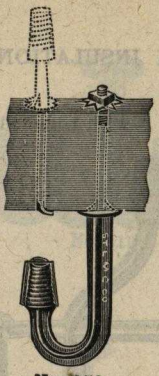
No. 976
No. 975, 4-Pin
No. 977, 1-Pin



Nos. 477, 478, 479



No. 650
No. 651, 3-Pin



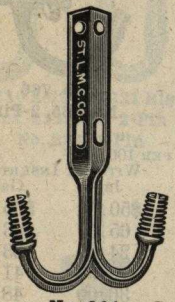
No. 958
No. 959, 2-Pin



No. 475



No. 476



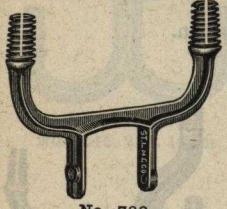
No. 364

TRANSPOSITION AND CROSS-ARM BRACKETS

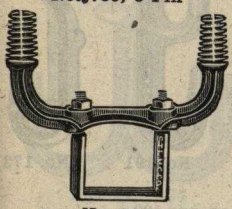
For Telephone Wires

Trade No.	Mfrs. No.	Dimens., Inches: No. of Pins	Space Bet. Heads	Head from Flange	Wt., Lbs. per 100	Price, per 100: With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
107698	975	4	7 and 12	3½	410	$58.00	$74.00	$54.00	$70.00
107699	976	2	12	3½	220	28.00	38.00	26.00	36.00
107700	977	1	....	3½	180	24.00	30.00	23.00	29.00
107701	477	2	8	3	220	32.00	41.00	30.00	39.00
107702	478	2	12	3	250	34.00	44.00	32.00	42.00
107703	479	2	10	3	270	36.00	46.00	34.00	44.00
107704	650	2	9	4	315	43.00	55.00	41.00	53.00
107705	651	3	6	4	375	49.00	67.00	46.00	64.00
017965	958	1	....	2½	170	24.00	30.00	23.00	29.00
017966	959	2	6	3	240	32.00	40.00	30.00	38.00
098723	475	1	....	2½	125	18.00	22.00	17.00	21.00
098721	476	1	....	2½	150	20.00	25.00	19.00	24.00
107706	364	2	7	3	210	34.00	46.00	32.00	44.00

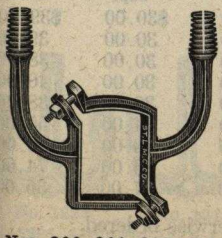
Nos. 975–478 have ¾-inch flange; Nos. 479–364, 1-inch flange.
Angle arm of No. 364 with U-bolt is reversible.
Nos. 364 and 651 are always furnished with U-bolt.



No. 788
No. 789, 3-Pin



No. 792
No. 793, 3-Pin



Nos. 200, 201, 203, 204
Nos. 202, 205, 3-Pin

CROSS-ARM BRACKETS

For High and Low Tension Wires

Furnished with nuts and bolts, for 3¼x4¼-inch arm.

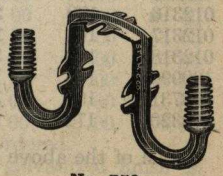
Trade No.	Mfrs. No.	No. of Pins	Space Bet. Heads Inches	Style Clamp	Wt., Lbs. per 100	Price, per 100: With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
107686	788	2	9	Saddle	150	$20.00	$26.00	$18.00	$24.00
107687	789	3	6	Saddle	175	24.00	31.00	21.00	28.00
107688	792	2	9	U-bolt	160	24.00	30.00	22.00	28.00
107689	793	3	6	U-bolt	185	29.00	36.00	26.00	33.00
107690	200	2	9	Way	225	33.00	42.00	31.00	40.00
107691	201	2	12	Way	240	36.00	46.00	34.00	44.00
107692	203	2	9	Way	250	37.00	47.00	35.00	45.00
107693	204	2	12	Way	270	40.00	51.00	38.00	49.00
107694	202	3	6	Way	300	43.00	57.00	42.00	54.00
107695	205	3	9	Way	330	49.00	62.00	46.00	59.00
107696	760	2	10	Way	340	49.00	62.00	47.00	60.00
107697	753	2	10	Saddle	160	22.00	28.00	20.00	26.00

Nos. 788–201 and 753 have ¾-inch flange; Nos. 203–760 have 1-inch flange.

No. 760 has a cross-arm clamp similar to Nos. 200–205, inclusive, but has heads to take wood pins with 1½-inch shank.

U-bolts for 3¼x4¼-inch arms are furnished where shown in illustrations.

In ordering, specify whether brackets are desired with or without insertion and whether japanned or galvanized finish is desired.

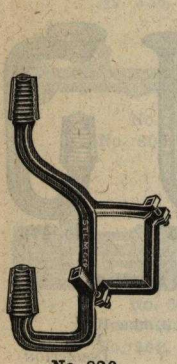


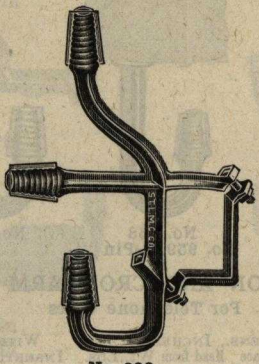
No. 753

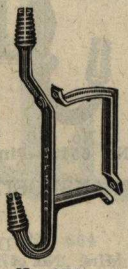
MALLEABLE IRON BRACKETS

HIGH INSULATION SPREADER BRACKETS

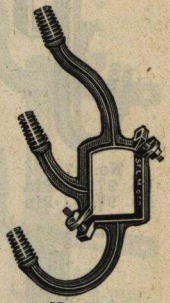
With 1-inch Slotted Heads and Bolts


No. 820


No. 822

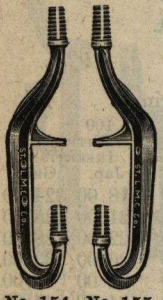

No. 970


No. 972


No. 766
No. 765, 2-Pin

Trade No.	Mfrs. No.	No. of Pins	Dimens., Inches Space Bet. Heads	Size of Flange	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
016972	820	2	12	1¼	450	$52.00	$67.00	$50.00	$65.00
016973	822	3	5½	1¼	500	68.00	86.00	65.00	83.00
017004	970	2	9	¾	260	26.00	35.00	24.00	33.00
017005	972	3	6½	¾	310	32.00	44.00	29.00	41.00
100988	765	2	12	1	300	38.00	50.00	36.00	48.00
100989	766	3	6½	1	370	43.00	57.00	40.00	54.00

All for 3¼x4¼-inch cross-arm. Prices of other sizes quoted on application.

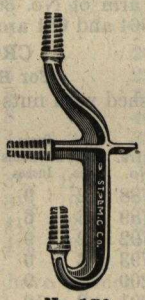

No. 154

No. 155


No. 156


No. 160


No. 161


No. 170


No. 165


No. 191


No. 172

Trade No.	Mfrs. No.	No. of Pins	Dimens., Inches Space Bet. Heads	Head from Flange	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
012313	154	2	12	3	370	$32.00	$41.00	$30.00	$39.00
012314	155	3	12	3	370	32.00	41.00	30.00	39.00
012315	156	2	12	3	375	32.00	40.00	30.00	38.00
012316	160	2	12	3	420	32.00	42.00	30.00	40.00
012317	161	2	12	3	335	32.00	40.00	30.00	38.00
012318	170	3	12	3	540	47.00	58.00	44.00	55.00
100990	165	1	15	2½	275	24.00	30.00	23.00	29.00
098731	191	3	7	....	650	59.00	77.00	56.00	74.00
012320	172	2	12	3	325	29.00	37.00	27.00	35.00

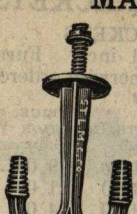
All of the above brackets will be furnished with insertion unless otherwise ordered.

In ordering, specify whether japanned or galvanized finish is desired.

MALLEABLE IRON BRACKETS



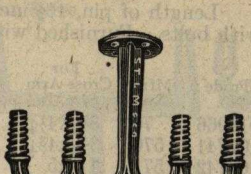
No. 213
No. 214, 2-Pin



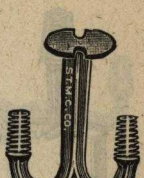
No. 222
No. 220, 1-Pin



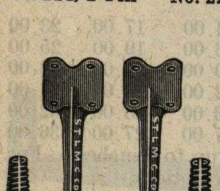
No. 217
No. 218, 2-Pin



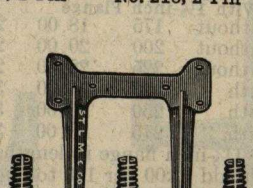
No. 219



No. 226
No. 227, 1-Pin



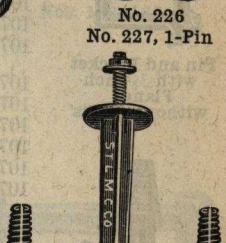
No. 230 Left No. 231 Right
Nos. 232, 247, 2-Pin
No. 234, 4-Pin



No. 233



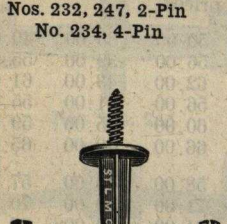
Nos. 241, 235
Nos. 242, 236, 1-Pin



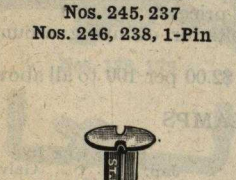
Nos. 243, 239
Nos. 244, 240, 1-Pin

HIGH INSULATION CEILING BRACKETS

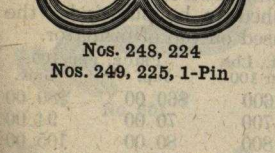
With 1-inch Slotted Heads



Nos. 245, 237
Nos. 246, 238, 1-Pin



Nos. 248, 224
Nos. 249, 225, 1-Pin



No. 1220 No. 1215
No. 1221, 4-Pin No. 1216, 1-Pin
No. 1218, 4-Pin

Trade No.	Mfrs. No.	Wire from No. of Pins	Ceiling Spread Inches	Inches	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
017738	213	1	4	3	200	$21.00	$29.00	$20.00	$28.00
017741	214	2	4	6	250	26.00	36.00	24.00	34.00
097357	220	1	4	3	200	31.00	39.00	30.00	38.00
097359	222	2	4	6	270	36.00	42.00	34.00	40.00
107716	217	1	4	3	200	26.00	34.00	25.00	33.00
107717	218	2	4	6	270	31.00	42.00	29.00	40.00
017748	219	4	4	15	575	69.00	85.00	65.00	81.00
107718	226	2	4	6	220	22.00	32.00	20.00	30.00
107719	227	1	4	3	170	17.00	25.00	16.00	24.00
107720	230L	1	4	3	225	21.00	30.00	20.00	29.00
107721	230R	1	4	3	225	21.00	30.00	20.00	29.00
017757	232	2	4	6	300	32.00	42.00	30.00	40.00
017803	247	2	4	14	350	50.00	70.00	48.00	68.00
017760	233	3	4	12	575	53.00	70.00	50.00	67.00
017763	234	4	4	12	475	69.00	84.00	65.00	80.00
017785	241	2	4	14	375	50.00	70.00	48.00	68.00
017788	242	1	4	14	325	41.00	59.00	40.00	58.00
017767	235	2	8	14	400	54.00	74.00	52.00	72.00
017770	236	1	8	14	325	49.00	69.00	48.00	68.00
017791	243	2	4	14	400	50.00	70.00	48.00	68.00
017794	244	1	4	14	325	41.00	50.00	40.00	58.00
017779	239	2	8	14	425	54.00	74.00	52.00	72.00
017782	240	1	8	14	350	49.00	69.00	48.00	68.00
017797	245	2	4	14	610	50.00	70.00	48.00	68.00
017800	246	1	4	14	510	41.00	50.00	40.00	58.00
017773	237	2	8	14	425	54.00	74.00	52.00	72.00
017776	238	1	8	14	350	49.00	69.00	48.00	68.00
107722	248	2	4	14	375	46.00	64.00	44.00	62.00
107723	249	1	4	14	325	37.00	54.00	36.00	53.00
107724	224	2	8	14	400	50.00	70.00	48.00	68.00
107725	225	1	8	14	325	45.00	65.00	44.00	64.00
107726	1220	2	3	6	300	40.00	58.00	38.00	56.00
107727	1221	4	4	19	400	50.00	68.00	48.00	66.00
107728	1215	2	3	6	350	50.00	68.00	48.00	66.00
107729	1216	1	3	3	300	40.00	52.00	39.00	51.00
107730	1218	4	4	19	400	52.00	68.00	48.00	64.00

Furnished with insertion unless otherwise ordered.

In ordering, specify whether japanned or galvanized finish is desired.

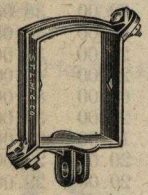
MALLEABLE IRON PINS AND BRACKETS



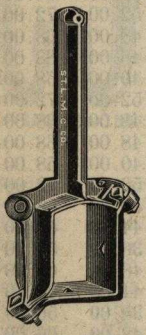
Pin and Bracket with ⅞-inch Flange without Clevis



Pin and Bracket with ⅞-inch Flange with Clevis



Cross-Arm Brace Clamp



Dead End Pin without Clevis



Pin Brace and Spacer

WAY PINS AND BRACKETS

Length of pin, 4¾ inches; size of thread, 1 inch. Furnished complete with bolts. Furnished with insertion unless otherwise ordered.

Trade No.	Mfrs. No.	For Cross-Arm Size, In.	Clevis	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
			With ⅞-inch Flange					
016966	70	3¼x4¼	Without	150	$14.00	$19.00	$13.00	$18.00
107741	570	3¾x4¾	Without	175	16.00	21.00	15.00	20.00
107742	571	4 x5	Without	200	18.00	24.00	17.00	23.00
107743	572	3¼x4¼	With	200	20.00	27.00	19.00	26.00
107744	573	3¾x4¾	With	225	22.00	28.00	21.00	27.00
107745	574	4 x5	With	250	24.00	32.00	23.00	31.00
			With 1⅛-inch Flange					
107746	50	3¼x4¼	Without	175	18.00	24.00	17.00	23.00
107747	51	3¾x4¾	Without	200	20.00	26.00	19.00	25.00
107748	52	4 x5	Without	225	22.00	29.00	21.00	28.00
107749	53	3¼x4¼	With	225	24.00	32.00	23.00	31.00
107750	54	3¾x4¾	With	250	26.00	33.00	25.00	32.00
107751	55	4 x5	With	275	28.00	37.00	27.00	36.00

Pins are made on ⅞ and 1⅛-inch flange in lengths up to 7 inches. For each additional inch in length add $2.00 per 100 to above prices.

			With 1½-inch Flange					
107752	581	3¼x4¼	Without	200	27.00	34.00	26.00	33.00
107753	881	3¼x4¼	With	300	28.00	38.00	27.00	37.00

Pins are made on 1½-inch flange in lengths up to 18 inches. For each additional inch in length add $2.00 per 100 to above prices.

			With 2-inch Flange					
016968	72	3¼x4¼	Without	350	36.00	50.00	35.00	49.00
107754	670	3¾x4¾	Without	425	40.00	56.00	39.00	55.00
107755	671	4 x5	Without	500	44.00	62.00	43.00	61.00
107756	672	3¼x4¼	With	400	42.00	56.00	41.00	55.00
107757	673	3¾x4¾	With	475	46.00	60.00	45.00	59.00
107758	674	4 x5	With	550	50.00	66.00	49.00	65.00
			With 3-inch Flange					
107759	73	3¼x4¼	Without	500	41.00	58.00	40.00	57.00
107760	870	3¾x4¾	Without	600	51.00	71.00	50.00	70.00
107761	872	4 x5	Without	700	61.00	84.00	60.00	83.00
107762	873	3¼x4¼	With	550	48.00	66.00	47.00	65.00
107763	874	3¾x4¾	With	650	58.00	79.00	57.00	78.00
107764	875	4 x5	With	750	68.00	92.00	67.00	91.00

Pins are made on 2 and 3-inch flange in lengths up to 24 inches. For each additional inch in length add $3.00 per 100 to above prices.

Brackets with 2 and 3-inch flange have three bolts for clamping around cross-arm instead of two as shown in illustration.

For 1⅜-inch heads instead of 1-inch heads, add $2.00 per 100 to all above prices.

WAY CROSS-ARM BRACE CLAMPS

1½-inch Flange with Clevis

Trade No.	Mfrs. No.	Size Inches	Wt., Lbs. per 100	Price, per 100 Jap.	Galv.
016965	580	3¼x4¼	200	$24.00	$30.00

WAY DEAD END PINS

Width of flange around cross-arm, 3½ inches. For spool type insulators, with 1 1/16x6-inch hole. When pin braces and spacers shown are not used with these pins, the washer and pull-off shown is furnished to be put under the insulator and an extra washer is furnished to be used on top of insulator.

Trade No.	Mfrs. No.	For Cross-Arm Size, In.	Clevis	Wt., Lbs. per 100	Price, per 100 Jap.	Galv.
016961	78	3¼x4¼	Without	600	$60.00	$80.00
107765	78S	4 x5	Without	700	70.00	94.00
107766	78D	4¾x5¾	Without	800	80.00	105.00
107767	78A	3¼x4¼	With	700	75.00	100.00
107768	78B	4 x5	With	800	85.00	110.00
107769	78H	4¾x5¾	With	900	95.00	125.00

PIN BRACES AND SPACERS

016962	79	With bolts and washer	300	28.00	38.00

Special sizes, prices on application.

Weight and prices are per pair.

The above pins are furnished with insertion unless otherwise ordered. In ordering specify whether japanned or galvanized finish is desired.

MALLEABLE IRON ARMS

BREAK AND FEEDER ARMS

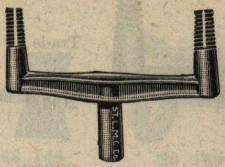
For High Tension Wires



Nos. 180, 181, 182, 183, 268



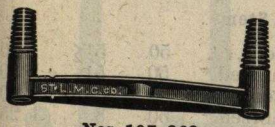
Nos. 186, 186B



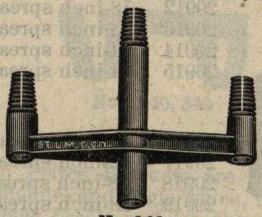
Nos. 184, 185, 196, 269
Nos. 266, 267, 3-Pin



Nos. 187, 188



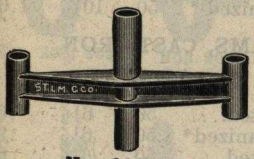
Nos. 197, 262



No. 263



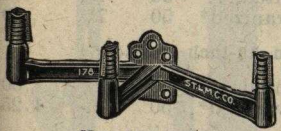
Nos. 260, 261



Nos. 264, 265



Nos. 176, 177



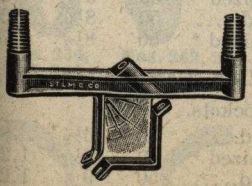
Nos. 178, 179



No. 600



No. 601



Feeder Arm with Way Clamp

Trade No.	Mfrs. No.	No. of Pins	Space Bet. Holes	Head Pin Hole	Head from Arm Hole	Wt., Lbs. per 100	Price, per 100 With Insertion Jap.	With Insertion Galv.	Without Insertion Jap.	Without Insertion Galv.
			Dimensions, Inches							
012306	180	2	12	1½	5	350	.....	.....	$32.00	$43.25
012307	181	2	12	1¼	5	320	.....	.....	28.00	37.00
017704	182	2	18	1½	8 1½	700	.....	.....	42.00	68.00
017706	183	2	18	1½	8 1¼	700	.....	.....	42.00	68.00
017708	268	2	24	1½	10 1½	900	.....	.....	55.00	85.00
012310	186	2	14	1½	6	350	.....	.....	32.00	43.00
012355	186B	2	14	1¼	6	350	.....	.....	29.00	39.00
012308	184	2	12	....	5 1¼	325	32.00	42.00	30.00	40.00
012309	185	2	12	....	5 1½	410	32.00	42.25	30.00	40.25
017715	196	2	18	....	7 1½	580	42.00	60.00	40.00	58.00
017718	269	2	24	....	10 1½	900	54.00	84.00	52.00	82.00
017721	266	3	9	....	7&3 1¼	600	48.00	71.00	45.00	68.00
017724	267	3	9	....	7&3 1½	600	48.00	71.00	45.00	68.00
012311	187	2	14	....	6 1¼	370	32.00	42.00	30.00	40.00
012312	188	2	14	....	6 1½	370	32.00	42.50	30.00	40.00
017713	197	2	18	....	7	550	42.00	60.00	40.00	58.00
017710	262	2	12	....	5	300	32.00	48.00	30.00	46.00
017727	263	3	9&9	....	7 1½	850	59.00	90.00	56.00	87.00
017700	260	2	12	1¼	5	250	.....	.....	32.00	48.00
017702	261	2	12	1½	5	250	.....	.....	32.00	48.00
017730	264	3	9&9	1½	7 1½	800	.....	.....	72.00	100.00
017732	265	3	9&9	1¼	7 1½	800	.....	.....	72.00	100.00
098737	176	2	12	....	5	250	26.00	34.00	24.00	32.00
098739	177	2	18	....	5	400	44.00	57.00	42.00	55.00
098741	178	3	18	....	5	450	53.00	68.00	50.00	65.00
098743	179	3	18	....	9	500	58.00	74.00	55.00	71.00
27567	600	2	15	....	4&8	400	42.00	58.00	40.00	56.00
27568	601	1	....	....	9	200	21.00	29.00	20.00	28.00

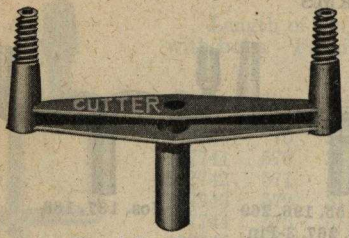
The illustration of feeder arm with way clamp shows the manner in which way clamp is added to any feeder arm. For this addition, add to above prices, per 100, japanned, $14.00; galvanized, $20.00, including bolts. Way clamps will more than double the life of cross-arms.

Slotted heads furnished with insertion, unless otherwise ordered.

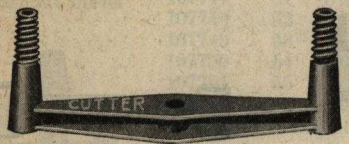
In ordering, specify whether japanned or galvanized finish is desired.

CUTTER POLE LINE MATERIAL

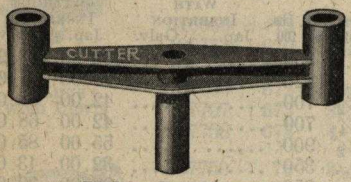
SCHEDULE F



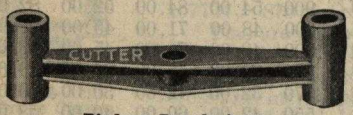
Fixed Pin Break Arm with Stem



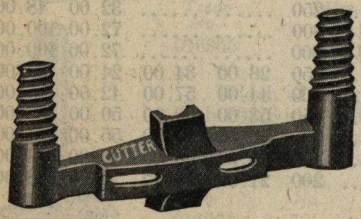
Fixed Pin Break Arm without Stem



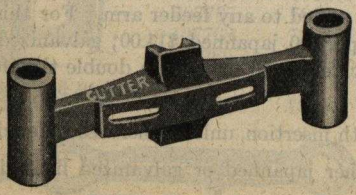
Pinless Break Arm with Stem



Pinless Break Arm without Stem



Fixed Pin Clamp Arm



Pinless Clamp Arm

FIXED PIN BREAK ARMS, CAST IRON

Trade No.	Description	Std. Pkg.	Wt., Lbs Each	Price Each
	With 1¼-inch Stem			
20908	12-inch spread, painted.....	50	6	$0.60
20909	12-inch spread, galvanized*	50	6	.90
	With 1½-inch Stem			
20910	12-inch spread, painted.....	50	6	.60
20911	12-inch spread, galvanized *	50	6	.90
20912	18-inch spread, painted.....	50	8½	.80
20913	18-inch spread, galvanized *	50	8½	1.25
20914	24-inch spread, painted.....	50	11	1.04
20915	24-inch spread, galvanized *	50	11	1.60
	Without Stem			
20916	12-inch spread, painted.....	50	5½	.60
20917	12-inch spread, galvanized *	50	5½	.90
20918	18-inch spread, painted.....	50	8	.80
20919	18-inch spread, galvanized *	50	8	1.25
20920	24-inch spread, painted.....	50	10½	1.04
20921	24-inch spread, galvanized *	50	10½	1.60

PINLESS BREAK ARMS, CAST IRON

	With 1¼-inch Stem, 12-inch Spread			
20922	1¼-inch sockets, painted....	50	6½	.60
20923	1¼-inch sockets, galvanized*	50	6½	.90
20924	1½-inch sockets, painted....	50	6½	.60
20925	1½-inch sockets, galvanized*	50	6½	.90
	With 1½-inch Stem, 12-inch Spread			
20926	1¼-inch sockets, painted....	50	7	.60
20927	1¼-inch sockets, galvanized*	50	7	.90
20928	1½-inch sockets, painted....	50	7	.60
20929	1½-inch sockets, galvanized*	50	7	.90
	With 1½-inch Stem, 18-inch Spread			
20930	1½-inch sockets, painted....	50	9	.80
20931	1½-inch sockets, galvanized*	50	9	1.25
	With 1½-inch Stem, 24-inch Spread			
20932	1½-inch sockets, painted....	50	12	1.10
20933	1½-inch sockets, galvanized*	50	12	1.60
	Without Stem, 12-inch Spread			
20934	1¼-inch sockets, painted....	50	6	.60
20935	1¼-inch sockets, galvanized*	50	6	.90
20936	1½-inch sockets, painted....	50	6	.60
20937	1½-inch sockets, galvanized*	50	6	.90

FIXED PIN CLAMP ARMS, CAST IRON

Has a "U" bolt for fastening to 2½-inch (bore) pipe. Furnished for other sizes of pipe when so ordered.

20938	12-inch spread, painted.....	50	6	.80
20939	12-inch spread, galvanized *	50	6	1.25
20940	18-inch spread, painted.....	50	8½	1.25
20941	18-inch spread, galvanized *	50	8½	1.75

PINLESS CLAMP ARMS, CAST IRON

Furnished with 1½-inch sockets.

20942	12-inch spread, painted.....	50	6½	.80
20943	12-inch spread, galvanized *	50	6½	1.25
20944	18-inch spread, painted.....	50	9	1.25
20945	18-inch spread, galvanized * .	50	9	1.75

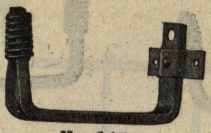
*Includes final coat of black enamel

PEIRCE BRACKETS

Hot Galvanized



Nos. 145, 146



No. 147



Nos. 148, 149



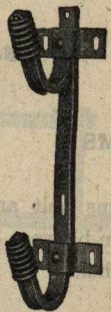
No. 150



No. 151



Nos. 202, 303



Nos. 204, 205, 305



Nos. 240, 340



Nos. 241, 341, 441

WALL BRACKETS

All Peirce Brackets are made from hot-rolled open-hearth steel channel and angle which, under severe strains, will bend but will never break and let the wires down. The brackets shown with short springs are for telephone wires only, although they may be used on short spans of wires up to No. 6 covered. Any style of multiple point bracket may be obtained in any desired number of points although not shown in the lists.

Brackets in the 100 series are for single wires, in the 200 series for two wires, in the 300 series for three wires and so on. If a bracket similar to No. 306 is desired for four wires, for instance, a No. 406 should be specified.



Nos. 206, 306



Nos. 207, 307

Trade No.	Mfrs. No.	Dimensions, Inches: Extension	Channel	Holes	Wire Spacing	Std. Pkg.	Wt., Lbs. per 100	Price per 100
75001	145	3½	¾	5/16	....	25	56	$11.00
75002	146	4½	1	5/16	....	25	100	17.00
75003	147	9	1	5/16 & 9/16	....	25	141	24.00
75004	148	6	1	3/8	....	15	140	25.00
75005	149	6	1	3/8	....	15	140	27.00
75006	150	3½	¾	5/16	....	25	74	13.00
75007	151	7½	1	3/8	....	15	150	24.00
75008	203	3	¾	5/16	9	20	145	23.00
75009	204	3	¾	5/16	6½	20	160	23.00
75010	205	3	¾	5/16	9	20	175	25.00
75011	206	3	1	5/16	9	20	225	39.00
75012	207	4½	¾	3/8	9	10	250	37.00
75013	234	3½	¾	9/32	8	25	90	17.00
75014	235	3½	¾	9/32	12	25	110	19.00
75015	236	3½	1	9/32	10	25	143	20.00
75016	240	3½	¾	5/16	7	20	125	23.00
75017	241	4½	1	3/8	7	10	250	41.00
75018	242	3	¾	5/16	9	20	186	27.00
75019	303	3	¾	5/16	6½	20	225	35.00
75020	305	3	¾	5/16	6½	20	260	37.00
75021	306	3	1	5/16	6½	10	330	60.00
75022	307	4½	¾	3/8	6½	10	350	51.00
75023	340	3½	¾	5/16	6½	10	220	35.00
75024	341	4½	1	3/8	6½	10	460	65.00
75025	342	3	¾	5/16	6½	20	261	40.00
75026	441	4½	1	3/8	6½	10	625	83.00



Nos. 234, 235, 236



Nos. 242, 342

BRACKET FEET AND CORNER IRONS

For use with Nos. 204, 205, 206, 305 and 306 wall brackets. Make brackets extend 8 inches from wall to get around obstructions such as rain conductors. May also be used on corners. Furnished complete with two stove bolts.

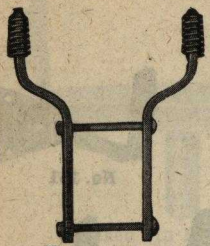


No. 500

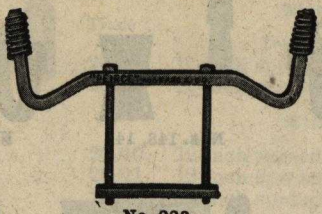
Trade No.	Mfrs. No.	Dimensions, Inches: Extension	Channel	Holes	Spread of Base Inches	Std. Pkg.	Wt., Lbs. per 100	Price per 100
75027	500	4⅜	1x⅜	5/16	10⅜	20	85	$12.00

PEIRCE BRACKETS

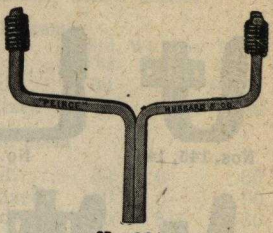
Hot Galvanized



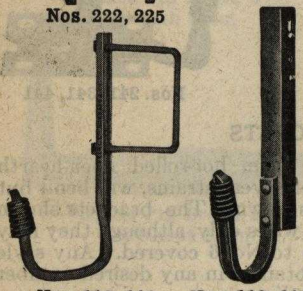
Nos. 222, 225



No. 223



No. 224

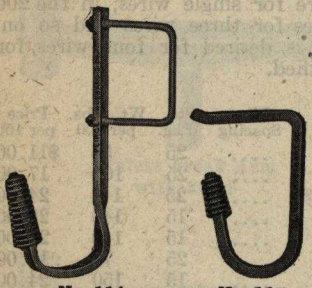


Nos. 110, 111 Nos. 112, 113

BREAK ARMS

Nos. 222, 223 and 225 break arms bolt around the arms and are adjustable to any size of arm between 3¼x4¼ and 4x5 inches. No. 224 fits in 1½-inch pin hole.

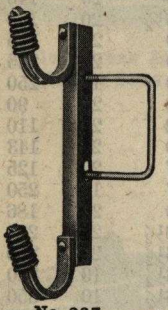
Trade No.	Mfrs. No.	Dimensions, Inches Spacing	Channel	Bolts	Std. Pkg.	Wt., Lbs. per 100	Price per 100
75060	222	9	¾	⅜	10	160	$31.00
75061	223	12	1	⅜	10	240	38.00
75062	224	12	1	..	20	200	38.00
75063	225	10	1	½	10	205	39.00



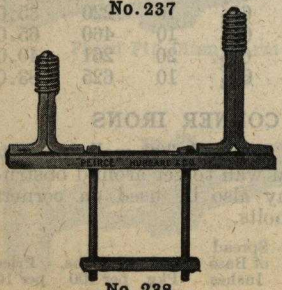
No. 114 No. 115

TRANSPOSITION BRACKETS

Brackets shown with "U" bolts are furnished with bolts bent for 3¼x4¼-inch arms unless otherwise specified, but can be furnished with bolts bent for any size up to 4x5 inches. The No. 115 bracket bolts to the shank of a ½-inch steel pin below the arm and is held by the pin nut. The No. 238 bracket is for the transposition of telephone lines on routes with extremely long spaces between poles. Two brackets are needed for each crossover.



No. 237

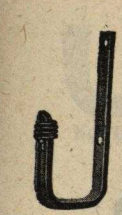


No. 238

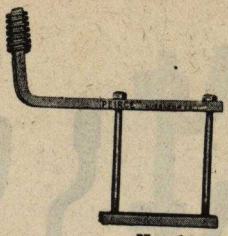
Trade No.	Mfrs. No.	Dimensions, Inches Channel	Back	"U" Bolt	Std. Pkg.	Wt., Lbs. per 100	Price per 100
75101	110	¾	...	5/16	25	108	$22.00
75102	111	1	...	⅜	25	170	29.00
75103	112	¾	1	..	25	96	19.00
75104	113	¾	1¼	..	25	156	25.00
75105	114	1	...	⅜	25	170	33.00
75106	115	1	...	..	25	135	22.00
75107	237	¾	1	⅜	20	201	34.00
75108	238	¾	1¾	..	10	380	70.00
75109	437	¾	1¾	⅜	10	400	70.00

PEIRCE BRACKETS

Hot Galvanized



Nos. 100, 101, 103, 104



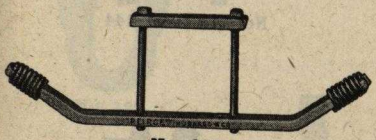
No. 105



No. 106



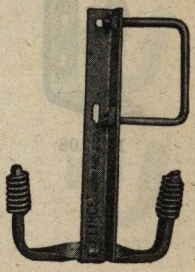
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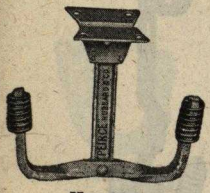
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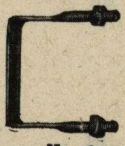
No. 221



No. 227



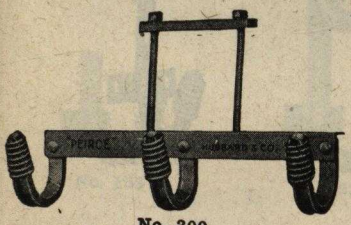
No. 229



No. 1

CROSS-ARM BRACKETS

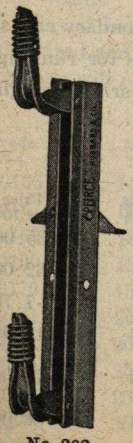
Trade No.	Mfrs. No.	Dimensions, Inches Length	Holes	Channel	Spacing	Std. Pkg.	Wt., Lbs. per 100	Price per 100
75064	100	....	7/16	3/4	..	25	46	$10.60
75065	101	....	7/16	3/4	..	25	56	11.80
75066	103	....	7/16	1	..	25	85	15.00
75067	104	8 1/2	7/16	3/4	..	25	85	15.00
75068	105	....	..	1	..	10	180	22.00
75069	106	5	3/8	3/4	..	25	68	12.00
75070	107	18 1/2	11/32	1	..	25	164	28.00
75071	200	....	..	1	16	10	216	38.00
75072	221	9 1/2	7/16	3/4	8	20	155	30.00
75073	227	11 1/2	..	3/4	8	20	195	42.00
75074	229	7 1/2	3/8	3/4	8	10	205	33.00
75075	300	....	..	3/4	7	10	340	39.00



No. 300

CROSS-ARM STRAPS

Trade No.	Mfrs. No.	Size of Arm Inches	Size of Bolt Inches	Std. Pkg.	Wt., Lbs. per 100	Price per 100
75055	1	3 1/4 x 4 1/4	1/2	100	91	$10.50
75056	2	3 1/2 x 4 1/2	1/2	100	102	11.00
75057	3	3 3/4 x 4 3/4	1/2	100	113	11.50
75058	4	4 x5	1/2	100	126	12.00
75059	5	5 x6	1/2	100	148	14.00



No. 202



No. 301

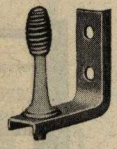
SPREADER BRACKETS

Spreader brackets fasten around the arm with the cross-arm straps listed below. The ends of straps fit in the long center slot of bracket.

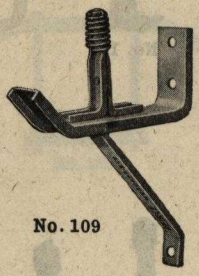
Trade No.	Mfrs. No.	Dimensions, Inches Extension	Spacing	Channel	Holes	Width of Back Inches	Std. Pkg.	Wt., Lbs. per 100	Price per 100
75051	201	4 1/2	10	1	7/16	2 1/2	10	290	$50.00
75052	202	4 1/2	12	1	7/16	2 1/2	10	375	54.00
75053	301	4 1/2	6 1/2	1	7/16	2 1/2	10	390	71.00
75054	302	4 1/2	6 1/2	1	7/16	2 1/2	10	450	75.00

PEIRCE POLE BRACKETS

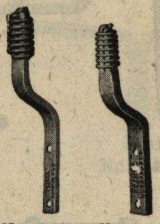
Hot Galvanized



No. 108



No. 109



No. 143 No. 144



No. 142



No. 308



No. 321

POLE BRACKETS

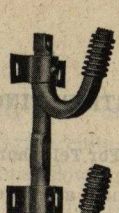
The No. 308 is a pole bracket for secondary circuits for use instead of secondary racks. The No. 321 is used on poles in connection with spreader brackets on the arms for running wires from end to end of the arms. The hump fits over the head of the cross-arm through bolt. The No. 109 is a pole bracket for heavy feeder wires.

Trade No.	Mfrs. No.	Dimensions, Inches: Channel	Dimensions, Inches: Extension	Dimensions, Inches: Spacing	Dimensions, Inches: Holes	Std. Pkg.	Wt., Lbs. per 100	Price per 100
75110	108	1¾	4	...	11/16	20	186	$35.00
75111	109	1¾	6	...	9/16	10	302	62.00
75114	143	¾	3	...	5/16	25	56	7.70
75115	144	1	3½	...	7/16	25	108	17.00
75113	142	10 ga. sheet	12	...	9/16	10	365	75.00
75116	308	1	3½	6½	7/16	20	330	66.00
75118	321	¾	3½	4½	5/16	20	265	37.00

PEIRCE PRESTEEL BRACKETS

Hot Galvanized


No. 136


No. 253½


No. 253

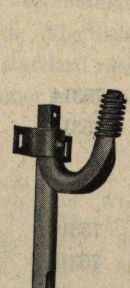

No. 353

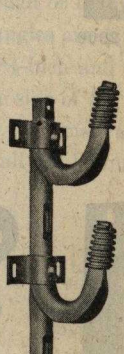

No. 137

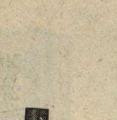

No. 154


No. 138


No. 254½


No. 254


No. 354


No. 153

These New Presteel Brackets are 100 per cent stronger than the channel brackets of the same weight. The pressed steel construction puts the strength where the greatest strain comes. The thread has greater resilience than ever before and cannot lock insulators. They are hot galvanized and this coating preserves their original strength. Excessive strains may bend them but they will never break and let the wires down.

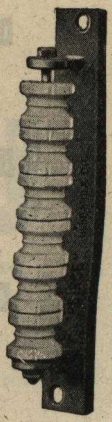
Trade No.	Mfrs. No.	Style	Dimensions, Inches: Extension	Spacing	Size of Holes	Std. Pkg.	Wt., Lbs. per 100	Price per 100
120166	136	Light	4	....	9/32	25	60	$ 9.00
120167	137	Heavy	4½	....	3/8	25	100	17.00
120168	138	Heavy	4½	....	3/8	25	100	17.00
120169	153	Light	4	....	9/32	25	75	10.00
120170	154	Heavy	4½	....	5/16	25	100	15.00
120171	253	Light	4	9	5/16	20	188	26.00
120172	253½	Light	4	6½	5/16	20	175	25.00
120173	254	Heavy	4½	9	5/16	20	244	35.00
120174	254½	Heavy	4½	6½	5/16	20	235	33.00
120175	353	Light	4	6½	5/16	20	275	38.00
120176	354	Heavy	4½	6½	5/16	20	350	49.00

PEIRCE BRACKETS

Hot Galvanized



No. 2900



No. 2901

DISTRIBUTING RACKS

For Telephone Wires

These racks furnish a secure but inexpensive means for distributing twisted pair telephone wires from cable poles. Nos. 2900, 2901 and 2902 are made with 1¾-inch channel steel back, pressed steel eyes and ⅜-inch through bolts.

Channel Frame, Single

Trade No.	Mfrs. No.	Pairs of Wires	Wt., Lbs. per 100	Price per 100
75311	2900	4	225	$50.00
75312	2901	6	300	66.00
75313	2902	8	475	82.00

Malleable Frame, Single

75314	2910	5	350	123.00
75315	2911	8	400	153.00

Malleable Frame, Double

75316	2912	10	515	192.00
75317	2913	16	615	270.00

Above prices are for racks complete with knobs.



No. 2902



No. 2910

SINGLE-KNOB FIXTURES

These small fixtures are for either telephone or lighting wires, but for the latter they should only be used in localities not visited by snow and sleet.

No. 2922 fixture can be fastened to wood buildings with a screw in the center hole and to brick buildings with a Peirce Expansion Bolt, making a very strong fastening and one which is especially adapted to duplex service wires.

No. 2920 is a redesign of the Peirce Knob Screw in which the shank is lengthened to 2½ inches.



No. 2920



No. 2922



No. 2924

Trade No.	Mfrs. No.	Wt., Lbs. per 100	Price per 100
75318	2920	35	$ 8.00
75319	2922	48	12.00
75320	2924	40	10.00

Above prices, complete with knobs.

PEIRCE BRACKETS

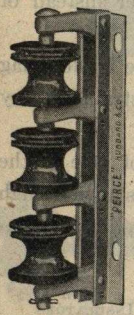
Hot Galvanized



No. 250

SECONDARY RACKS

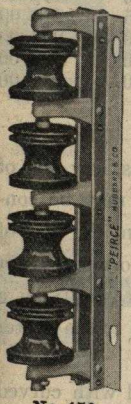
Secondary racks take the place of secondary cross-arms. On them, the party secondary circuits are strung with the wires in vertical instead of horizontal alignment, thus allowing the taking off of service wires without crossing of wires and without the aid of buck arms or spreader brackets.



No. 350

The rack arms are pressed from sheet steel and have the same strength as the double channel arms previously used, but give better alignment and a smoothly rounded top surface, allowing insulated wires to be pulled in over them without injuring the insulation

The width of the back of the rack is 2¾ inches with a slot ¾ inch wide between the two angles which allows the use of ⅝-inch through or lag bolts for fastening the rack to the pole. The side slots in the back angles are ⅜x1 inch and are used in fastening the rack to buildings, etc., with ⅜-inch and smaller expansion bolts, lags or wood screws. The distance from the side of the pole to the center of the insulators of the standard rack in 4 inches. Special racks for any desired number of wires, spacing or extension from the wall can be furnished promptly.



No. 450

Trade No.	Mfrs. No.	No. of Line Wires	Dimens. Inches Spacing	Dimens. Inches Length Over All	Std. Pkg.	Without Insulators Wt., Lbs. per 100	Without Insulators Price per 100	With Insulators Wt., Lbs. per 100	With Insulators Price per 100
75152	250	2	4	8¾	10	360	$56.00	560	$72.00
75153	350	3	4	12¾	10	500	75.00	800	99.00
75154	450	4	4	16¾	10	620	96.00	1020	128.00
75160	540	5	4	20¾	10	740	115.00	1240	155.00
75161	258	2	8	12¾	10	500	75.00	700	91.00
75162	358	3	8	20¾	10	740	115.00	1040	139.00

Insulators for Secondary Racks

Insulators furnished with the above racks are of the best grade of porcelain, brown glazed. The standard insulator has one large groove which will take six No. 0 weatherproof service wires. Its under surface is grooved to give a petticoat insulating surface.



No. 355

The special insulator, No. 356, has two large grooves, one for tying in the main circuit and the other for the service wires. This special double grooved insulator can be furnished on orders, if specified.

All insulators for Peirce Racks are packed in corrugated paper compartment boxes holding 30, 50 and 100 insulators. Breakage and chipping is thereby positively eliminated, and the insulators are handled and stored more conveniently and with less expense than under the old method of packing in barrels.

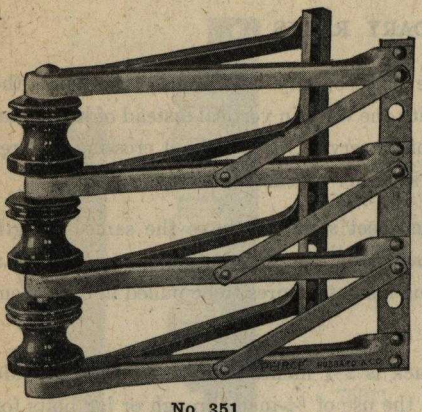


No. 356

Trade No.	Mfrs. No.	Description	Wt., Lbs. per 100	Price per 100
75158	355	Standard single groove	100	$8.00
75159	356	Special double groove	105	9.00

PEIRCE BRACKETS

Hot Galvanized



No. 351

EXTENSION SECONDARY RACKS

In some localities local or state regulations demand that no wire be nearer to the center of the pole than 13 inches, and to meet this condition, these extensions racks have been developed.

This type of rack is also usable on joint pole lines where pole room is scant, and it is desired to run the secondary mains past a transformer and on the same level as the transformer instead of above or below it.

The rack is fastened to the pole by four lag screws, and is rigidly braced against strains in any direction.

The extension from the center of pole to the center of insulators is 14 inches and the opening of the base is 8 inches. The legs have enough spring to allow them to be used on any size pole. The holes in the base are 11/16 inch for 5/8-inch or 1/2-inch lags.

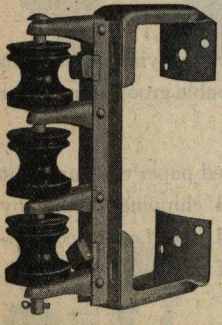
Trade No.	Mfrs. No.	No. of Line Wires	Dimens., Inches Spacing	Dimens., Inches Length Over All	Std. Pkg.	Without Insulators Wt., Lbs. Per 100	Without Insulators Price Per 100	With Insulators Wt., Lbs. Per 100	With Insulators Price Per 100
75155	251	2	4	8 3/4	5	735	$110.00	935	$126.00
75156	351	3	4	12 3/4	5	1000	150.00	1300	174.00
75157	451	4	4	16 3/4	5	1245	186.00	1645	218.00
120151	541	5	4	20 3/4	5	1500	222.00	2000	262.00
120152	259	2	8	12 3/4	5	1000	150.00	1200	166.00
120153	359	3	8	20 3/4	5	1500	222.00	1800	246.00

EXTENSION BRACKETS FOR SECONDARY RACKS



No. 3355

By the addition of a pair of these extension brackets, any one of the standard secondary racks listed on preceding page may be converted in a moment from a 4 to a 10-inch extension from the face of the pole or wall. This allows the line wires to clear transformers, water spouts, or other wires, and to comply with regulations specifying a minimum wire clearance of 13 inches from the line wires to the center of the pole.



No. 350 Rack Equipped with a Pair of No. 3355 Brackets

The brackets are made in two styles, with flat and with curved backs, for wall and pole use, respectively. The curved back type has one 11/16-inch hole for a 5/8-inch through bolt and two 9/16-inch holes for 1/2-inch lag screw.

The flat back bracket has one 9/16-inch and two 5/16-inch holes for 1/2-inch and 1/4-inch Peirce Expansion Bolts.

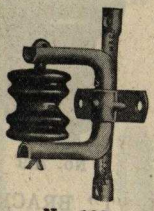
Brackets are made of No. 9 gauge steel, are 6 inches long, have a 4-inch bearing on the pole or wall, and are each equipped with a 5/8x2-inch carriage bolt.

Trade No.	Mfrs. No.	Description	Wt., Lbs. Per 100 Pairs	Price Per 100 Pairs
120154	3355	Curved back, for poles	430	$48.00
120155	3356	Flat back, for walls...	430	48.00

PEIRCE BRACKETS

Hot Galvanized

LIGHT PRESTEEL SECONDARY RACKS



No. 183

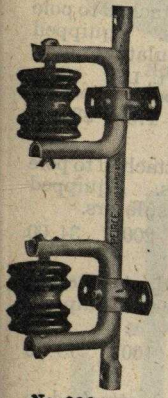
The Presteel Rack is a lighter form of the well-known No. 350 Peirce Secondary Rack. It is designed to carry No. 3 and lighter wire secondary mains on poles and service wires on buildings, work which does not require the strength of the heavy rack.

Experience has definitely settled three principles of bracket construction:

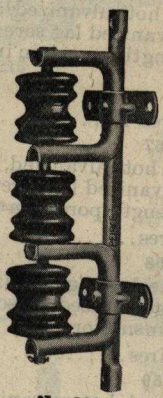
First.— That the original Peirce Rack, using spool insulators, is stronger and cheaper for heavy wires than cross-arms or pin-type brackets.

Second.— That steel is the only safe and dependable material for brackets because it is free from flaws, and will not break and let the wires down.

Third.— That the Presteel method of construction makes the strongest brackets because each part is pressed out of sheet steel which allows it to be cut so as to give the most metal just where the greatest strength is needed.



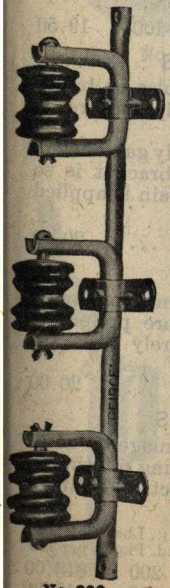
No. 286



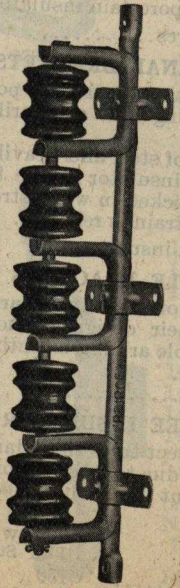
No. 383

By combining the original spool insulator design with the Presteel construction, the strength of the spool insulator rack is obtained for lighter lines at a cost which is actually lower than that of most pin-type brackets.

For carrying secondary mains on poles, in place of wood cross-arms, Presteel Racks save both money and trouble. They cost about one-fourth as much as cross-arms when arm replacements are allowed for, and central station records show that service connections cost less to make. The vertical arrangement of wires on secondary racks is neat and inconspicuous, and in many cases its use has quieted the public's demand for the removal of poles.



No. 386

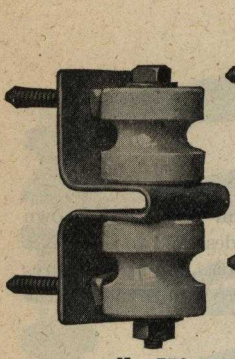


No. 583

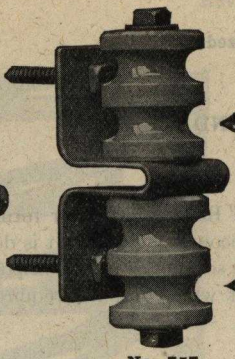
As service wire brackets on buildings, Presteel Racks are actually cheaper than any but the lightest kind of house brackets, so service wires can be taken as they run, light and heavy, and it is not necessary to carry several different kinds of brackets in stock.

Trade No	Mfrs. No.	No. of Line Wires	Wire Spacing Inches	Length Over All Inches	Std. Pkg.	Wt., Lbs. per 100	Price per 100
148117	183	1	0	6	10	125	$17.00
148118	286	2	6	12	10	250	40.00
148119	383	3	3	12	10	310	47.00
148120	386	3	6	18	10	375	59.00
148121	583	5	3	18	10	495	73.00

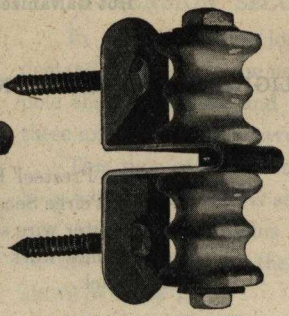
BRACKETS AND INSULATORS



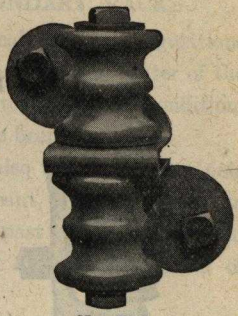
No. 756



No. 757



No. 758



No. 759

HALL GALVANIZED PRESSED STEEL "T" BRACKETS

No. 756

Formed of 1/8x2-inch mild steel, hot galvanized, attached to pole or building with two 3/8x3-inch galvanized lag screws. Equipped with two single groove special strength porcelain insulators.

Trade No.	Description	Wt., Lbs. per 100	Price per 100
42472	For two pairs of drop wires	175	$30.00

No. 757

Formed of 1/8x2-inch mild steel, hot galvanized, attached to pole or building with two 3/8x3-inch galvanized lag screws. Equipped with two double groove special strength porcelain insulators.

42473	For four pairs of drop wires.....	200	34.00

No. 758

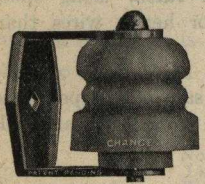
Formed of 1/16x1 5/8-inch mild steel, hot galvanized, attached to pole or building with 5/16x2 1/4-inch galvanized lag screws. Equipped with two double groove porcelain insulators.

42474	For four pairs of drop wires.....	100	18.00

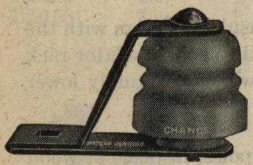
No. 759

Formed of 1/16x1 5/8-inch mild steel, hot galvanized, attached to pole or building with two 5/16x2 1/4-inch galvanized lag screws. Equipped with two double groove porcelain insulators.

42475	For four pairs of drop wires.....	100	19.50



Terminal Bracket



Angle Bracket

SKYROCKET TERMINAL BRACKETS

For wire deadening or terminating on arms or poles, on building, and for all work about a building that ordinarily requires a bracket and insulators.

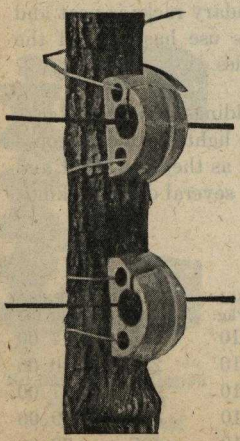
The terminal bracket is made of steel and heavily galvanized. The galvanized pin that holds the insulator in the bracket is so constructed that the insulator is locked in when strain is applied and cannot be removed until the strain is released.

42476	Galvanized brackets with insulator pin ...		20.00

SKYROCKET ANGLE BRACKETS

These brackets are to be used on top of cross-arms, on angle poles, and at such places where their design is more preferable than the terminal brackets. Double arming is entirely unnecessary when angle brackets are used.

42477	Single bracket with pin..... ...		20.00



Cutter Tree Insulator

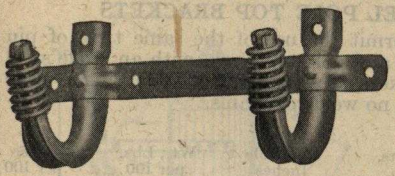
SCOTT CUTTER TREE INSULATORS

These tree insulators will protect trees from damage by wires and will entirely prevent grounds due to trees rubbing off the insulation of wires. Equally efficient for either electric light or telephone work.

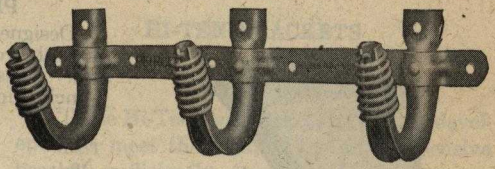
Trade No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
42478	For telephone lines.....	150	200	$13.00
42479	For lighting lines.....	150	250	15.00

PEIRCE BRACKETS

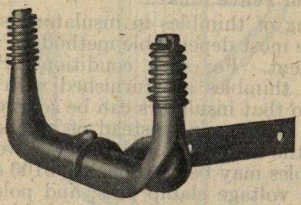
Hot Galvanized



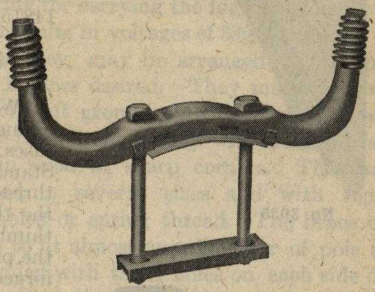
No. 243



No. 343



No. 218



No. 231

HEAVY PRESTEEL SPREADERS AND BREAK ARMS

These brackets are pressed from No. 9 gauge steel and the cross section of their main body is 1x1½ inches. They will take the strain of the largest and heaviest services.

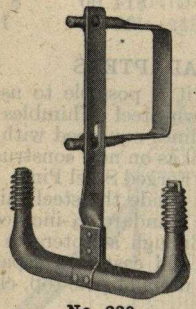
The line will be safer and cross arms will last longer because most of these brackets clamp around the arms instead of bolting through them. This keeps the arms from splitting and rotting.

The Peirce Spreader Brackets will not break, bend or pull off the arms. They are designed so that the top cross wire clears the line wire. Because of the different sizes used, cross arm straps cannot be included in bracket prices, but are listed on this page for convenience.

The Cow Horn No. 231 is the type of break arm in general use as a circuit breaker on series lighting circuits. It fits any standard cross arm, by the arrangement of the two bolts with slots and holes in the bracket and in the cross arm strap.

No. 218 is used either as a break arm or a spreader, bolted to the end of a cross arm.

No. 230, with the strap as shown, will save the cost of a cross arm by carrying two extra wires under an arm already filled, or, with the strap in the other leg of the angle, will act as a break arm.



No. 230

SPREADER BRACKETS

Trade No.	Mfrs. No.	Spacing Points, In.	Std. Pkg.	Wt., Lbs. per 100	Price per 100
148132	217	13	10	320	$55.00
148133	317	6½	10	450	75.00

BREAK ARMS

148134	231	12	10	465	80.00
148135	218	10	10	300	52.00
148136	230	10	10	300	52.00

CROSS ARM STRAPS

Trade No.	Mfrs. No.	Size Arm Inches	Wt., Lbs. per 100	Price per 100
148137	1001	3¼x4¼	91	$10.50
148138	1002	3½x4½	102	11.00
148139	1003	3¾x4¾	113	11.50
148140	1004	4 x5	126	12.00



No. 217



No. 317

LIGHT PRESTEEL HORIZONTAL HOUSE BRACKETS

Designed to take the place of the old channel steel horizontal brackets Nos. 240 and 241. Have the same strength as the No. 253 vertical bracket.

Trade No.	Mfrs. No.	Spacing of Points, In.	Std. Pkg.	Wt., Lbs. per 100	Price per 100
148141	243	8	20	170	$23.00
148142	343	6½	10	230	35.00

PEIRCE BRACKETS

Hot Galvanized

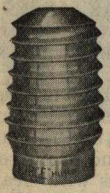


No. 3035

PRESTEEL POLE TOP BRACKETS

Designed to permit the use of the same type of pin for both cross arm and pole top work, with an angle steel arm. These brackets are pressed out of a single plate ¼-inch thick, with no welds or seams.

Trade No.	Mfrs. No.	Diam. Pin Hole Inches	Wt., Lbs. per 100	Price per 100
148153	3035	13/16	550	$84.00
148154	3036	1 1/16	550	84.00



No. 5025



Thimble Adapter

LEAD THREAD SEPARABLE THIMBLES

For Peirce Pins

While the cementing of thimbles in insulators is recommended as being the most dependable method, in some cases it is not expedient. For such conditions, Peirce Standard Drawn-Steel thimbles are furnished with lead threads cast on them so that insulators can be screwed on the thimbles mounted on the pins instead of having the thimbles cemented in the insulators and then screwed on the pins. These thimbles may be used on No. 5100 series forged steel pins, high voltage clamp pins, and pole top pins. The list prices of pins include drawn steel thimbles. If lead thimbles are desired, the price given in the second list should be added to the pin lists.

Trade No.	Mfrs. No.	Insulator Bore Inches	Wt., Lbs. per 100	Price, per 100 Ordered Separately	Price, per 100 Ordered with Pins
148155	5020	1	25	$14.00	$ 9.00
148156	5025	1 3/8	40	15.00	10.00

PEIRCE THIMBLE ADAPTERS

By means of these adapters, it is possible to use insulators in which Peirce Drawn-Steel Thimbles are cemented for repair work on old lines equipped with cast iron separable thimble pins, as well as on new construction with Peirce Pole Top, Clamp, and Forged Steel Pins. The outside thread of the adapter fits inside the steel thimble and the adapter is tapped for the standard ¾-inch center bolt of the old cast iron pin. Enough adapters to take care of the broken insulators on old cast iron separable thimble pins are furnished free to users of pole top, clamp, or forged steel pins.

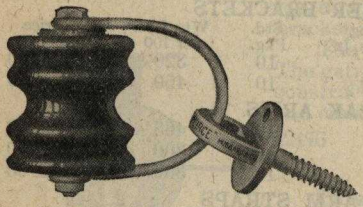


No. 555

KLAUBER UNIVERSAL DEAD ENDING CLEVISES

Designed to anchor a metal cap strain insulator with any one of the three types of connections—eye, clevis, and hook— on the end of a bolt through the side of a cross arm or building. Where a variety of insulators are used, the Universal clevis is a necessity. Forged from flat steel, ¼x1¼ inches, and fits both ½ and ⅝-inch bolts.

Trade No.	Mfrs. No.	Wt., Lbs. per 100	Price per 100
148157	555	110	$15.00

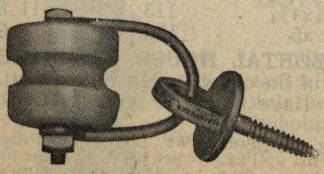


No. 2925

PEIRCE SWINGING KNOB FIXTURES

For light electric service wires and telephone twists, these fixtures are cheap and easily installed fastenings. Can be screwed into the building with a pair of pliers and the 2½-inch screw will reach well into the studding.

No. 2925 has the insulator furnished with light Presteel racks, and No. 2926, the same insulator as the other Peirce Single Knob Fixtures.

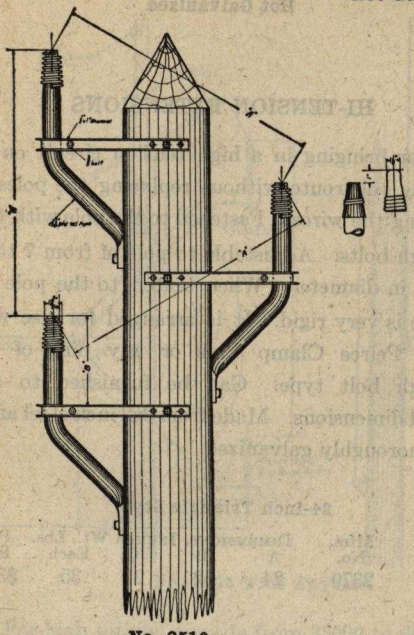


No. 2926

Trade No.	Mfrs. No.	Wt., Lbs. per 100	Price per 100
148158	2925	70	$16.00
148159	2926	54	14.00

PEIRCE BRACKETS

Hot Galvanized



No. 2510

HI-TEN BRACKETS

PIN TYPE

These Hi-Tension Brackets have been developed to meet the demand for an inexpensive bracket sufficiently strong and with proper spacing for carrying the high tension distributing circuits in voltages of 33000 and less. Obviously they may be arranged on the pole in any manner desired. They may be used with or without ground wire bayonet. Because of their truss bracing they will meet any service strain even at sharp corners. They are furnished in several sizes and with separable thimbles or spring thread. The brace can be bent to fit almost any diameter of pole and is provided with three holes on each side of pole to meet such adjustment.

24-inch Triangle Style

Trade No.	Mfrs. No.	Style Thimble	Size, Inches A	B	Wt., Lbs. per 100	Price per 100
75461	2510	Spring	24	8	535	$107.00
75462	2511	Separable	24	8	535	108.50

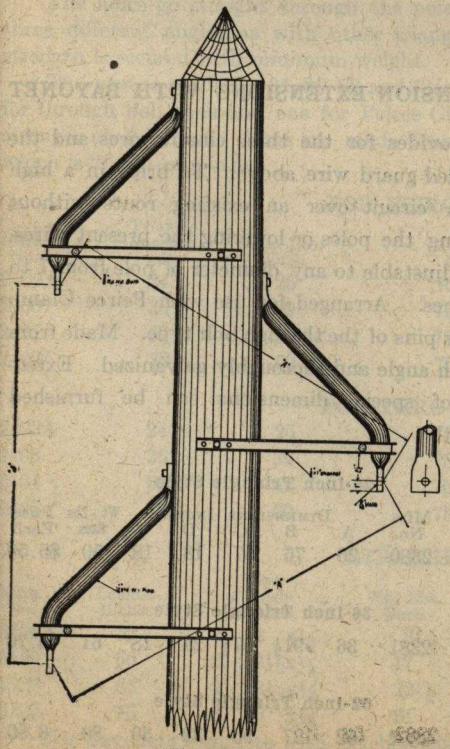
36-inch Triangle Style

75463	2512	Spring	36	10	735	147.00
75464	2513	Separable	36	10	735	148.50

52-inch Triangle Style

75465	2514	Spring	52	12	1133	226.00
75466	2515	Separable	52	12	1133	227.50

The Peirce Drawn Steel Separable Thimbles shown on these brackets are drawn from 18 gauge sheet steel into a seamless shell with rolled thread. They are stronger than cast iron thimbles and weigh but one fourth as much.



No. 2500

SUSPENSION TYPE

These brackets correspond in every way with the pin type brackets, but are made for suspension insulators.

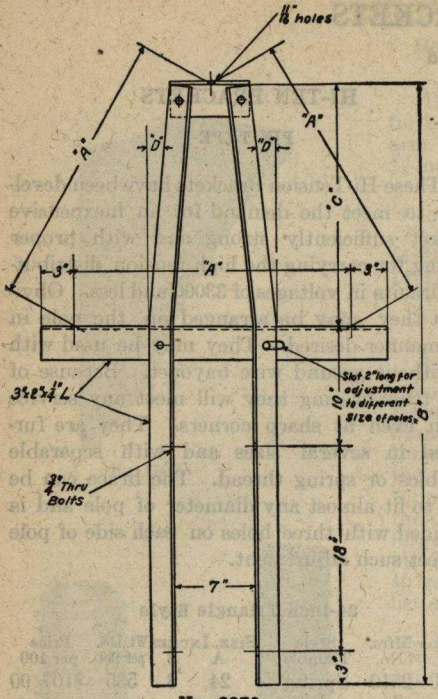
Used with one link or insulator unit, they will meet conditions on high tension distributing circuits of 33000 volts and less.

36-inch Triangle Style

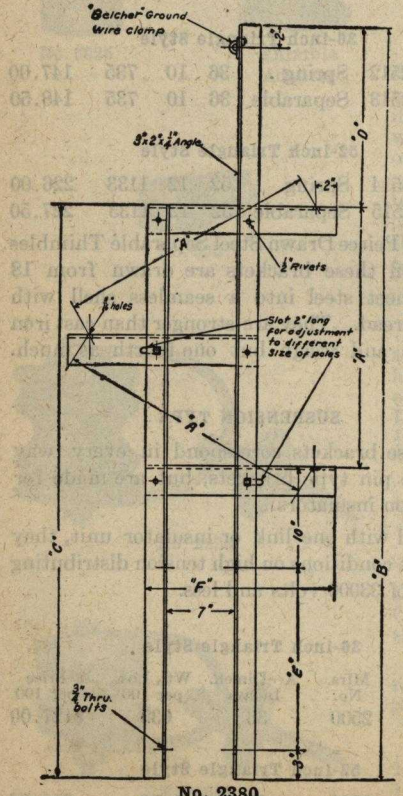
Trade No.	Mfrs. No.	A—Dimen. Inches	Wt., Lbs. per 100	Price per 100
75467	2500	36	635	$127.00

52-inch Triangle Style

75468	2501	52	1000	200.00



No. 2370



No. 2380

PEIRCE EXTENSIONS

Hot Galvanized

HI-TENSION EXTENSIONS

For bringing in a high tension circuit on an existing pole route without replacing the poles or lowering the wires. Fastened to the pole with two through bolts. Adjustable to pole of from 7 to 10 inches in diameter. When bolted to the pole the fixture is very rigid. It is arranged for use with either Peirce Clamp Pins or any pins of the through bolt type. Can be furnished to any special dimensions. Made from 3x2-inch steel angle and thoroughly galvanized.

24-inch Triangle Style

Trade No.	Mfrs. No.	Dimensions, Inches A	B	C	Wt., Lbs. Each	Price Each
75411	2370	24	52	21	35	$3.85

36-inch Triangle Style

75412	2371	36	62	31	45	4.95

HI-TENSION EXTENSIONS WITH BAYONET

Provides for the three circuit wires and the grounded guard wire above. To bring in a high tension circuit over an existing route without replacing the poles or lowering the present wires. It is adjustable to any diameter of pole from 7 to 10 inches. Arranged for use with Peirce Clamp Pins or pins of the through bolt type. Made from 3x2-inch angle and thoroughly galvanized. Extensions of special dimensions can be furnished promptly.

26-inch Triangle Style

Trade No.	Mfrs. No.	Dimensions, Inches A	B	C	D	E	Wt., Lbs. Each	Price Each
75413	2380	26	75	57	18	18	50	$5.50

36-inch Triangle Style

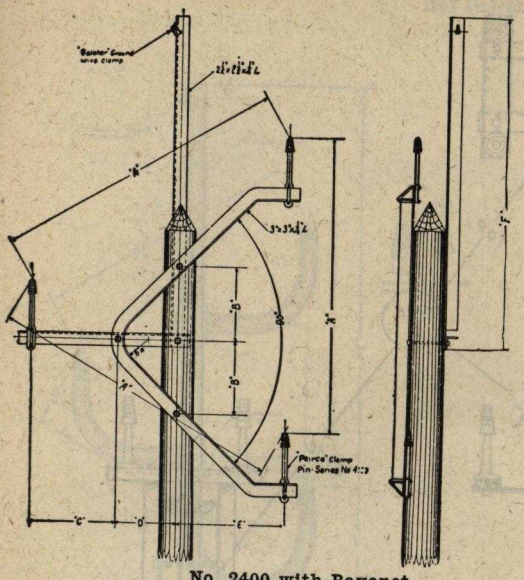
75414	2381	36	91½	67½	24	18	61	6.70

52-inch Triangle Style

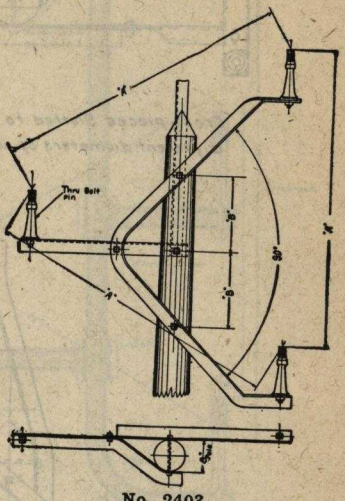
75415	2382	52	127	95	32	30	80	8.80

HUBBARD BO-ARROW ARMS

PLAIN OR HOT GALVANIZED



No. 2400 with Bayonet



No. 2403

For high tension circuits from 33000 to 66000 volts, the Bo-Arrow Arm represents the latest practice on single circuit poles.

It is fastened with but three through bolts which also hold the ground wire bayonets.

The holes go straight through the poles at right angles to the arm instead of going at three different angles as with other triangular arms. With this design of arm, maximum strength is secured with minimum weight.

The arm is made for 24, 36, 52 and 72-inch triangles and in two styles as illustrated: One for through bolt pins and one for Peirce Clamp Pins. The latter are recommended as being stronger at less cost. Arms are made from 3x3x¼-inch steel angle, except the 24-inch size which is 2½x2½x¼ inch.

FOR PEIRCE CLAMP PINS

Mfrs. No.	Triangle Spacing Inches	Wt., Lbs. Each	Plain Trade No.	Plain Price Each	Galvanized Trade No.	Galvanized Price Each
2400A	24	25	75454	$2.70	75455	$3.72
2400	36	39	75436	4.20	75442	5.80
2401	52	52	75437	5.40	75443	7.20
2402	72	69	75438	6.80	75444	9.40

FOR THROUGH BOLT PINS

2403A	24	25	75456	2.70	75457	3.72
2403	36	39	75439	4.20	75445	5.80
2404	52	52	75440	5.40	75446	7.20
2405	72	69	75441	6.80	75447	9.40

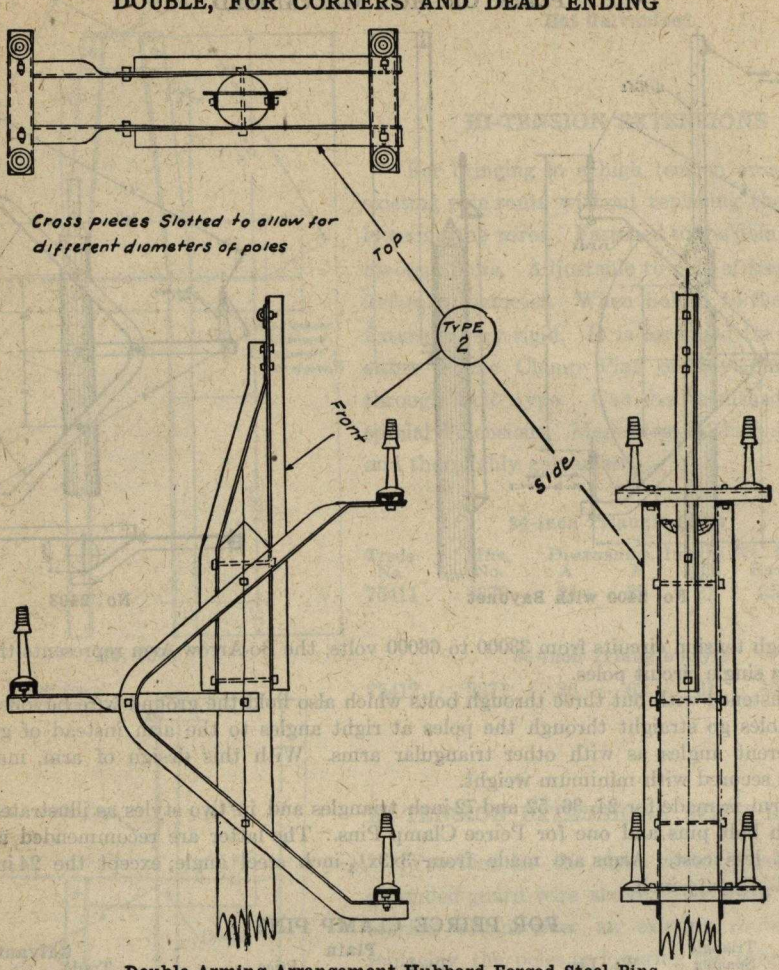
STRAIGHT BAYONETS

Mfrs. No.	Length Inches	Size of Angle Inches	Wt., Lbs. Each	Plain Trade No.	Plain Price Each	Galvanized Trade No.	Galvanized Price Each
3100A	32	2 x2 x¼	8½	75458	$0.94	75459	$1.24
3100	50	2½x2½x¼	17	75448	1.88	75451	2.48
3103	66	2½x2½x¼	22½	75449	2.24	75452	3.04
3105	75	3 x3 x¼	31	75450	3.00	75453	4.12

For bayonets complete with Belcher Clamps, add 18 cents to list price.

HUBBARD BO-ARROW ARMS

DOUBLE, FOR CORNERS AND DEAD ENDING



Double Arming Arrangement Hubbard Forged Steel Pins

TYPE 1 FOR PIERCE CLAMP PINS

Mfrs. No.	Triangle Spacing Inches	Wt., Lbs. Each	Plain Trade No.	Plain Price Each	Galvanized Trade No.	Galvanized Price Each
2410	24	52	89918	$7.28	89922	$8.72
2411	36	113	89919	15.82	89923	18.92
2412	52	139	89920	19.46	89924	23.28
2413	72	173	89921	24.22	89925	28.98

TYPE 2 FOR THROUGH BOLT PINS

2415	24	52	89926	7.28	89930	8.72
2416	36	113	89927	15.82	89931	18.92
2417	52	139	89928	19.46	89932	23.28
2418	72	173	89929	24.22	89933	22.98

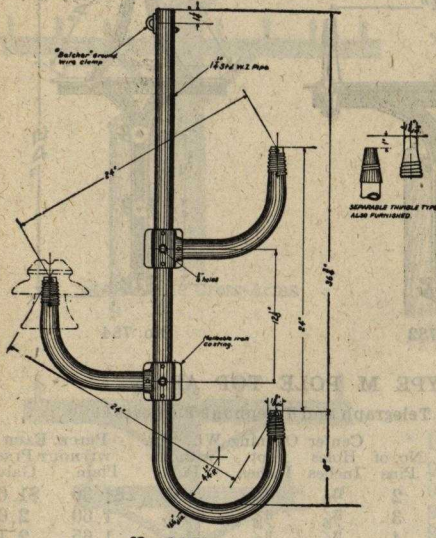
CORNER BAYONETS

With Bolts for Fastening Parts Together

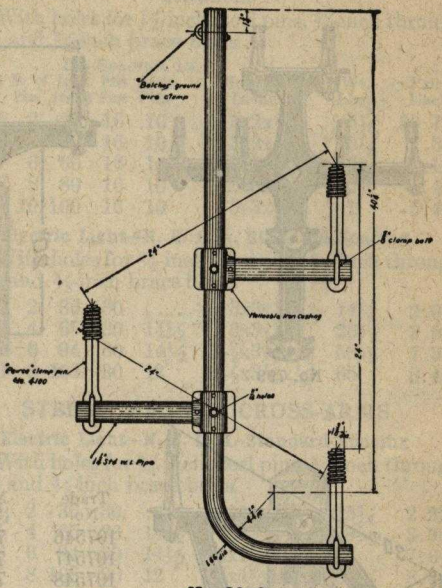
Mfrs. No.	Length Inches	Size of Angle Inches	Wt., Lbs. Each	Plain Trade No.	Plain Price Each	Galvanized Trade No.	Galvanized Price Each
3110	32	2 x2 x¼	16	89934	$1.80	89938	$2.72
3111	50	2 x2 x¼	26	89935	2.92	89939	4.42
3112	66	2½x2½x¼	44	89936	4.92	89940	7.48
3113	75	2½x2½x¼	50	89937	5.60	89941	8.50

PEIRCE FIXTURES

Hot Galvanized



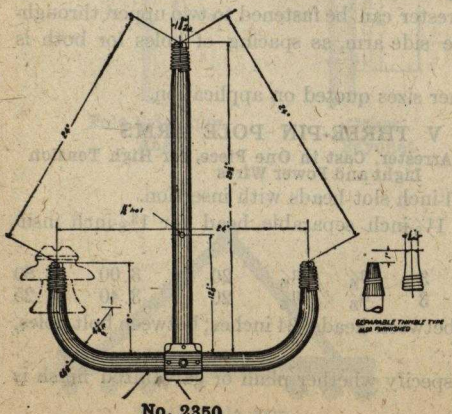
No. 2351



No. 2352

HI-TEN FIXTURES

These fixtures, for high tension distributing lines below 22000 volts provide a secure, inexpensive support for such circuits, which can be placed with a minimum of labor and expense. They are fastened to the poles with two through bolts. The malleable castings are very heavy, with re-enforcing webs and fillets, and are strengthened by one leg of the pipe which extends through the casting. The fixtures are hot galvanized inside and out after assembly.

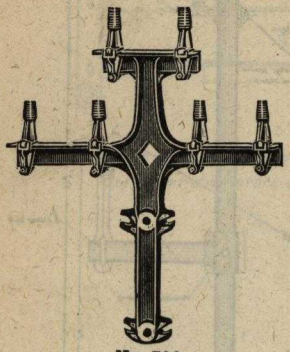


No. 2350

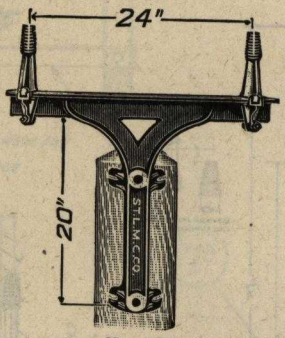
Trade No.	Mfrs. No.	Style Thimble	Wt., Lbs. Each	Price Each
75491	2351	Spring	22	$4.40
75492	2361	Separable	22	4.55
75493	2352	Spring	19	*3.80
75494	2350	Spring	15	3.00
75495	2360	Separable	15	3.15

*Price is for fixture only without pins. For price of pins, see one of the preceding pages.

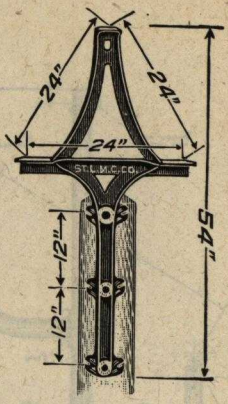
MALLEABLE IRON POLE TOP ARMS



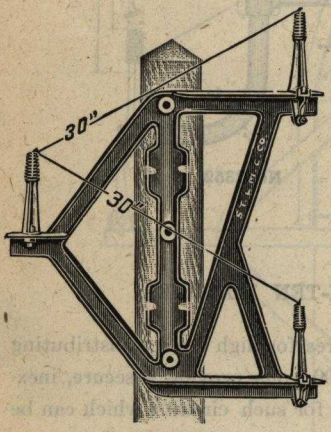
No. 799



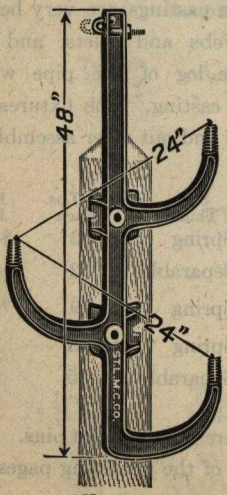
No. 782



No. 784



No. 286



No. 281

TYPE M POLE TOP ARMS

For Telegraph and Telephone Purposes

Trade No.	Mfrs. No.	No. of Pins	Center Holes Inches	Opening Slot Inches	Wt., Lbs. without Pins	Price, Each without Pins Plain	Galv.
107546	796	2	13/16	11/16	8½	$1.30	$1.65
107547	797	3	13/16	11/16	10½	1.60	2.00
107548	798	4	13/16	11/16	11	1.65	2.10
107549	799	6	13/16	11/16	16	2.40	3.00

Pin spacing between heads, 10 inches; between bolt holes, 12 inches.

TYPE P POLE TOP ARMS

Extra Heavy, for High Tension Light and Power Wires

107550	782	2	13/16	11/16	12½	1.90	2.40
107551	784	3	13/16	11/16	22	3.30	4.15

Pin spacing between heads, 24 inches; between bolt holes, 12 inches.

TYPE R TRIANGLE POLE ARMS

Cast in One Piece, for High Tension Light and Power Wires

107552	286	3	13/16	11/16	33	4.00	5.00

Pin spacing between heads, 30 inches; between bolt holes, 12 inches.

In ordering, state if for clamp pins; or if for bolt pins, give diameter of pin shank.

Lightning arrester can be fastened to two upper through-bolts on opposite side arm, as spacing of holes for both is 12 inches.

Prices on other sizes quoted on application.

TYPE V THREE-PIN POLE ARMS

With Lightning Arrester, Cast in One Piece, for High Tension Light and Power Wires

No. 281 has 1-inch slot heads with insertion.

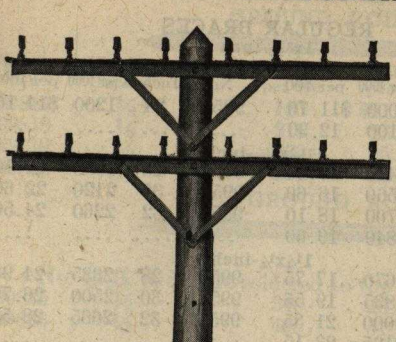
No. 282 has 1⅛-inch separable head for 1⅜-inch insulator.

107553	281	3	13/16	11/16	20	3.00	3.80
107554	282	3	13/16	11/16	20	3.40	4.25

Pin spacing between heads, 24 inches; between bolt holes, 12 inches.

In ordering, specify whether plain or galvanized finish is desired.

HUBBARD CROSS-ARMS



Steel Angle Cross-Arms

STEEL ANGLE CROSS-ARMS

Telephone

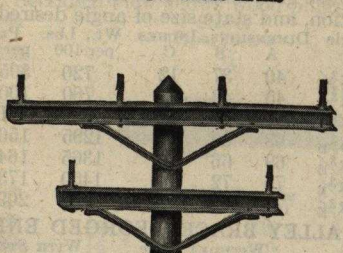
With holes for ½-inch steel pins, ⅝-inch through bolts and ⅜-inch brace bolts.

Trade No.	No. of Pins	Lgth. Inches	Pin Spacing, In. Pole Pins	Side Pins	Dimensions Inches	Wt. Lbs.	Price Each
99595	2	20	16	10	3x2x3/16	5¼	$0.77
99596	4	40	16	10	3x2x3/16	10¼	1.50
99597	6	60	16	10	3x3x¼	15½	2.10
99598	8	80	16	10	3x3x¼	32¾	4.40
99599	10	100	16	10	3x3x¼	41	5.42

Electric Light—N. E. L. A. Standard Spacing

With holes for ¾-inch steel pins, ⅝-inch through bolts and ⅜-inch brace bolts.

99600	2	36	30	....	3x3x¼	14¾	2.04
99601	4	65	30	14½	3x3x¼	26½	3.56
99602	6	94	30	14½	3½x3½x5/16	56½	7.34
99603	8	108	30	12	3½x3½x5/16	65	8.44



Steel Channel Cross-Arms

STEEL CHANNEL CROSS-ARMS

Electric Light—N. E. L. A. Standard Spacing

With holes for ¾-inch steel pins, ⅝-inch through bolts and ⅜-inch brace bolts.

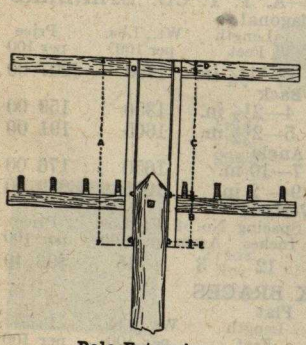
99604	2	36	30	....	4x1½x3/16	15¾	2.22
99605	4	65	30	14½	4x1½x3/16	28½	3.98
99606	6	94	30	14½	4x1¾x11/32	57	7.64
99607	8	108	30	12	4x1¾x11/32	64¼	8.80

Power

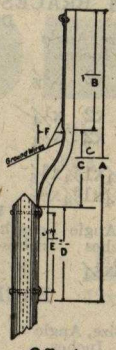
With holes for ¾-inch steel pins, ⅝-inch through bolts and ⅜-inch brace bolts.

99608	2	52	48	....	4x1½x3/16	22¾	3.18
99609	2	76	72	....	4x1½x3/16	33¼	4.60
99610	4	76	24	24	4x1¾x11/32	46	6.24
99611	4	112	36	36	4x1¾x11/32	67¾	8.98

The above prices are for arms only, without pins, braces or bolts.



Pole Extension Angle



Offset Bayonet

POLE EXTENSION ANGLES

Standard size to raise arm 42 inches above bell arm is listed, but can be furnished to any dimensions desired. In ordering, refer to letters on illustration.

Trade No.	Total Length Inches	Size Angle Inches	Holes for Bolts Inches	Wt., Lbs. per Pair	Price per Pair
99612	70	3x3x¼	⅝	57	$6.20

OFFSET BAYONETS

Dimensions, Inches							Wt.	Without Clamp		With Clamp	
Length	A	B	C	D	E	F	Lbs.	Trade No.	Price Each	Trade No.	Price Each
81	81	34	21½	26½	22	7	29	99613	$3.40	99614	$3.70

Other sizes furnished on request.



Steel Cable Arm

STEEL CABLE ARMS

Trade No.	No. of Cables	Length Inches	Spacing between Cables, In. Middle	Side	Size Angle Inches	Wt. Lbs.	Price Each
99615	4	36	20	6	3x3x¼	22	$3.50
99616	6	48	20	6	3x3x¼	30	4.70
99617	4	36	20	6	5x3x5/16	32	4.80
99618	6	48	20	6	5x3x5/16	44	6.70

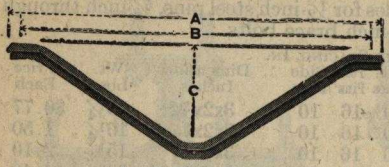
The last two sizes are A. T. T. standards.

Prices cover arms complete with clamps and bolts, without braces.

HUBBARD CROSS-ARM BRACES



Regular Brace



Angle Iron Brace



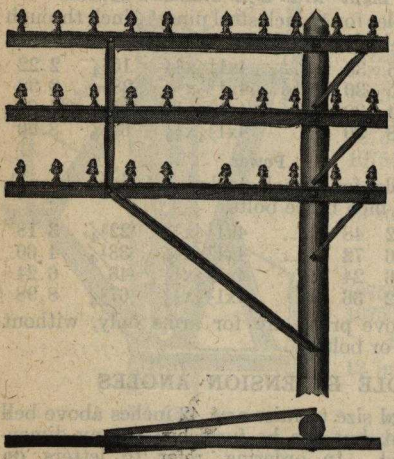
Angle Iron Alley Brace



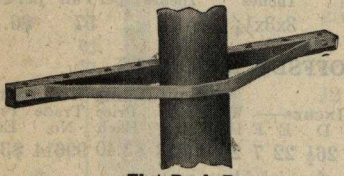
Diagonal Brace



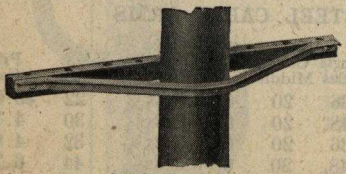
Back Brace



Showing Diagonal, Back and Vertical Brace Assembled



Flat Back Brace



Angle Back Brace



Vertical Brace

REGULAR BRACES

Trade No.	Length Inches	Wt., Lbs. per 1000	Price per 100	Trade No.	Length Inches	Wt., Lbs. per 1000	Price per 100
		1x3/16-inch					
99546	20	1000	$11.70	99548	24	1200	$14.10
99547	22	1100	12.90	....	....	....	....
		1 7/32x7/32-inch					
99549	20	1420	15.10	99553	28	1980	21.10
99550	22	1560	16.60	99554	30	2120	22.60
99551	24	1700	18.10	99555	32	2260	24.50
99552	26	1840	19.60	....	....	....	....
		1¼x¼-inch					
99556	20	1670	17.75	99560	28	2335	24.95
99557	22	1835	19.55	99561	30	2500	26.75
99558	24	2000	21.35	99562	32	2665	28.55
99559	26	2165	23.15	....	....	....	....

ANGLE IRON BRACES

Angle iron braces furnished to specifications. When writing please give dimensions, A, B, C, as indicated on illustration, and state size of angle desired.

Trade No.	Size, Angle Inches	Dimensions, Inches A	B	C	Wt., Lbs. per 100	Price per 100
99563	1½x1½x3/16	40	37	12	720	$95.00
99564	1½x1½x3/16	45	42	12	780	100.00
99565	1½x1½x3/16	51	48	14¾	885	111.00
99566	1¾x1¾x3/16	63	60	18	1295	156.00
99567	1¾x1¾x3/16	69	66	20	1365	164.00
99568	1¾x1¾x3/16	75	72	18	1450	173.00
99569	2 x2 x3/16	75	72	22	1830	209.00

ANGLE IRON ALLEY BRACES, FORGED ENDS

Size, Angle Inches	Length Feet	Wt., Lbs. per 100	Without Step Trade No.	Without Step Price per 100	With Step Trade No.	With Step Price per 100
1½x1½x⅛	5	775	99570	$93.50	99592	$133.50
1½x1½x3/16	5	1090	99571	127.00	99593	167.00
1½x1½x3/16	6	1270	99572	144.50	99594	184.50
1½x1½x3/16	7	1450	99573	165.00	99619	205.00
1¾x1¾x3/16	7	1690	99574	191.00	99620	231.00
2 x2 x¼	10	3600	99575	415.00	99621	460.00

ALLEY ARM BRACES—A. T. T. CO. STANDARD

Trade No.	Size, Angle Inches	Length Feet	Wt., Lbs. per 100	Price per 100
		Diagonal		
99576	2 x2 x3/16	6—11¼ in.	1750	$207.00
		Back		
99577	2 x2 x¼	4—2½ in.	1350	159.00
99578	2 x2 x¼	5—2½ in.	1665	191.00
		Angle		
99584	1¾x1¾x3/16	7—10 in.	1650	176.00
99585	1¾x1¾x3/16	9— 2 in.	1935	219.00

Trade No.	Size, Angle Inches	Length Inches	Spacing Inches	No. of Arms	Wt., Lbs. per 100	Price per 100
		Vertical				
99579	2x2x¼	28	12	3	745	$96.40

BACK BRACES

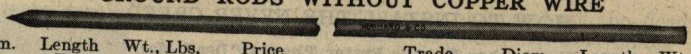
Trade No.	Size, Angle Inches	Length Feet	Wt., Lbs. per 100	Price per 100
		Flat		
99580	1½x⅜	6	1150	$128.00
		Angle		
99581	1½x1½x⅛	4	512	77.60
99582	1½x1½x⅛	5	635	91.40
99583	1½x1½x3/16	6	1100	133.60

VERTICAL BRACES

Trade No.	Size, Angle Inches	Length Over All, In.	Spacing Inches	No. of Arms	Wt., Lbs. per 100	Price per 100
99586	1½x1½x3/16	16	12	2	240	$38.20
99587	1½x1½x3/16	28	12	3	420	58.20
99588	1½x1½x3/16	40	12	4	600	85.00
99589	1¾x1¾x3/16	22	18	2	385	52.50
99590	1¾x1¾x3/16	40	18	3	700	91.50
99591	1¾x1¾x3/16	58	18	4	1015	129.30

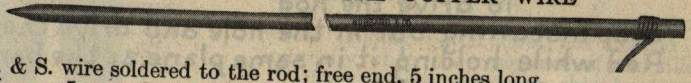
GROUND RODS AND GROUND PLATES

GROUND RODS WITHOUT COPPER WIRE



Trade No.	Diam. Inches	Length Feet	Wt., Lbs. per 100	Price per 100	Trade No.	Diam. Inches	Length Feet	Wt., Lbs. per 100	Price per 100
99817	3/8	5	180	$21.80	99821	1/2	7	460	$46.00
99818	3/8	6	215	25.70	99822	5/8	6	600	60.00
99819	1/2	5	330	35.00	99823	5/8	7	700	70.00
99820	1/2	6	395	40.50	99824	5/8	8	800	80.00

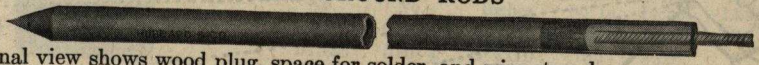
GROUND RODS WITH COPPER WIRE



No. 12 B. & S. wire soldered to the rod; free end, 5 inches long.

99825	1/2	5	340	46.15	99827	5/8	6	615	80.00
99826	1/2	6	405	51.50	....	....	....	....	....

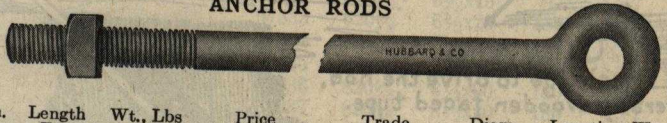
PIPE GROUND RODS



Sectional view shows wood plug, space for solder, and wire strand.

Trade No.	Size of Pipe, Inches	Length Feet	Wt., Lbs. per 100	Price per 100
99829	3/4	8	875	$85.00

ANCHOR RODS



Trade No.	Diam. Inches	Length Feet	Wt., Lbs per 100	Price per 100	Trade No.	Diam. Inches	Length Feet	Wt., Lbs. per 100	Price per 100
99830	1/2	5	355	$46.00	99838	3/4	7	1125	$122.70
99831	1/2	6	410	52.80	99839	3/4	8	1274	136.40
99832	1/2	7	465	59.60	99840	3/4	9	1475	152.00
99833	5/8	5	550	64.00	99841	1	8	2320	256.70
99834	5/8	6	650	74.00	99842	1	10	2850	308.60
99835	5/8	7	750	84.00	99843	1 1/4	10	4500	510.00
99836	5/8	8	850	94.00	99844	1 1/2	12	7750	864.00
99837	3/4	6	975	108.00	.....	.....	....	....	.....

Prices on rods include the nut but no washer. See washer list.

ROCK GUY ANCHORS



Trade No.	Mfrs. No.	Size Inches	Wt., Lbs. per 100	Price per 100
99849	3074	1 1/4 x 3/8 x 9 1/2	400	$140.00



GROUND PLATES

Trade No.	Size Inches	Gauge No.	Wt., Lbs. per 100	Price per 100
99850	12x12	20	160	$30.00



PARAGON GROUND CONES

Trade No.	Mfrs. No.	Length Feet	Gauge Copper	Price Each
145829	1	1	25	$2.75
145830	2	2	25	4.00
145831	3	1	21	3.25
145832	4	2	21	4.50

Nos. 1 and 2 are for telephone and telegraph construction.

Nos. 3 and 4 are recommended for electric light installation. Prices on special sizes upon application.

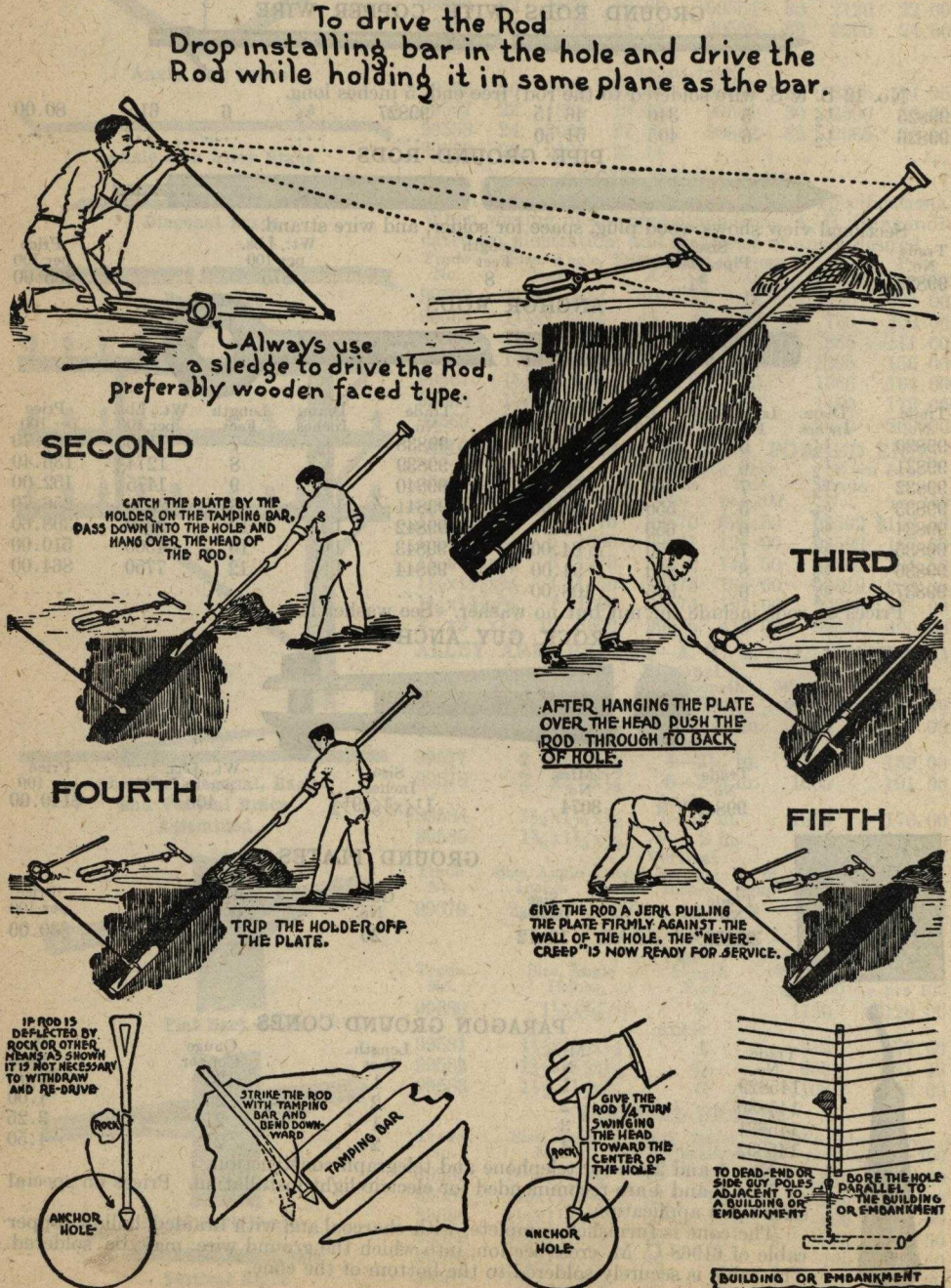
The cone is furnished complete, with charcoal and with braided, hollow copper cable of 61968 C. M. cross section, into which the ground wire may be soldered. The cable is securely soldered to the bottom of the cone.

NEVER-CREEP ANCHORS

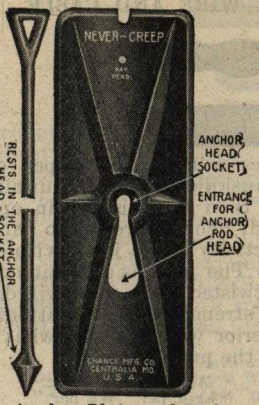
HOW TO INSTALL THE NEVER-CREEP

The Anchor That is Better Than a "Dead Man."

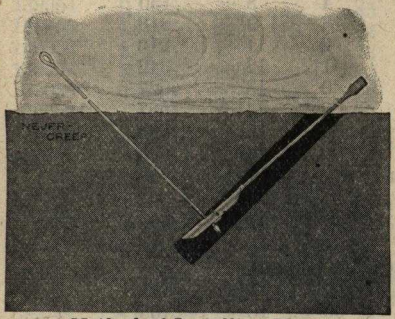
First, locate the spot desired for the anchor rod and measure from that point, back from the pole, the length of the rod and start the hole at this point. Use an 8-inch auger and bore the hole as nearly at a right angle to the line of strain as conditions will allow. Next, drive the rod.



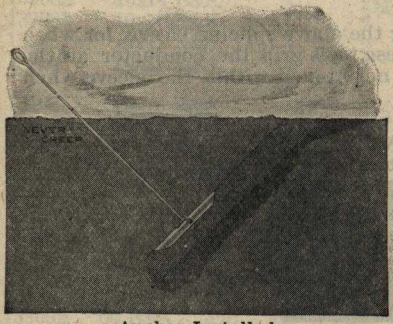
NEVER-CREEP ANCHORS



Anchor Plate and Rod



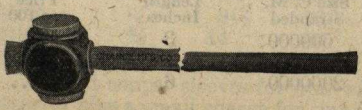
Method of Installing Plate



Anchor Installed



Installing Bar



Cast Maul

Never-Creep Anchors beat the deadman. They are more easily installed and hold more. An ordinary 8-inch auger is all that is required to install all sizes up to and including the 36-inch.

The Never-Creep Anchors, like the deadman, are practically unlimited in size. They are made to meet every anchoring requirement. No work is too light or strain too great for the Never-Creep to be the most economical way to anchor.

They are the only anchors or method of anchoring whose holding power does not depend directly or indirectly upon the resistance of the filled in earth.

They cannot creep nor skid because the anchor plate pulls entirely against the solid, undisturbed earth.

Trade No.	Mfrs. No.	Size of Plate Inches	Holding Surface Sq. In.	Size of Rod Inches	Wt. Lbs	Price, Each Anchor Complete
97327	510 1/2	5 1/2x10	55	1/2x5	7	$1.50
97328	510 1/2	5 1/2x10	55	1/2x6	8	1.60
97329	615 1/2	6 1/2x15	97	1/2x5	10	2.00
97330	615 1/2	6 1/2x15	97	1/2x6	11	2.10
97331	615 5/8	6 1/2x15	97	5/8x6	13 1/2	2.60
97332	615 5/8	6 1/2x15	97	5/8x7	14 1/2	2.90
97333	620 5/8	6 1/2x20	130	5/8x6	16	3.10
97334	620 5/8	6 1/2x20	130	5/8x7	17	3.40
97335	620 5/8	6 1/2x20	130	5/8x8	18	3.70
97336	820 5/8	8 1/2x20	180	5/8x6	20	3.70
97337	820 5/8	8 1/2x20	180	5/8x7	21	4.00
97338	820 5/8	8 1/2x20	180	5/8x8	22	4.30
97339	820 3/4	8 1/2x20	180	3/4x6	23	4.50
97340	820 3/4	8 1/2x20	180	3/4x7	24	4.80
97341	820 3/4	8 1/2x20	180	3/4x8	25	5.10
97342	825 5/8	8 1/2x25	212	5/8x6	22	4.50
97343	825 5/8	8 1/2x25	212	5/8x7	23	4.80
97344	825 5/8	8 1/2x25	212	5/8x8	24	5.10
97345	825 3/4	8 1/2x25	212	3/4x6	25	5.20
97346	825 3/4	8 1/2x25	212	3/4x7	27	5.50
97347	825 3/4	8 1/2x25	212	3/4x8	29	5.80
97348	830 3/4	8 1/2x30	255	3/4x6	30	5.70
97349	830 3/4	8 1/2x30	255	3/4x7	32	6.00
97350	830 3/4	8 1/2x30	255	3/4x8	34	6.30
97351	835 3/4	8 1/2x35	297	3/4x6	35	7.00
97352	835 3/4	8 1/2x35	297	3/4x7	37	7.30
97353	835 3/4	8 1/2x35	297	3/4x8	39	7.60
97354	835–1	8 1/2x35	297	1 x7	44	9.20
97355	835–1	8 1/2x35	297	1 x8	47	9.60
97356	835–1	8 1/2x35	297	1 x9	50	10.00
97357	1040–1	11 x40	440	1 x7	62	11.20
97358	1040–1	11 x40	440	1 x8	64	11.60
97359	1040–1	11 x40	440	1 x9	66	12.00

NEVER-CREEP INSTALLING BARS

The Installing Bar is a turned maple handle 10 feet long with a galvanized Never-Creep holder mounted on one end and a malleable tamp head on the other. The bar is strong and light and makes the handling of the Never-Creep easy. By dropping the bar into the auger hole, the projecting end is very beneficial in sighting the rod when driving.

Trade No.	Description	Price Each
97360	Never-Creep installing bar..... ...	$2.60

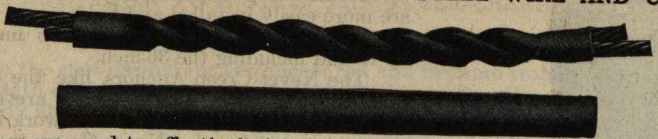
WOOD INSERT CAST MAULS

Has two wooden faces and two iron faces. In driving the rods it is very necessary to use a sledge or maul that is heavier than the rod, otherwise the blow will not exert much driving force.

97361	14-lb. maul, for 1/2, 5/8 and 3/4-in. rods....	2.25
97362	18-lb. maul, for 1-in. rods.....	2.60
97363	Pair extra wooden inserts, boiled and turned.....	.40

CLARK TWIST CONNECTORS

SPLICING SLEEVES, FOR COPPER AND STEEL WIRE AND CABLE



These sleeves are used to effectively join together two wires or cables of copper, copper clad steel, or bare steel. The joint is quickly made, even by unskilled labor, by running the two conductor ends into and through the oval sleeve and then by twisting in opposite directions at each end of the sleeve. There is no solder used; hence there is no danger of annealing and weakening the line at the joint. The conductivity of the joint, with copper conductor, is about 250 per cent of that of the conductor. The joint is guaranteed to be stronger than the conductor. Tests show that the conductor twisted in the joint will develop on an average in excess of 98½ per cent of its ultimate tensile strength. Special attention is given to the annealing, with the idea of producing a hard exterior wall, but somewhat softer interior. Being made of pure copper, the prices will vary with the price of copper.

Trade No.	Size B. & S.	Approx. Lgth. per Sleeve Inches	Approx. Wt. per Sleeve Pounds	Price per 100 Sleeves
For Solid Wire				
079654	14	2¾	.014	....
079655	13	3	.020	....
079656	12	3¼	.023	....
079657	11	3½	.024	....
079658	10	3½	.027	....
079659	9	4½	.034	....
079660	8	5	.050	....
079661	7	5½	.078	....
079662	6	6	.090	....
For Steel Cable (Sleeves are Extra Heavy and Tinned)				
68044	¼ in.	14	.40	....
68045	5/16 in.	18	.90	....
68046	⅜ in.	22	1.25	....
For Seven-strand and Standard Strand Copper Cable				
079667	4	11	.279	....
079668	3	12	.304	....
079669	2	12	.342	....
079670	1	13	.527	....

Trade No.	Size B. & S.	Approx. Lgth. per Sleeve Inches	Approx. Wt. per Sleeve Pounds	Price per 100 Sleeves
079671	5	7	.119	....
079672	4	8	.130	....
079673	3	9½	.213	....
079674	2	11	.219	....
079675	1	12	.342	....
079676	0	13	.527	....
079677	00	14½	.587	....
079678	000	16	.768	....
079679	0000	18	1.095	....
68047	7/16 in.	24	1.50	....
68048	½ in.	26	1.85	....
.....	.....	..	....	....
079684	0	14½	.641	....
079685	00	16	.768	....
079686	000	18	1.095	....
079687	0000	18	1.185	....

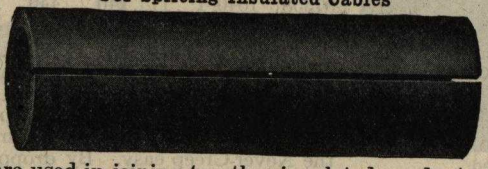
SPLICING TOOLS

These steel twisting tools should be used in applying the above splicing sleeve, for when so used the line will develop its maximum strength. These tools grip the conductor at the ends of the sleeve and are so made that the conductor is not kinked within the sleeve when twisting is started.

Price, per clamping outfit, $5.00 to $10.00.

SPLIT TINNED COPPER CONNECTORS

For Splicing Insulated Cables



These connectors are used in joining together insulated conductor, usually used in conduits, etc. They are supplied of pure soft copper with a split running the entire length and entirely covered by a coating of tin. After sufficient insulation is removed the cable ends are butted together and solder poured into the joint. These connectors provide, at a minimum cost of insulation to cover them, efficient, neat and economical joints. Being supplied entirely of copper, the prices will depend upon the price of copper but will approximate those shown below.

Trade No.	Size B. & S. Stranded	Approx. Length Inches	Price per 100
079688	2	2	....
079689	0	2	....
079690	0000	2¼	....

Trade No.	Size C. M. Stranded	Approx. Length Inches	Price per 100
079691	500000	3	....
079692	1000000	4	....
079693	2000000	6	....

Prices Quoted Upon Application

RELIABLE SLEEVE CONNECTORS



DOUBLE TUBE COPPER SLEEVES

Reliable double tube copper sleeves are accurately made from pure soft copper and are brazed throughout their entire length.

Reliable split sleeves are made for attaching drop wires and branch circuits to the main line without cutting the main line wires.

Reliable tinned copper sleeves for splicing iron wires are made for all sizes of iron wire.

For splicing two wires of different sizes, use Reliable Combination Sleeves.

Split single tube tinned copper soldering connectors for splicing cable wires are made in sizes No. 0000 to No. 16 B. & S. gauge.

Use standard lineman's splicing clamps for twisting sleeves—three full turns for copper sleeves and two and one-half turns for tinned copper sleeves.

Standard Sizes

Trade No.	Gauge Wire	Diam. Wire	Length Sleeve Inches	Wt., Lbs. per 100	Price per 100
139051	0000 B&S	.460	20	140	....
139052	000 B&S	.410	18	95	....
139053	00 B&S	.365	16	84	....
139054	0 B&S	.325	14	45	....
139055	1 B&S	.289	12	32	....
139056	2 B&S	.258	9½	23	....
139057	3 B&S	.229	8¾	20	....
139058	4 B&S	.204	6¾	13	....
139059	4 B&S	.204	8	18	....
139060	6 B&S	.162	6¾	10¾	....
139061	7 B&S	.144	5½	8	....
139062	8 B&S	.128	5½	7	....
139063	8 BWG	.165	6¾	10¾	....
139064	9 B&S	.114	5¼	6½	....
139065	10 B&S	.101	4¾	3½	....
139066	10 BWG	.134	5½	5½	....
139067	10 NBS	.128	5½	6½	....
139068	11 BWG	.120	5¼	6½	....
139069	12 BWG	.109	4¾	4¼	....
139070	12 NBS	.104	4¾	3¾	....
139071	12 B&S	.080	4½	2¾	....
139072	14 NBS	.083	4½	3	....
139073	14 B&S	.064	4	2	....
139074	14 B&S	.064	3	1½	....
139075	16 B&S	.050	4	1½	....
139076	17 B&S	.045	4	1¾	....
139077	17 B&S	.045	3½	1½	....
139078	18 B&S	.040	4	1¼	....

Combination Sizes

Trade No.	Gauge Wire	Length Sleeve Inches	Wt., Lbs. per 100	Price per 100
139079	8 BWGx12NBS	6¾	8	....
139080	8x10 B&S	5½	5¼	....
139081	10x12 B&S	4¾	3	....
139082	10x14 B&S	4	2¾	....
139083	10x16 B&S	4	2	....
139084	10x17 B&S	4	2	....
139085	10x18 B&S	4	2	....
139086	10x10 B&S	4¾	3½	....
139087	10x12 B&S	4¾	3	....
139088	12x12 B&S	4½	2¾	....
139089	12x14 B&S	4½	2½	....
139093	12x14 B&S	4	2½	....
139094	12x16 B&S	4	1¾	....
139095	12x17 B&S	4	1⅞	....
139096	12x18 B&S	4	1⅞	....
139097	14x17 B&S	4	1½	....
139098	14x18 B&S	4	1½	....

Split Sizes

Trade No.	Gauge Wire	Length Sleeve Inches	Wt., Lbs. per 100	Price per 100
139099	12x16 B&S	4½	1¾	....
139100	14x14 B&S	4	2	....
139101	14x16 B&S	4	1¾	....

COPPER SLEEVES FOR SEVEN-STRAND COPPER WIRE

Trade No.	Gauge Wire	Diam. Wire	Length Sleeve Inches	Wt., Lbs. per 100	Price per 100
139090	0000 B&S	.530	20	150	....
139091	000 B&S	.470	20	140	....
139092	00 B&S	.420	18	95	....
139102	0 B&S	.375	16	84	....
139103	1 B&S	.330	14	45	....
139104	2 B&S	.291	12	32	....

TINNED STEEL SLEEVES FOR IRON WIRE

139109	8 BWG	.165	6¾	10	....
139108	9 BWG	.148	5¾	6	....
139110	10 BWG	.134	5½	5½	....
139111	12 BWG	.109	4¾	3¾	....
139112	14 BWG	.083	4½	3	....

TINNED COPPER SLEEVES FOR GALVANIZED IRON STRAND

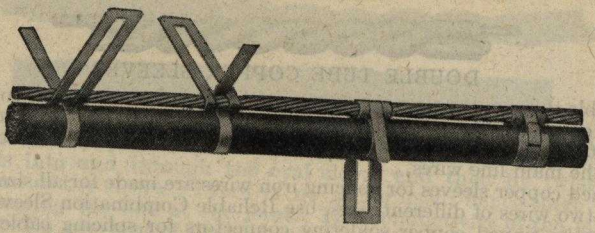
Trade No.	Diam. of Strand In.	Length In.	Wt. Lbs. per 100	Price per 100
139105	¼	9½	26	....
139106	5/16	14	50	....
139107	⅜	16	92	....

Reliable sleeves are also made in half lengths.

Tinned copper sleeves for iron wire take the same price as standard copper sizes of nearest diameter plus a small charge for tinning.

RELIABLE CABLE HANGERS AND CONNECTORS

DAVIDSON CABLE HANGERS

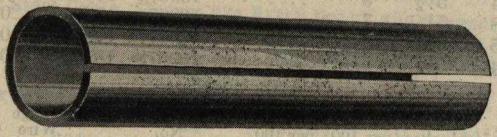


Made from pure iron, protected with a heavy coating of lead and tin. By holding the cable close to the messenger this hanger overcomes most of the vibration to which a loosely hung cable is subjected. By a double tie around messenger and cable, the sheath is electrically bonded to the messenger at each hanger, so that punctures, due to insufficient bonding, do not occur. On account of the large surface supporting the cable at each hanger, the lead sheath does not dent, crystallize or crack at points of contact.

Trade No.	Mfrs. No.	Length Inches	Description	Wt. Lbs. per 1000	Price per 1000
139123	1	8	For 5 to 25 pair cables	20	$13.00
139124	2	11	For 30 to 150 pair cables	35	15.50
139125	3	14	For 175 to 300 pair cables	50	17.50
139126	4	16	For 325 to 400 pair cables	65	19.50

RELIABLE SPLIT TINNED COPPER CONNECTORS

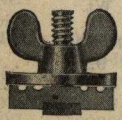
For Splicing Underground Cable Lines



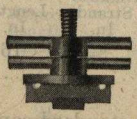
These connectors are made of soft copper and the entire surface is tinned. They are especially adapted for use on underground cables.

Trade No.	Size Conductor	Length Inches	Approx. Inside Diam., In	Price per 100
139127	6 B&S Solid	2	.166	$7.80
139128	5 B&S Solid	2	.185	7.80
139129	4 B&S Solid	2	.208	10.00
139130	4 B&S Strd.	2	....	10.40
139131	3 B&S Strd.	2	.268	10.40
139132	2 B&S Strd.	2	.298	11.00
139133	1 B&S Strd.	2	.339	12.20
139134	0 B&S Strd.	2	.381	21.00
139135	00 B&S Strd.	2	.428	22.00
139136	000 B&S Strd	2	.480	28.60
139137	0000 B&S Strd.	2¼	.539	35.20
139138	250000 C.M.	2¼	.587	40.00
139139	300000 C.M.	2½	.643	48.00
139140	350000 C.M.	2½	.695	58.00
139141	400000 C.M.	2¾	.744	66.00
139142	450000 C. M.	2¾	.789	80.00
139143	500000 C.M.	3	.831	$92.00
139144	550000 C.M.	3	.872	94.00
139145	600000 C.M.	3	.911	100.00
139146	650000 C.M.	3	.948	102.00
139147	700000 C.M.	3	.984	106.00
139148	750000 C.M.	3½	1.018	128.00
139149	800000 C.M.	3½	1.051	138.00
139150	850000 C.M.	3½	1.082	148.00
139151	900000 C.M.	3½	1.115	156.00
139152	950000 C.M.	3½	1.146	168.00
139153	1000000 C.M.	4	1.180	172.00
139154	1250000 C.M.	4	1.320	244.00
139155	1500000 C.M.	5	1.440	294.00
139156	2000000 C.M.	6	1.670	502.00
139157	2500000 C.M.	6½	1.824	610.00
.....	.....	...	.....	.....

RELIABLE TEST CONNECTORS



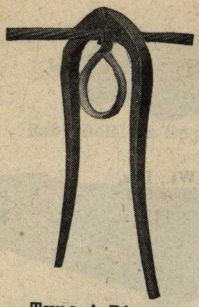
No. 00 Connector



No. 000 Connector

Trade No.	Mfrs. No.	Description	Price per 100
012798	00	One wing nut	$28.00
139158	000	Two wing nut	30.00
012799	255	One-bolt	14.00
012800	256	One-bolt thumbnut	18.00
012801	257	Two-bolt	20.00
012802	258	Two-bolt extra heavy	30.00

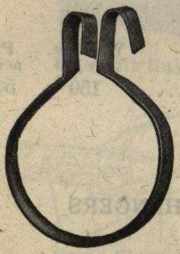
CABLE HANGERS



Type A Ring Showing Plier Used to Attach Rings to Strand



Type C Ring Showing Edge



Type D Ring



Marline Hanger



Bridle Ring

LOCKE AERIAL CABLE RINGS

These rings are galvanized metal cable hangers which last as long as the strand to which they are attached.

Type A

Type A rings have an inside diameter of 1¾ inches and are large enough for all cable up to 100 pair No. 22.

Trade No.	Diam. Inches	Std. Pkg.	Wt. Lbs.	Price per 1000
093401	1¾	1000	61	$12.00

Type C

Type C rings have two hooks, making them very strong.

093402	1¾	1000	65	14.50
093403	2	1000	68	15.50
093404	2¼	500	41	16.50
093405	2½	500	47	18.00
093406	3	500	53	20.00
093407	3½	250	29	24.00

Type D

Type D rings also have two hooks but they drop on the strand direct, whereas Type C must be passed over the supporting wire and then given a quarter turn before engaging same.

69471	1¾	1000	78	14.50
69472	2	1000	85	15.50
69473	2½	500	50	18.00
69474	3	500	58	20.00
69475	3½	250	32	24.00

The hooks or eyes on all sizes and types of rings are formed to fit any strand diameter. Specify strand size when ordering.

Pliers for Attaching Rings

Made in two sizes: Small size for 1¾ and 2-inch rings, and large size for 2¼, 2½, 3 and 3½-inch rings.

Trade No.	Description	Price Each
093408	Small size	$3.00
093409	Large size	4.00
69476	Adjustable size	16.00

MARLINE CABLE HANGERS

No. 1

The hooks are made of No. 9 galvanized steel wire.

Trade No.	Hook No.	Description	Wt., Lbs. per 1000	Length of Loop, In.	Size of Cable, Pair	Price per 1000
076005	9	2-ply marline	30	9	25	$5.25
076006	9	2-ply marline	33	11	50	5.75
076007	9	2-ply marline	34	12	75	6.00
076008	9	3-ply houseline	40	14	100	7.35
076009	9	3-ply houseline	42	15	150	7.65
076010	9	3-ply houseline	45	16	200	8.00

No. 3 A. T. & T. Specifications

The hooks are made of No. 9 spring steel wire and are regalvanized by hot dip process after they are formed.

076011	9	3-ply houseline	35	9	25	6.40
076012	9	3-ply houseline	37	11	50	7.00
076013	9	3-ply houseline	38	12	75	7.35
076014	9	3-ply houseline	40	14	100	7.85
076015	9	3-ply houseline	42	15	150	8.15
076016	9	3-ply houseline	45	16	200	8.50

No. 6 regalvanized hooks furnished on this grade at a net advance of 1.50 per thousand.

BRIDLE RINGS

Trade No.	Style	Size, Inches: Eye	Opening	Shank	Price per 1000
012160	A	1⅝	¼	1¼	$112.00
012162	C	1¼	¼	1½	106.00
012164	E	⅝	¼	⅞	80.00
012165	F	3	¼	1¾	194.00

The prices listed above are for gray enamel. Prices on galvanized on application.

HUBBARD LINE MATERIAL

GUY CLAMPS



Two-Bolt Guy Clamp

Two-Bolt

Trade No.	Dimensions Inches	Wt., Lbs. per 100	Price per 100
99767	1 9/16 x 3/8 x 3	115	$34.00

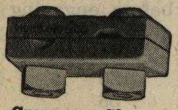
Three-Bolt



Three-Bolt Guy Clamp

Trade No.	Dimensions Inches	Wt., Lbs. per 100	Price per 100
99768	1 9/16 x 3/8 x 4	185	45.70
99769	1 9/16 x 3/8 x 6	210	54.50

CROSSOVER CLAMPS



Crossover Clamp

Trade No.	Dimensions Inches	Wt., Lbs. per 100	Price per 100
99770	1 1/2 x 1 1/2 x 3 3/8	190	77.50

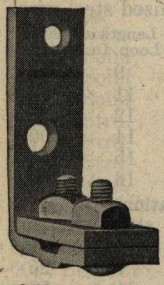
MESSENGER HANGERS



Messenger Hanger

Trade No.	Description	Wt., Lbs. per 100	Price per 100
99771	Non-breakable.....	150	54.00

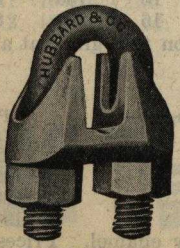
UNIVERSAL MESSENGER HANGERS



Universal Messenger Hanger

Trade No.	Mfrs. No.	Dimensions* Inches	Length of Legs, In.	Wt., Lbs. per 100	Price per 100
99772	1	2 x 1/2	5x3 1/4	325	$80.00
99773	2	1 3/4 x 3/8	5x3 1/4	235	70.00

WIRE ROPE CLIPS



Wire Rope Clip

Trade No.	Size of Strand, In.	Wt., Lbs. per 100	Price per 100
99774	1/4	25	$35.00
99775	5/16	25	35.00
99776	3/8	37	40.00
99777	7/16	37	45.00
99778	1/2	75	45.00
99779	5/8	87	55.00
99780	3/4	175	65.00
99781	7/8	200	75.00
99782	1	300	85.00

MATTHEWS CLAMPS



Baby Boltless Guy Clamp



Giant Boltless Guy Clamp

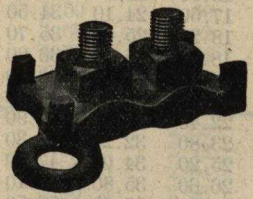
MATTHEWS BOLTLESS GUY CLAMPS

Matthews Boltless Guy Clamps are extremely simple in their construction. Only tool needed is a hammer.

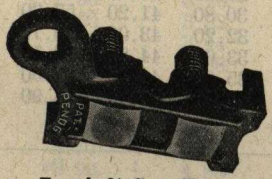
The Baby clamp is designed for use on ¼-inch and 5/16-inch guy strand. Holding power up to 5000 pounds.

The Giant clamp is designed for use on 5/16-inch and ⅜-inch guy strand. Holding power up to 8000 pounds.

Trade No.	Style	Ship. Wt., per 100	List Price, Each: Less than 500	500–999	Over 999
058148	Baby	50	$0.23	$0.22	$0.21
058149	Giant	130	.38	.36	.34



Two-bolt Guy Clamp



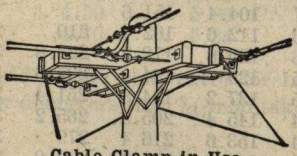
Two-bolt Guy Clamp

MATTHEWS TWO-BOLT GUY CLAMPS

Made in one size only. Prevent the possibility of scarring or nicking the cable by driving the clamp with a hammer as it is pulled into position with a chain lever and the feet on one of the clamping plates prevent guys from jumping out. Will fit all sizes of guy strand up to ½-inch. Will hold 16000 pounds.

Trade No.	Description	List Price, Each: Less than 1000	Over 999
058162	Two-bolt guy clamp.....	$0.64	$0.64
058163	Chain lever.....	5.00	....

Shipping weight of clamps, per 100, 200 pounds.



Cable Clamp in Use

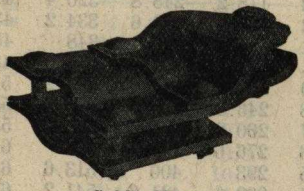
MATTHEWS CABLE CLAMPS

For Use on Power Cable only

These clamps are designed to relieve the strain from power cable ranging in size from 000 up to 2000000 C. M. at corners and dead ends, and to do away with the great expense of splices at these places and the cost of making up into strain insulators, etc. Guaranteed to effect a saving of at least $5.00 per corner turn in cables of 500000 C. M. or larger. Not for telephone cables.

Trade No.	Finish	List Price, Each: Less than 25	25 to 49	50 and Over
047982	Painted black	$2.70	$2.60	$2.50
27124	Galvanized	3.20	3.00	2.90

Packed in bags of 12, 25 and 50 each.
Shipping weight, 425 pounds per 100.

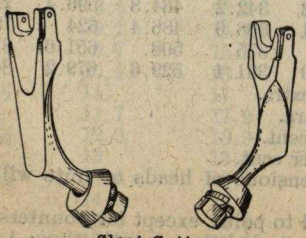


Cable Clamp

MATTHEWS O-K SLEET CUTTERS

Trade No.	Mfrs. No.	For Wheel Size, In.	Wt., Lbs. Packed	List Price Each
27120	1	5 or 6	1¾	$2.00
27121	2	4	1½	1.60
		Brass Lugs		
27122		To fit either size	¼	.60

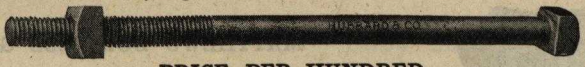
When ordering sleet cutters give make of harp and size of wheel with which they are to be used.



Sleet Cutters

HUBBARD MACHINE BOLTS

SQUARE HEADS, SQUARE NUTS AND FINISHED POINTS



PRICE, PER HUNDRED

Length Inches	Diameter, Inches ¼	5/16	3/8	7/16	½	9/16 & 5/8	¾	⅞	1	1⅛	1¼
¾ to 1½	$1.70	$2.00	$2.40	$2.80	$3.60	$5.20	$7.70	$10.50	$15.10	$22.50	$30.00
2	1.78	2.12	2.56	3.00	3.86	5.58	8.25	11.20	16.00	23.70	31.50
2½	1.86	2.24	2.72	3.20	4.12	5.96	8.80	11.90	16.90	24.90	33.00
3	1.94	2.36	2.88	3.40	4.38	6.34	9.35	12.60	17.80	26.10	34.50
3½	2.02	2.48	3.04	3.60	4.64	6.72	9.90	13.30	18.70	27.30	36.00
4	2.10	2.60	3.20	3.80	4.90	7.10	10.45	14.00	19.60	28.50	37.50
4½	2.18	2.72	3.36	4.00	5.16	7.48	11.00	14.70	20.50	29.70	39.00
5	2.26	2.84	3.52	4.20	5.42	7.86	11.55	15.40	21.40	30.90	40.50
5½	2.34	2.96	3.68	4.40	5.68	8.24	12.10	16.10	22.30	32.10	42.00
6	2.42	3.08	3.84	4.60	5.94	8.62	12.65	16.80	23.20	33.30	43.50
6½	2.50	3.20	4.00	4.80	6.20	9.00	13.20	17.50	24.10	34.50	45.00
7	2.58	3.32	4.16	5.00	6.46	9.38	13.75	18.20	25.00	35.70	46.50
7½	2.66	3.44	4.32	5.20	6.72	9.76	14.30	18.90	25.90	36.90	48.00
8	2.74	3.56	4.48	5.40	6.98	10.14	14.85	19.60	26.80	38.10	49.50
9	2.90	3.80	4.80	5.80	7.50	10.90	15.95	21.00	28.60	40.50	52.50
10	3.06	4.04	5.12	6.20	8.02	11.66	17.05	22.40	30.40	42.90	55.50
11	3.22	4.28	5.44	6.60	8.54	12.42	18.15	23.80	32.20	45.30	58.50
12	3.38	4.52	5.76	7.00	9.06	13.18	19.25	25.20	34.00	47.70	61.50
13	....	....	6.08	7.40	9.58	13.94	20.35	26.60	35.80	50.10	64.50
14	....	....	6.40	7.80	10.10	14.70	21.45	28.00	37.60	52.50	67.50
15	....	....	6.72	8.20	10.62	15.46	22.55	29.40	39.40	54.90	70.50
16	....	....	7.04	8.60	11.14	16.22	23.65	30.80	41.20	57.30	73.50
17	....	....	....	....	11.66	16.98	24.75	32.20	43.00	59.70	76.50
18	....	....	....	....	12.18	17.74	25.85	33.60	44.80	62.10	79.50
19	....	....	....	....	12.70	18.50	26.95	35.00	46.60	64.50	82.50
20	....	....	....	....	13.22	19.26	28.05	36.40	48.40	66.90	85.50

WEIGHT, PER HUNDRED

Length Inches	Diameter, Inches ¼	5/16	3/8	7/16	½	9/16 & 5/8	¾	⅞	1	1⅛	1¼
1½	3.1	5.6	8.8	13.5	18.5	33.4	53.8	88	130	....	....
2	3.7	6.5	10.2	15.4	21	37.5	59.7	96.2	140.8	....	....
2½	4.4	7.5	11.7	17.4	23.6	41.6	65.7	104.4	151.6	....	....
3	5	8.4	13.1	19.3	26.1	45.7	71.6	112.6	162.4	210	286
3½	5.7	9.4	14.6	21.3	28.7	49.8	77.6	120.8	173.2	223.8	302.5
4	6.3	10.3	16	23.2	31.2	53.9	83.5	129	184	237.6	319.1
4½	7	11.3	17.5	25.2	33.8	58	89.5	137.2	194.8	251.4	335.6
5	7.6	12.2	18.9	27.1	36.3	62.1	95.4	145.4	205.6	265.2	352.2
5½	8.3	13.2	20.4	29.1	38.9	66.2	101.4	153.6	216.4	279	368.7
6	8.9	14.1	21.8	31	41.4	70.3	107.3	161.8	227.2	292.8	385.3
6½	9.6	15.1	23.3	33	44	74.4	113.3	170	238	306.6	401.8
7	10.2	16	24.7	34.9	46.5	78.5	119.2	178.2	248.8	320.4	418.4
7½	10.9	17	26.2	36.9	49.1	82.6	125.2	186.4	259.6	334.2	434.9
8	11.5	17.9	27.6	38.8	51.6	86.7	131.1	194.6	270.4	348	451.5
9	....	....	30.5	42.7	56.7	94.9	143	211	292	375.6	484.6
10	....	....	33.4	46.6	61.8	103.1	154.9	227.4	313.6	403.2	517.7
11	....	....	36.3	50.5	66.9	111.3	166.8	243.8	335.2	430.8	550.8
12	....	....	39.2	54.4	72	119.5	178.7	260.2	356.8	458.4	583.9
13	....	....	....	....	77.1	127.7	190.6	276.6	378.4	486	617
14	....	....	....	....	82.2	135.9	202.5	293	400	513.6	650.1
15	....	....	....	....	87.3	144.1	214.4	309.4	421.6	541.2	683.2
16	....	....	....	....	92.4	152.3	226.3	325.8	443.2	568.8	716.3
17	....	....	....	....	97.5	160.5	238.2	342.2	464.8	596.4	749.4
18	....	....	....	....	102.6	168.7	250.1	358.6	486.4	624	782.5
19	....	....	....	....	107.7	176.9	262	375	508	651.6	815.6
20	....	....	....	....	112.8	185.1	273.9	391.4	529.6	679.2	848.7

Bolts with hexagon heads or hexagon nuts, 10 per cent extra.
If both hexagon heads and hexagon nuts, 20 per cent extra.
When fitted with U. S. standard square nuts, add 5 per cent.
When fitted with U. S. standard hexagon nuts, add 15 per cent.
Special bolts with irregular threads and unusual dimensions of heads or nuts will be charged extra.

In ordering bolts please specify length from under head to point, except for countersunk head bolts, which are measured over all. Name diameter first, and then length, thus: ½ x 3.

HUBBARD COMMON CARRIAGE BOLTS



PRICE, PER HUNDRED

Length Inches	Diameter, Inches						
	1/8 and 1/4	5/16	3/8	7/16	1/2	9/16 and 5/8	3/4
1	$1.00	$1.40	$1.90	$2.20	$3.25	$5.75	$8.50
1½	1.00	1.40	1.90	2.20	3.25	5.75	8.50
2	1.10	1.52	2.06	2.40	3.25	5.75	8.50
2½	1.20	1.64	2.22	2.60	3.25	5.75	8.50
3	1.30	1.76	2.38	2.80	3.53	6.13	9.00
3½	1.40	1.88	2.54	3.00	3.81	6.51	9.50
4	1.50	2.00	2.70	3.20	4.09	6.89	10.00
4½	1.60	2.12	2.86	3.40	4.37	7.27	10.50
5	1.70	2.24	3.02	3.60	4.65	7.65	11.00
5½	1.80	2.36	3.18	3.80	4.93	8.03	11.50
6	1.90	2.48	3.34	4.00	5.21	8.41	12.00
6½	2.00	2.60	3.50	4.20	5.49	8.79	12.50
7	2.10	2.72	3.66	4.40	5.77	9.17	13.00
7½	2.20	2.84	3.82	4.60	6.05	9.55	13.50
8	2.30	2.96	3.98	4.80	6.33	9.93	14.00
8½	2.40	3.08	4.14	5.00	6.61	10.31	14.50
9	2.50	3.20	4.30	5.20	6.89	10.69	15.00
9½	2.60	3.32	4.46	5.40	7.17	11.07	15.50
10	2.70	3.44	4.62	5.60	7.45	11.45	16.00
11	2.90	3.68	4.94	6.00	8.01	12.21	17.00
12	3.10	3.92	5.26	6.40	8.57	12.97	18.00
13	3.30	4.16	5.58	6.80	9.13	13.73	19.00
14	3.50	4.40	5.90	7.20	9.69	14.49	20.00
15	3.70	4.64	6.22	7.60	10.25	15.25	21.00
16	3.90	4.88	6.54	8.00	10.81	16.01	22.00
17	4.10	5.12	6.86	8.40	11.37	16.77	23.00
18	4.30	5.36	7.18	8.80	11.93	17.53	24.00
19	4.50	5.60	7.50	9.20	12.49	18.29	25.00
20	4.70	5.84	7.82	9.60	13.05	19.05	26.00

Add 15 per cent extra for hexagon nuts. Intermediate lengths take next higher list. Larger diameters than ¾-inch take machine bolt list.

WEIGHT, POUNDS, PER HUNDRED

Length Inches	Diameter, Inches						
	1/4	5/16	3/8	7/16	1/2	5/8	3/4
1	2.6	4.6	7.1	10.8	14.5	27.1	....
1½	3.2	5.6	8.5	12.8	17.1	31.2	....
2	3.9	6.5	10	14.7	19.6	35.3	....
2½	4.5	7.5	11.4	16.7	22.2	39.4	58.4
3	5.2	8.4	12.9	18.6	24.7	43.5	64.4
3½	5.8	9.4	14.3	20.6	27.3	47.6	70.3
4	6.5	10.3	15.8	22.5	29.8	51.7	76.3
4½	7.1	11.3	17.2	24.5	32.4	55.8	82.2
5	7.8	12.2	18.7	26.4	34.9	59.9	88.2
5½	8.4	13.2	20.1	28.4	37.5	64	94.1
6	9.1	14.1	21.6	30.3	40	68.1	100.1
6½	9.7	15.1	23	32.3	42.6	72.2	106
7	10.4	16	24.5	34.2	45.1	76.3	112
7½	11	17	25.9	36.2	47.7	80.4	117.9
8	11.7	17.9	27.4	38.1	50.2	84.5	123.9
8½	12.3	18.9	28.8	40.1	52.8	88.6	129.8
9	13	19.8	30.3	42	55.3	92.7	135.8
9½	13.6	20.8	31.7	44	57.9	96.8	141.7
10	14.3	21.7	33.2	45.9	60.4	100.9	147.7
11	15.6	23.6	36.1	49.8	65.5	109.1	159.6
12	16.9	25.5	39	53.7	70.6	117.3	171.5

HUBBARD LAG SCREWS



Fetter Drive



Gimlet Point



Twist Drive

Fetter drive lag screws have become practically standard for construction work because of their greater holding power. When driven the threads do not tear the wood. For this reason fetter drive screws will be furnished on all orders unless otherwise specified.

PRICE, PER HUNDRED

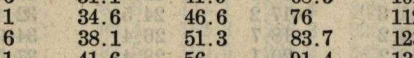
Length, In. under Head	Diameter, Inches							
	¼ and 5/16	3/8	7/16	½	9/16 and 5/8	¾	⅞	1
1½	$2.25	$2.70	$3.15	$3.75	.....	.....	.....	.....
2	2.45	2.96	3.47	4.11	6.00	.....	.....	.....
2½	2.65	3.22	3.79	4.47	6.50	9.20	.....	.....
3	2.85	3.48	4.11	4.83	7.00	9.90	15.00	.....
3½	3.05	3.74	4.43	5.19	7.50	10.60	16.00	22.00
4	3.25	4.00	4.75	5.55	8.00	11.30	17.00	23.30
4½	3.45	4.26	5.07	5.91	8.50	12.00	18.00	24.60
5	3.65	4.52	5.39	6.27	9.00	12.70	19.00	25.90
5½	3.85	4.78	5.71	6.63	9.50	13.40	20.00	27.20
6	4.05	5.04	6.03	6.99	10.00	14.10	21.00	28.50
6½	4.25	5.30	6.35	7.35	10.50	14.80	22.00	29.80
7	4.45	5.56	6.67	7.71	11.00	15.50	23.00	31.10
7½	4.65	5.82	6.99	8.07	11.50	16.20	24.00	32.40
8	4.85	6.08	7.31	8.43	12.00	16.90	25.00	33.70
9	5.25	6.60	7.95	9.15	13.00	18.30	27.00	36.30
10	5.65	7.12	8.59	9.87	14.00	19.70	29.00	38.90
11	6.05	7.64	9.23	10.59	15.00	21.10	31.00	41.50
12	6.45	8.16	9.87	11.31	16.00	22.50	33.00	44.10

The following extras are to be understood as a part of this list.
Hexagon heads, 10 per cent extra.

WEIGHT IN POUNDS, PER HUNDRED

Length Inches	Diameter, Inches							
	5/16	3/8	7/16	½	5/8	¾	⅞	1
1½	3.8	5.4	8.4	11.4	.....	.....	.....	.....
2	4.7	6.6	10.2	13.8	22.2	.....	.....	.....
2½	5.6	7.9	11.9	16.1	26	41	.....	.....
3	6.5	9.1	13.6	18.4	29.8	46.5	64.8	.....
3½	7.4	10.4	15.4	20.8	33.7	52	72.5	103
4	8.3	11.6	17.1	23.1	37.5	57.5	80.2	113
4½	9.2	12.9	18.9	25.5	41.4	63	87.9	123
5	10.1	14.1	20.6	27.8	45.2	68.5	95.6	133
5½	11	15.4	22.4	30.2	49.1	74	103.3	143
6	11.9	16.6	24.1	32.5	52.9	79.5	111	153
7	13.7	19.1	27.6	37.2	60.6	90.5	126.4	173
8	15.5	21.6	31.1	41.9	68.3	101.5	141.8	193
9	17.3	24.1	34.6	46.6	76	112.5	157.2	213
10	19.1	26.6	38.1	51.3	83.7	123.5	172.6	233
11	20.9	29.1	41.6	56	91.4	134.5	188	253
12	22.7	31.6	45.1	60.7	99.1	145.5	203.4	273

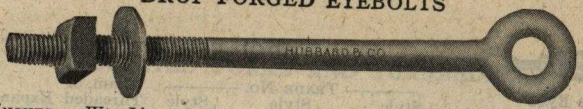
HANGER SCREWS—FOR SUPPORTING MINE HANGERS



Trade No.	Dimens., Inches Diam.	Length	Wt., Lbs. per 100	Price per 100	Trade No.	Dimens., Inches Diam.	Length	Wt., Lbs. per 100	Price per 100
99629	5/8	4	30	$8.44	99631	5/8	5	37	$9.56
99630	5/8	4½	33½	9.00	....	....	....	....	....

HUBBARD BOLTS

DROP FORGED EYEBOLTS



Trade No.	Dimens., Diam.	Inches Length	Wt., Lbs. per 100	Price per 100	Trade No.	Dimens., Diam.	Inches Length	Wt., Lbs. per 100	Price per 100
058025	1/2	6	56.7	$15.00	058048	5/8	14	160.5	$24.58
058026	1/2	7	61.8	15.52	058049	5/8	15	168.7	25.34
058027	1/2	8	66.9	16.04	058050	5/8	16	176.9	26.10
058028	1/2	9	72	16.56	058051	5/8	17	185.1	26.86
058029	1/2	10	77.1	17.08	058052	5/8	18	193.3	27.62
058030	1/2	11	82.2	17.60	058053	5/8	19	201.5	28.38
058031	1/2	12	87.3	18.12	058054	5/8	20	209.7	29.14
058032	1/2	13	92.4	18.66	058055	3/4	6	143	25.65
058033	1/2	14	97.5	19.20	058056	3/4	7	154.9	26.75
058034	1/2	15	102.6	19.72	058057	3/4	8	166.8	27.85
058035	1/2	16	107.7	20.24	058058	3/4	9	178.7	28.95
058036	1/2	17	112.8	20.76	058059	3/4	10	190.6	30.05
058037	1/2	18	117.9	21.28	058060	3/4	11	202.5	31.15
058038	1/2	19	123	21.80	058061	3/4	12	214.4	32.25
058039	1/2	20	128	22.32	058062	3/4	13	226.3	33.35
058040	5/8	6	94.9	18.50	058063	3/4	14	238.2	34.45
058041	5/8	7	103.1	19.26	058064	3/4	15	250.1	35.55
058042	5/8	8	111.3	20.02	058065	3/4	16	262	36.65
058043	5/8	9	119.5	20.78	058066	3/4	17	273.9	37.75
058044	5/8	10	127.7	21.54	058067	3/4	18	285.8	38.85
058045	5/8	11	135.9	22.30	058068	3/4	19	297.7	39.95
058046	5/8	12	144.1	23.06	058069	3/4	20	309.6	41.05
058047	5/8	13	152.3	23.82					

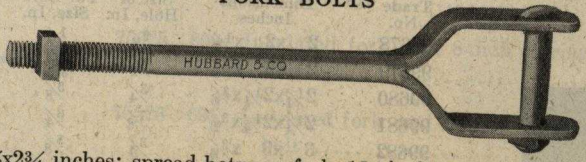
Prices include square nut and round washer.

SPACING OR DOUBLE ARMING BOLTS



058094	1/2	12	78	12.70	058127	5/8	19	198	24.76
058095	1/2	13	83	13.22	058128	5/8	20	208	25.52
058096	1/2	14	88	13.74	058129	5/8	21	218	26.28
058097	1/2	15	93	14.26	058130	5/8	22	228	27.04
058098	1/2	16	98	14.78	058131	5/8	23	238	27.90
058099	1/2	17	103	15.30	058132	5/8	24	248	28.66
058100	1/2	18	108	15.82	058133	3/4	12	220	28.80
058101	1/2	19	113	16.34	058134	3/4	13	232	29.90
058102	1/2	20	118	16.86	058135	3/4	14	244	31.00
058103	1/2	21	123	17.38	058136	3/4	15	256	32.10
058104	1/2	22	128	17.90	058137	3/4	16	268	33.20
058105	1/2	23	133	18.42	058138	3/4	17	280	34.30
058106	1/2	24	138	18.94	058139	3/4	18	292	35.40
058107	5/8	12	138	19.44	058140	3/4	19	304	36.50
058108	5/8	13	145	20.20	058141	3/4	20	316	37.60
058109	5/8	14	153	20.96	058142	3/4	21	328	38.70
058110	5/8	15	162	21.72	058143	3/4	22	340	39.80
058111	5/8	16	168	22.48	058144	3/4	23	352	40.90
058112	5/8	17	178	23.24	058145	3/4	24	364	42.00
058113	5/8	18	188	24.00	.....	....	....	....	....

FORK BOLTS



Size of bolt, 3/8x2 3/4 inches; spread between fork, 1 7/8 inches.

Trade No.	Diam. Inches	Length, In. from Center of Bolt Hole	Wt., Lbs. per 100	Price per 100	Trade No.	Diam. Inches	Length, In. from Center of Bolt Hole	Wt., Lbs. per 100	Price per 100
9632	1/2	10	85	$21.00	99635	5/8	12	155	$28.00
9633	1/2	12	95	22.00	99636	5/8	14	170	29.50
9634	1/2	14	105	23.00	99637	5/8	16	185	31.00

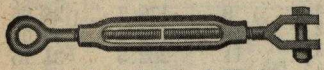
HUBBARD TURNBUCKLES AND WASHERS



Style A, Two Eyes



Style B, Hook and Eye



Style C, Eye and Clevis

DROP-FORGED TURNBUCKLES

Trade No. Style A	Trade No. Style B	Trade No. Style C	Diam. of Threaded End, In.	Expan. Inches	Wt., Lbs. per 100	Price per 100
99638	99649	99660	3/8	4 1/2	95	$65.00
99639	99650	99661	3/8	6	105	67.00
99640	99651	99662	1/2	6	175	81.50
99641	99652	99663	1/2	9	190	93.50
99642	99653	99664	1/2	12	230	105.50
99643	99654	99665	5/8	6	270	96.25
99644	99655	99666	5/8	9	335	111.50
99645	99656	99667	5/8	12	400	126.75
99646	99657	99668	3/4	6	400	128.75
99647	99658	99669	3/4	9	505	145.00
99648	99659	99670	3/4	12	610	161.00



Round Washer

ROUND WASHERS

Trade No.	Outside Diam., In.	Size of Hole, In.	Thickness Gauge	For Bolt Size Inches Mach.	Carriage	Wt., Lbs. per 1000	Price per 1000
99671	1	7/16	14	3/8	....	16	$2.80
99672	1 1/4	1/2	14	....	3/8	30	4.00
99673	1 3/8	9/16	12	1/2	3/8	42	5.25
99674	1 3/4	11/16	10	5/8	1/2	75	8.35
99675	2	13/16	9	3/4	5/8	112	11.50
99676	2 1/4	15/16	8	7/8	....	135	13.50
99677	2 1/2	1 1/16	8	1	3/4	180	18.00
99692	1 1/2	9/16	10	1/2	3/8	66	8.00



Round Pressed Steel Washer

ROUND PRESSED STEEL WASHERS

For heavy work. Better and cheaper than malleable or cast iron washers.

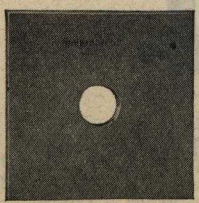
Trade No.	Dimensions, Inches Diam.	Thickness	Size of Hole, In.	For Bolt Size, In.	Wt., Lbs. per 100	Price per 100
99687	2 1/2	1/4	9/16	1/2	22	$3.00
99688	2 3/4	5/16	11/16	5/8	28	3.75
99689	3	7/16	13/16	3/4	33	4.50
99690	3 1/2	7/16	15/16	7/8	50	6.75
99691	4	1/2	1 1/16	1	70	9.50
99693	5	5/8	1 5/16	1 1/4	110	14.50



Square Washer

SQUARE WASHERS

Trade No.	Dimensions Inches	Size of Hole, In.	For Bolt Size, In.	Wt., Lbs. per 100	Price per 1000
99678	2 x2 x1/8	9/16	1/2	154	$12.50
99679	2 x2 x1/8	3/4	5/8	145	12.50
99680	2 1/4 x2 1/4 x3/16	3/4	5/8	250	20.00
99681	2 1/4 x2 1/4 x3/16	7/8	3/4	240	20.00
99682	3 x3 x3/16	3/4	5/8	445	37.50
99683	3 x3 x3/16	7/8	3/4	435	37.50
99684	4 x4 x3/16	3/4	5/8	830	67.50
99685	4 x4 x3/16	7/8	3/4	820	67.50
99686	5 x5 x3/16	7/8	3/4	1210	100.00
99694	4 x4 x1/2	1 1/8	1	2150	210.00



Square Washer

PEIRCE TURNBUCKLES

INSULATED FORKS AND TURNBUCKLES

Hot Galvanized



No. 550



No. 561

The turnbuckles, hook and eyebolts are drop-forged. The insulator forks are made from open-hearth steel channel.



No. 640



Insulator Fork



No. 650



No. 660



No. 670



No. 680

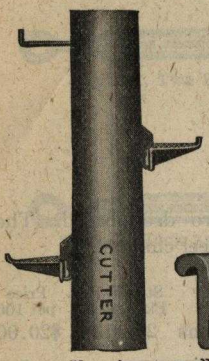


No. 690

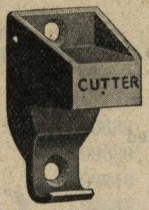
Trade No.	Mfrs. No.	Style	Std. Pkg.	Wt., Lbs. per 100	Price per 100
75511	549	Cross-arm clevis, 3¼x4¼-inch arms	25	134	$20.00
75512	550	Cross-arm clevis, 3½x4½-inch arms	25	138	20.50
75513	551	Cross-arm clevis, 3¾x4¾-inch arms	25	144	21.00
75514	552	Cross-arm clevis, 4x5-inch arms	25	150	21.50
75515	561	Insulated fork for heavy secondaries	100	221	24.00
75516	640	Insulated fork and 4-inch lag screw	10	155	22.00
75517	650	Insulated fork and eye, 6-inch turnbuckle	10	356	144.00
75518	651	Insulated fork and eye, 9-inch turnbuckle	10	381	156.00
75519	660	Two insulated forks and 6-inch turnbuckle	10	435	160.00
75520	661	Two insulated forks and 9-inch turnbuckle	10	460	176.00
75521	670	Insulated fork and hook, 6-inch turnbuckle	10	341	136.00
75522	671	Insulated fork and hook, 9-inch turnbuckle	10	366	148.00
75523	680	Insulated fork and swivel eye, 6-inch turnbuckle	10	304	150.00
75524	681	Insulated fork and swivel eye, 9-inch turnbuckle	10	329	162.00
75525	690	Insulated fork and 8-inch carriage bolt	10	170	30.00
75526	691	Insulated fork and 10-inch carriage bolt	10	187	32.00
75527	692	Insulated fork and 12-inch carriage bolt	10	204	34.00
75528	693	Insulated fork and 14-inch carriage bolt	10	221	36.00

CUTTER POLE LINE MATERIAL

SCHEDULE F



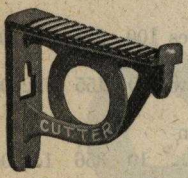
Showing Pole Steps in Use



Pole Step Socket



Removable Pole Step



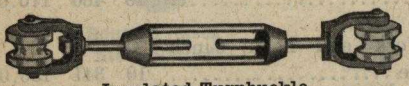
Ornamental Pole Step



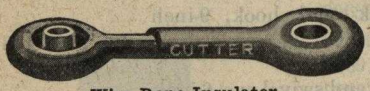
Insulated Fork



Insulated Suspension Bolt



Insulated Turnbuckle



Wire Rope Insulator



Streethood Paint

REMOVABLE POLE STEPS

Removable pole steps are much more easily carried than a ladder. A pair of them weighs less than 14 ounces, and can be slipped into the pocket. The sockets for them are hooded over so as to be sleet-proof.

Trade No.	Description	Std. Pkg.	Wt. Lbs.	Price Each
20885	Pole step, painted	250	7/16	$0.25
20886	Socket, painted	250	7/16	.15
20887	*Pole step, galvanized..	250	7/16	.30
20888	*Socket, galvanized....	250	7/16	.20

ORNAMENTAL POLE STEPS

Ornamental pole steps fit either round or octagonal poles. They are fastened in place by using a single lag screw and a nail.

20889	Painted	250	13/16	.15
20890	*Galvanized.....	250	13/16	.25

INSULATED FORKS

A wrought iron fork holds a heavy porcelain spool with 11/16-inch groove, which insulates the suspension wire or cable from the pole. Made for ½-inch lag screw. Prices do not include the lag screws.

20891	Painted	250	1	.25
20892	*Galvanized.....	250	1	.30

INSULATED SUSPENSION BOLTS

Consist of insulated fork with 12-inch bolt ½ inch in diameter and having 6 inches of thread. Shipped complete, with nut and washer.

20893	Painted	200	2	.35
20894	*Galvanized.....	200	2	.45

INSULATED TURNBUCKLES

An insulated fork on each end; maximum spread, 24 inches; adjustment, 9 inches.

20895	Painted	50	6	1.40
20896	*Galvanized.....	50	6	1.60

WIRE ROPE INSULATORS

Wire rope insulators are looped into the hoisting rope just outside the pole pulley. Insulates the lamp end from the end within reach of the public. Made of steel, with hard rubber insulation and protecting ferrules.

20897	Eyes 4 inches apart...	200	¼	.40
20898	Eyes 8 inches apart...	200	7/16	.55

GREEN HOOD PAINT

A dark green weatherproof paint for streethood tops, darker in color than that on Cutter Hoods, as it has to dry in the air. Takes a gallon for every eighty 18-inch hood tops.

20899-G	Gallon can.....	40	9	4.75
20900-G	2-gallon can.....	20	18	9.25
20901-G	5-gallon can.....	8	45	22.00

REFLECTOR ENAMEL

An extra fine air-drying enamel for streethood reflectors or tin shades. Not needed with Cutter Porcelainized Reflectors, but fine for all others. Takes a gallon for every 80 reflectors.

20902	Quart can.....	50	2½	2.00
20903	Half gallon can.....	30	5	3.50
20904	Gallon can	15	8½	6.25

PIPE PAINT

A glossy black paint for streethood goosenecks, mast arm pipes, arc fixtures and other metal work.

20905	Gallon can	40	13	1.25
20906	2-gallon can	20	25	2.25
20907	5-gallon can	8	63	5.50

*Includes final coat of black enamel.

HUBBARD SPECIALTIES

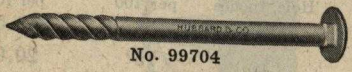


No. 99701

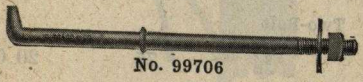
POLE STEPS

Hook Head

Trade No.	Dimensions, Inches Diam.	Length	Wt., Lbs. per 1000	Price per 1000
99701	9/16	9	652	$ 90.00
99702	5/8	9	810	111.00
99703	5/8	10	890	121.00



No. 99704

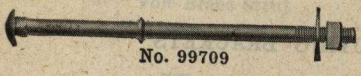


No. 99706

Button Head

99704	5/8	9	833	114.00
99705	5/8	10	913	124.00

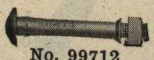
STEPS FOR CONCRETE POLES



No. 99709

Hook Head

Trade No.	Dimensions, Inches Diam.	Length	Length of Shank	Wt., Lbs. per 100	Price per 100
99706	5/8	14	9	160	$50.00
99707	5/8	16	11	175	52.00
99708	5/8	20	15	210	56.00



No. 99712



No. 99713

Button Head

99709	5/8	14	9	160	50.00
99710	5/8	16	11	175	52.00
99711	5/8	20	15	210	56.00



No. 99715

STEPS FOR STEEL POLES AND TOWERS

Button Head

99712	5/8	6 1/4	1 1/4	78	25.00

POLE SHIMS

Trade No.	Dimensions Inches	Wt., Lbs. per 100	Price per 100
99713	1 x 3/16 x 8	45	$8.00
99714	1 1/4 x 3/16 x 8	57	9.50



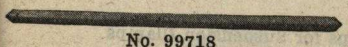
No. 99716

STRAIN PLATES

Trade No.	Dimensions Inches	Gauge Steel	Wt., Lbs. per 100	Price per 100
99715	4x8	14	85	$17.50

GUARD IRONS

Trade No.	Dimensions, Inches Diam.	Extension	Height	Wt., Lbs. per 100	Price per 100
99716	1/2	5	7 1/4	85	$27.50
99717	5/8	5	7 1/4	125	35.00



No. 99718

POLE PROTECTION STRIPS

Trade No.	Dimensions, Inches Width	Length	Gauge No.	Wt., Lbs. per 100	Price per 100
99718		48	24	165	$21.50



No. 99719

HUB GUARDS

Trade No.	Dimensions Inches	Wt., Lbs. per 100	Price per 100
99719	14x18x1/8	1050	$190.00
99720	16x18x1/8	1100	205.00
99721	14x30x3/16	2400	410.00
99722	16x30x3/16	2500	430.00

HUBBARD LINE MATERIAL



No. 99793



No. 99794

GUY HOOKS

One-Bolt

Trade No.	Dimensions Inches	Size of Bolt Hole, Inches	Wt., Lbs. per 100	Price per 100
99793	3½x1¼x5/16	9/16	38	$12.50
99794	4 x1¾x⅜	9/16	75	20.00

Two-Bolt

99795	6 x1½x⅜	9/16	75	20.00



No. 99795



No. 99796

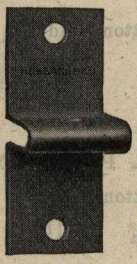
DISTRIBUTING BRACKETS

Style L

Trade No.	Dimensions Inches	Length of Legs Inches	Wt., Lbs. per 100	Price per 100
99796	1¾x⅜	3 11/16x2 5/16	51	$15.00
99797	2 x¼	4 x3	87	24.00



No. 99797



No. 99798

Style T

99798	2 x⅛	5 x2½	65	30.00

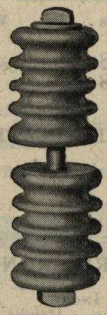
Prices are for brackets only, without knobs or bolts.

Knobs Complete with Bolts for Distributing Brackets

Trade No.	Description	Wt., Lbs. per 100	Price per 100
99799	One double-groove.....	68	$ 7.80
99800	Two four-groove.....	250	24.70



No. 99799



No. 99800

SUSPENSION CLAMPS

One-Bolt

Trade No.	Dimensions Inches	Wt., Lbs. per 100	Price per 100
99801	1¾x⅜x2½	80	$20.00



No. 99801

Three-Bolt

99802	1¾x⅜x5¾	205	51.30

Re-enforcing Straps for Suspension Clamps

99803	1¾x⅛x8½	50	14.00



No. 99802

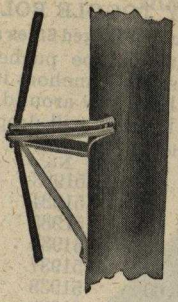
GUY THIMBLES



No. 99804

Trade No.	Size of Strand Inches	Size of Guy Rod Inches	Wt., Lbs. per 100	Price per 100
99804	⅜	½	9½	$9.30
99805	½	¾	22	10.50
99806	⅝	1	75	17.00

HUBBARD SPECIALTIES



Pole Brace Strut

POLE BRACE STRUTS

An extremely strong but inexpensive strut for self-bracing poles.

Trade No.	Dimensions, Inches: Extension	Strut Channel	Brace Channel	Wt., Lbs. Each	Price Each
99861	11	2x9/16	1x1/2	8 1/2	$2.00



Messenger Sheave Plate

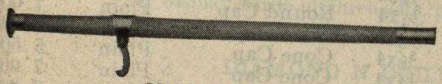
MESSENGER SHEAVE PLATES

Two-wheel

Trade No.	Length of Plate Inches	Size of Steel Inches	Wt., Lbs. Plate only	Price per 100 Plate only
99862	15	2 1/2 x 3/8	335	$30.00

Wheels for Above

Trade No.	Dimensions, Inches: Diam.	Thickness	Wt., Lbs. per 100	Price per 100
99863	3	1	100	$25.00



Manhole Lifter

MANHOLE LIFTERS

Trade No.	Length Feet	Wt., Lbs. Each	Price Each
99864	4	7 1/2	$5.00



Lock Washer

LOCK WASHERS

Trade No.	Diam. of Bolt, Inches	Price per 1000, Plain
99878	1/4	$11.00
99879	3/8	12.00
99880	1/2	12.60
99881	9/16	13.50
99882	5/8	14.50
99883	3/4	16.00



Cable Duct Shield

CABLE DUCT SHIELDS

For Protecting Cables at Duct Entrances

Trade No.	Length Inches	Size of Duct Inches	Gauge No.	Wt., Lbs. per 100	Price per 100
99877	6	3	18	40	$12.50

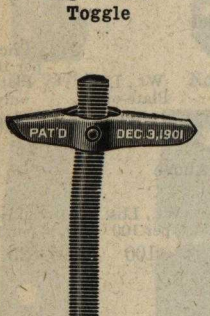
TOGGLE BOLTS



Square Nut Rigid Back Toggle



Hexagon Cap Toggle



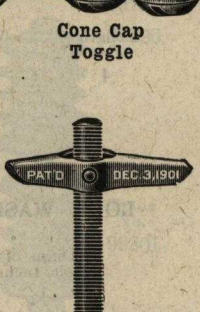
Round Cap Toggle



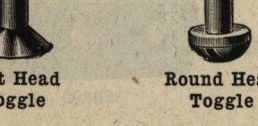
Cone Cap Toggle



Flat Head Toggle



Round Head Toggle



Cutter Toggle

WRIGLEY TOGGLE BOLTS

Patent Steel, with Double Flanged Sides and Rigid Back

The 3/16-inch size can be pushed through a 3/8-inch hole and instantly anchors itself securely. By turning it half way around, it will come out, or by pushing it up, it will drop out.

Trade No.	Size Inches	Price per 100	Trade No.	Size Inches	Price per 100
51921	1/8x3	$3.00	51933	1/4x6	$6.00
51922	1/8x4	3.00	51934	5/16x3	6.50
51923	3/16x2 1/2	3.20	51935	5/16x4	7.00
51924	3/16x3 1/2	3.20	51936	5/16x5	7.50
51925	3/16x4	3.30	51937	5/16x6	8.00
51926	3/16x5	3.60	51938	3/8x3	7.50
51927	3/16x6	3.80	51939	3/8x4	8.00
51928	1/4x2 1/2	5.00	51940	3/8x5	8.50
51929	1/4x3	5.00	51941	3/8x6	9.00
51930	1/4x3 1/2	5.30	51942	7/16x4	10.50
51931	1/4x4	5.50	51943	7/16x5	11.00
51932	1/4x5	5.70	51944	7/16x6	11.50

TRUNNION NUT STEEL TOGGLE BOLTS

Trunnion nut steel toggle bolt screws through the toggle key or plate the full length. Has a hexagon or a round screwdriver nut, flat or cone shape, which can be taken off after the bolt has been inserted to place on the fixture. Is used for marble slabs, telephone boxes and finished work.

Trade No.	Size Inches	Style Head	Style Nut	Price per 100
51945	3/16x4	Hexagon Cap	Plain	$5.50
51946	3/16x4	Hexagon Cap	Plated	7.00
51947	1/4x4	Hexagon Cap	Plain	7.00
51948	1/4x4	Hexagon Cap	Plated	8.50
51949	5/16x4	Hexagon Cap	Plain	8.60
51950	5/16x4	Hexagon Cap	Plated	10.40
51951	1/8x3	Round Cap	Plain	5.30
51952	3/16x4	Round Cap	Plain	5.50
51953	1/4x4	Round Cap	Plain	7.00
51954	1/8x3	Cone Cap	Plain	5.30
51955	3/16x4	Cone Cap	Plain	5.50
51956	1/4x4	Cone Cap	Plain	7.00
51957	1/8x2	Flat Head	Plain	3.60
51958	1/8x3	Flat Head	Plain	3.60
51959	3/16x3	Flat Head	Plain	3.70
51960	1/8x4	Flat Head	Plain	3.80
51961	3/16x4	Flat Head	Plain	3.80
51962	1/4x4	Flat Head	Plain	5.50
51963	5/16x4	Flat Head	Plain	7.60
51964	1/8x2	Round Head	Plain	3.60
51965	1/8x3	Round Head	Plain	3.60
51966	3/16x3	Round Head	Plain	3.70
51967	1/8x4	Round Head	Plain	3.70
51968	3/16x4	Round Head	Plain	3.80
51969	1/4x4	Round Head	Plain	5.50
51970	5/16x4	Round Head	Plain	7.60

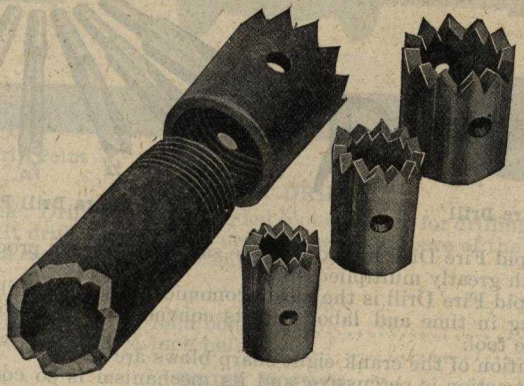
Standard package, 100, on all the above.

CUTTER TOGGLE BOLTS

Trade No.	Style	Size Inches	Wt. Lbs.	Price, per Package Pkg. of 10	Box of 25	Box of 100	1000 or More
23911	Slender	1/8x3	7/10	$0.40	$0.90	$3.40	$32.00
23912	Slender	1/8x4	3/4	.50	1.00	3.80	35.00
23913	Slender	1/8x6	1	.60	1.30	4.40	40.00
23914	Regular	3/16x3	1/4	.44	1.00	3.60	34.00
23915	Regular	3/16x4	1/4	.50	1.10	4.00	36.00
23916	Regular	3/16x6	1/4	.60	1.40	5.00	45.00
23917	1/4 inch	1/4x4	1 1/4	.56	1.65	6.00	54.00
23918	1/4 inch	1/4x6	1 1/2	.60	1.95	7.00	63.00
23919	Jumbo	5/16x4	2	.70	2.20	8.00	72.00
23920	Jumbo	5/16x6	2 1/4	.80	2.80	10.00	90.00

DIAMOND DRILLS

DIEXCO EXTENSION DRILL HEADS



Diexco Drill Heads are not made from steel tubing, but are turned from solid bar of best refined tool steel and carefully tempered so as to give the correct combination of hardness for the cutting edges and sufficient ductility to prevent breaking under hardest blows of the hammer.

Trade No.	Mfrs. No.	Size of Pipe for Handle Inches	Diam. of Hole Inches	Price per Doz.
109084	2	1/8	9/16	$3.00
109085	3	1/4	11/16	3.00
109086	4	3/8	7/8	3.00
109087	5	1/2	1	3.00
109088	5A	1/2	1 1/8	3.60
109089	6	3/4	1 1/4	4.20
109090	6A	3/4	1 3/8	7.50
109091	7	3/4	1 1/2	9.00
109092	7A	1	1 3/4	10.50
109102	Set made up of one each of Nos. 2, 3, 4 and 5, furnished in wood boxes or on display cards of three sets, per set			1.00

Trade No.	Mfrs. No.	Size of Pipe for Handle Inches	Diam. of Hole Inches	Price per Doz.
109093	8	1	2	$12.00
109094	9	1	2 1/4	18.00
109095	9A	1	2 1/2	22.00
109096	10	1	2 3/4	27.00
109097	10A	1	3	31.00
109098	11	1 1/4	3 1/4	36.00
109099	11A	1 1/4	3 1/2	40.00
109100	11B	1 1/4	3 3/4	44.00
109101	12	1 1/4	4	48.00

DIAMOND N DRILL HOLDERS AND POINTS



The taper shank on the drill point is carefully machined to fit the holder. The transverse hole in the handle is to admit a tapered pin which drives out the point when it is to be removed. The advantage of this drill over the one-piece regular drills is that in the smaller sizes a better grip can be had and a harder blow struck.

Drill Holders

Trade No.	Description	Price per Doz.
109103	Holder to take drill points from 1/4 to 3/4 inch	$24.00

Drill Points

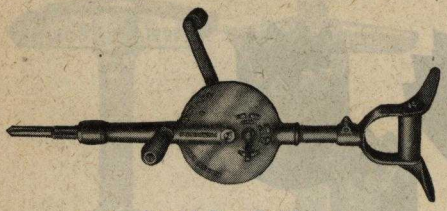
Trade No.	Size Inches	Price per Doz.
109104	1/4	$8.50
109105	5/16	8.50
109106	3/8	8.50
109107	7/16	9.00

Trade No.	Size Inches	Price per Doz.
109108	1/2	$10.00
109109	5/8	12.00
109110	3/4	14.00
.....	....	....

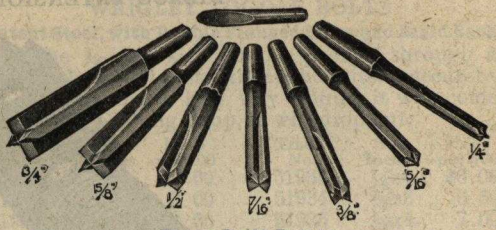
Sets

Trade No.	Description	Price per Set
109111	Set made up of one holder, one ejector pin and six points assorted of any of the above sizes, put up in wooden box	$7.50

DIAMOND RAPID FIRE DRILLS AND POINTS



Rapid Fire Drill



Extra Drill Points

The Diamond Rapid Fire Drill reproduces the same action as is produced with the hand hammer and drill, with greatly multiplied speed.

The Diamond Rapid Fire Drill is the most economical means of drilling holes for expansion bolts. Its saving in time and labor and its convenience in use will, in a short time, pay for the cost of the tool.

With every revolution of the crank eight sharp blows are struck.

No vibration. Its action is percussive, and its mechanism is so constructed that practically no vibration or concussion is felt by the operator.

Each drill has three adjustments, hard, medium and soft, controlled by a spring lever at the side of the housing. The springs are easily changed by removing the cover of the housing without disarranging or unfastening any of the parts of the mechanism.

Trade No.	Description	Price Each
54242	Drill only, without drill points	$32.00

STANDARD DRILL POINTS

Trade No.	Diam. Inches	Length Inches	Depth of Hole Inches	Price Each	Trade No.	Diam. Inches	Length Inches	Depth of Hole Inches	Price Each
54161	1/4	4 1/4	3	$0.71	54166	5/8	6	4 1/2	$1.00
54162	5/16	4 1/4	3	.71	54167	3/4	6	4 1/2	1.17
54163	3/8	4 1/4	3	.71	54168	7/8	6 1/2	5	1.33
54164	7/16	4 1/4	3	.75	54169	1	6 1/2	5	1.50
54165	1/2	6	4 1/2	.84	.....	...	...	...	....

Complete set (eight sizes) 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4 and 1, $7.40 list.

EXTRA LENGTHS OF DRILL POINTS

Trade No.	Diam. Inches	Length Inches	Price per Doz.	Trade No.	Diam. Inches	Length Inches	Price per Doz.	Trade No.	Diam. Inches	Length Inches	Price per Doz.
54170	1/4	12	$8.50	54183	1/4	18	$11.00	54196	1/4	24	$13.50
54171	5/16	12	8.50	54184	5/16	18	11.00	54197	5/16	24	13.50
54172	3/8	12	8.50	54185	3/8	18	11.00	54198	3/8	24	13.50
54173	7/16	12	9.00	54186	7/16	18	11.50	54199	7/16	24	14.00
54174	1/2	12	10.00	54187	1/2	18	12.50	54200	1/2	24	15.00
54175	5/8	12	12.00	54188	5/8	18	15.00	54201	5/8	24	17.50
54176	3/4	12	14.00	54189	3/4	18	17.50	54233	3/4	24	20.00
54177	7/8	12	16.00	54190	7/8	18	20.00	54234	7/8	24	22.50
54178	1	12	18.00	54191	1	18	22.50	54235	1	24	25.00
54179	1 1/8	12	24.00	54192	1 1/8	18	28.00	54236	1 1/8	24	32.00
54180	1 1/4	12	30.00	54193	1 1/4	18	35.00	54237	1 1/4	24	40.00
54181	1 3/8	12	40.00	54194	1 3/8	18	45.00	54238	1 3/8	24	50.00
54182	1 1/2	12	50.00	54195	1 1/2	18	56.00	54239	1 1/2	24	62.00

CEILING STANDS FOR DIAMOND RAPID FIRE DRILLS

The Diamond Rapid Fire Ceiling Stand is light, made of best quality cold-drawn seamless tubing, the sections telescoping together and can be easily carried about by the operator. The automatic spring feed attachments will supply the required pressure for holes up to 8 inches deep without readjustment. The ball and socket joints at base will permit of it being readily adjusted to any angle or level of the floor.

Trade No.	Style	Description	Price Each
54240	A	For ceilings 7 to 12 feet	$12.00
54241	B	For ceilings 8 to 20 feet	15.00

PEIRCE DRILLS AND BOLTS



Hammer Drill



½x4-inch Drill Point

⅝x6-inch Drill Point

HAMMER DRILLS

The Peirce Hammer Drill is a double-ended tool designed for drilling holes easily in brick, stone and concrete. It drills the hole and swages the lead sleeve of the bolt. Holds all sizes of drill points. Points easily removed for sharpening.

Trade No.	Description	Price Each
042057	Hammer drill only, for ¼-inch bolts	$6.28
042058	Hammer drill only, for ⅜-inch bolts	6.68

DRILL POINTS

Trade No.	Size Inches	Description	Price Each
74701	⅜x 4		$0.86
042059	½x 4	For ¼-inch expansion bolts	.86
74702	½x 6		.96
74703	½x12		1.06
042060	⅝x 6	For ⅜-inch expansion bolts	1.26
042061	⅝x12		1.58
042062	¾x 6		1.48
042063	¾x12		1.78
042064	⅞x 6	For ½-inch expansion bolts	1.58
042065	⅞x12		1.90

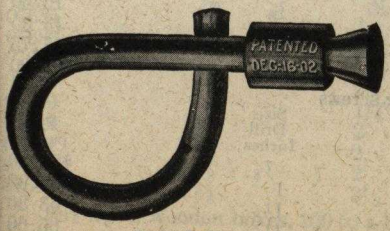
EXPANSION BOLTS



Expansion Bolt

Trade No.	Mfrs. No.	Size Inches	Price per 100
042066	1	¼x1¾	$3.20
042067	2	¼x2	3.30
042068	3	¼x2½	3.40
042069	4	¼x3¼	4.00
042070	5	⅜x2½	5.60
042071	6	⅜x3	5.90
042072	7	⅜x3½	6.40
042073	8	⅜x4½	7.20
042074	9	⅜x5	7.70
042075	10	⅜x5½	8.10
042076	11	½x2½	8.10
042077	12	½x3½	8.90
042078	13	½x4	9.30
042079	14	½x4½	9.70
042080	15	½x5	10.10
042081	16	½x5½	10.50
042082	17	½x6½	11.30
042083	18	½x8	12.60

EXTRA LEAD SLEEVES



Ring Bolt

Trade No	Diameter Inches	Price per 100
74704	¼	$1.10
74705	⅜	1.80
74706	½	5.20

RING BOLTS

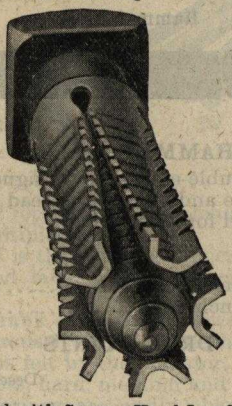
Trade No.	Diameter of Eye, Inches	Price per 100
042084	¾	$3.60
042085	1	4.10
042086	1¼	4.54
042087	1¾	5.28

SAVAGE EXPANSION BOLTS AND SHIELDS

NOVEL TYPE, PRESSED STEEL

The most efficient grip yet conceived. Universal expansion of 5 arms with 10 rows of gripping teeth. One piece shield. No adjustments necessary.

EXPANSION SHIELDS WITH SQUARE HEAD LAG SCREWS



Shield with Square Head Lag Screw
Prices per 100

Length Inches	Diameter of Lag Screw, Inches 3/16	7/32	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1
1½	$8.98	$9.45	$10.73	$11.60	.....	.....	.....	.....	.....	.....	.....
2	9.07	9.55	10.85	11.65	.....	.....	.....	.....	.....	.....	.....
2½	9.16	9.65	11.00	11.85	15.90	20.30	24.15	31.70	48.30	.....	.....
3	9.28	9.80	11.25	12.00	16.10	20.50	24.45	32.10	48.85	.....	.....
4	9.55	10.10	11.50	12.35	16.40	20.80	25.35	32.90	50.00	.....	.....
5	....	.....	11.85	12.65	16.90	21.15	25.90	33.75	51.05	.....	.....
6	....	.....	12.20	13.00	17.35	21.50	26.45	34.60	52.20	68.90	79.55
7	....	.....	.....	13.30	17.65	21.80	27.00	35.40	53.30	70.00	81.65
8	....	.....	.....	.....	18.00	22.15	27.55	36.25	54.45	71.10	83.70
9	....	.....	.....	.....	.....	22.50	28.10	37.10	55.55	72.20	85.75

EXPANSION SHIELDS ONLY



Shield
Pressed Steel Shields for Wood Screws

Screw Size Nos.	Length of Shield, Inches Regular	Short	Size Drill Inches	Price per 100
8	⅞	...	9/32	$7.75
10 Short	...	⅞	9/32	7.75
10–11	1¼	...	5/16	8.40
12–13	1¼	...	5/16	8.90
14–15	1½	1¼	⅜	9.40

Pressed Steel Shields for Lag Screws

Diam. Bolt Inches	Length of Shield, Inches Regular	Short	Size Drill Inches	Price per 100
¼	1½	1¼	⅜	$9.40
5/16	2	...	7/16	10.50
⅜	2½	2	½	13.35
7/16	2½	...	9/16	17.75
½	2¾	2	⅝	22.00

Malleable Iron Shields for Lag Screws

Diam. Bolt Inches	Length of Shield, Inches Regular	Short	Size Drill Inches	Price per 100
⅝	3½	2	⅞	$27.80
¾	3½	...	1	39.95
⅞	5	...	1⅛	53.30
1	5	...	1¼	66.60

DIAMOND EXPANSION BOLTS



Malleable Shield
with Square Head Lag Screw



One Part Composition Shield
with Round Head Iron Screw

MALLEABLE SHIELDS WITH SQUARE HEAD LAG SCREWS

Length Inches	Inside Diameter, Inches: 1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1 1/4
	Price, per Hundred									
1 1/2	$10.13	$11.60	.....	.....	.....	.....	.....	.....	.....	.....
2	10.85	11.65	.....	.....	.....	.....	.....	.....	.....	.....
2 1/2	11.00	11.85	15.90	20.30	24.15	31.70	48.30	.....	.....	.....
3	11.25	12.00	16.10	20.50	24.45	32.10	48.85	.....	.....	.....
4	11.50	12.35	16.40	20.80	25.35	32.90	50.00	.....	.....	.....
5	11.85	12.65	16.90	21.15	25.90	33.75	51.05	.....	.....	.....
6	12.20	13.00	17.35	21.50	26.45	34.60	52.20	68.90	79.55	.....
7	.....	13.30	17.65	21.80	27.00	35.40	53.30	70.00	81.65	.....
8	.....	.....	18.00	22.15	27.55	36.25	54.45	71.10	83.70	174.45
9	.....	.....	.....	22.50	28.10	37.10	55.55	72.20	85.75	181.10
10	.....	.....	.....	.....	.....	37.95	56.65	73.30	87.75	187.75
11	.....	.....	.....	.....	.....	38.80	57.75	74.40	89.90	194.45
12	.....	.....	.....	.....	.....	39.60	58.90	75.55	92.00	201.10
	Malleable Shields Only									
...	9.40	10.50	13.35	17.75	22.00	27.80	39.95	53:30	66.00	100.00

ONE PART COMPOSITION SHIELDS WITH IRON SCREWS

Complete with Either Flat, Round Head or Oval Bright Iron Screws

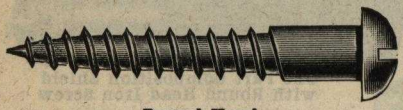
Diam. Anchor Inches	Length Shield Inches	Size Screws	Length, Screws, Inches: 3/4	1	1 1/2	2	2 1/2
			Price, per Hundred				
1/8	1	5–6–7	$4.60	$4.65	$4.70	.....	.....
3/16	1	8–9–10–11	5.25	5.30	5.35	5.40	.....
1/4	1	12–13–14	5.90	5.95	6.05	6.10	.....
5/16	1	15–16–17–18	.....	6.85	7.10	7.20	7.30

ONE PART COMPOSITION SHIELDS ONLY

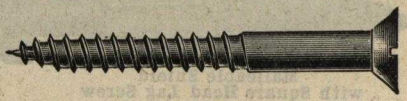
Trade No.	Dimensions, Inches: Inside Diam. Shield	Length of Shield	Outside Diam.	Size Screws	Price per 100
07620	1/8	1/2	1/4	5– 6– 7	$4.40
07621	1/8	5/8	1/4	5– 6– 7	4.40
07622	1/8	3/4	1/4	5– 6– 7	4.40
07623	3/16	1/2	1/4	8– 9–10–11	5.00
07624	3/16	3/4	5/16	8– 9–10–11	5.00
07625	3/16	1 Light	5/16	8– 9–10–11	5.00
07626	3/16	1 Heavy	3/8	8– 9–10–11	5.00
07627	3/16	1 5/8	5/16	8– 9–10–11	6.25
07628	1/4	1/2	3/8	12–13–14	5.60
07629	1/4	3/4	3/8	12–13–14	5.60
07630	1/4	1	3/8	12–13–14	5.60
07631	1/4	1 1/2	3/8	12–13–14	8.00
07632	1/4	2	3/8	12–13–14	10.00
07633	1/4	2 1/2	3/8	12–13–14	12.00
07634	5/16	3/4	7/16	15–16–17–18	6.25
07635	5/16	1	7/16	15–16–17–18	6.25
07636	5/16	1 3/8	1/2	15–16–17–18	10.00
07637	5/16	1 1/2	7/16	15–16–17–18	10.00
07638	5/16	2	7/16	15–16–17–18	13.00
07639	3/8	1 1/4	9/16	20–22–24	15.00
07640	3/8	2	9/16	20–22–24	15.00
07641	1/2	2	3/4	26–28–30	25.00
07642	5/8	2	7/8	5/8-in. lag	30.00
07643	5/8	3 1/2	7/8	5/8-in. lag	50.00

Put up in wooden boxes, 100 to a box.

IRON WOOD SCREWS



Round Head



Flat Head

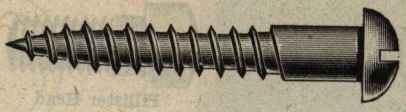
PRICE PER GROSS

No. Screw	Length of Screw, Inches ¼	⅜	½	⅝	¾	⅞	1	1¼	1½	1¾
0	$0.72	$0.72	....	....	....	....	....	....	....	....
1	.72	.72	.72	.72	....	....	....	....	....	....
2	.72	.72	.72	.72	.72	.74	....	....	....	....
3	.72	.72	.72	.72	.75	.78	.80	.88	.98	....
4	.72	.72	.75	.75	.78	.82	.84	.92	1.05	....
5	....	.75	.78	.78	.82	.85	.87	.98	1.10	1.30
6	....	.78	.80	.82	.85	.90	.92	1.05	1.15	1.35
7	....	.82	.84	.86	.90	.94	.98	1.10	1.20	1.45
8	....	.88	.90	.92	.95	1.00	1.05	1.15	1.30	1.50
9	....	.94	.96	.98	1.00	1.05	1.10	1.20	1.35	1.55
10	....	....	1.05	1.07	1.10	1.15	1.20	1.30	1.40	1.60
11	....	....	1.10	1.12	1.15	1.25	1.30	1.40	1.50	1.70
12	....	....	1.20	1.20	1.25	1.35	1.40	1.55	1.65	1.80
13	....	....	....	1.25	1.35	1.45	1.60	1.70	1.80	2.00
14	....	....	....	1.30	1.50	1.55	1.70	1.90	2.00	2.25
15	....	....	....	....	1.65	1.75	2.00	2.15	2.35	2.60
16	....	....	....	....	1.80	2.00	2.50	2.50	2.80	2.90
17	....	....	....	....	....	....	2.70	2.75	3.20	3.50
18	....	....	....	....	....	....	2.80	3.30	3.80	4.00
20	....	....	....	....	....	....	3.50	4.00	4.30	4.50
22	....	....	....	....	....	....	....	4.80	5.10	5.20
24	....	....	....	....	....	....	....	5.40	5.90	6.00

No. Screw	Length of Screw, Inches 2	2¼	2½	2¾	3	3½	4	4½	5	6
5	$1.45	$1.55	$1.90	....	....	....	....	....	....	....
6	1.50	1.60	2.00	2.40	2.95	....	....	....	....	....
7	1.55	1.65	2.10	2.60	3.00	....	....	....	....	....
8	1.60	1.75	2.20	2.70	3.05	3.90	4.90	....	....	....
9	1.65	1.85	2.30	2.80	3.10	4.00	5.10	....	....	....
10	1.75	1.95	2.40	2.90	3.15	4.10	5.20	....	....	....
11	1.85	2.05	2.50	3.00	3.20	4.20	5.30	....	....	....
12	2.00	2.20	2.60	3.10	3.30	4.30	5.40	7.00	8.10	10.00
13	2.20	2.35	2.70	3.20	3.40	4.40	5.60	7.20	8.30	10.30
14	2.45	2.65	2.90	3.30	3.50	4.50	5.90	7.60	8.60	11.00
15	2.75	3.10	3.30	3.60	3.80	4.75	6.20	7.85	9.10	11.60
16	3.10	3.50	3.65	3.90	4.20	4.95	6.50	8.15	9.70	12.40
17	3.70	3.85	4.20	4.50	4.80	5.40	7.00	8.60	10.10	13.00
18	4.20	4.55	4.70	5.00	5.50	6.15	7.60	9.15	11.00	14.50
20	4.80	5.30	5.80	6.10	6.50	7.30	8.60	9.85	11.50	16.00
22	5.50	6.10	6.70	7.20	7.50	8.70	9.70	11.20	13.00	18.00
24	6.40	6.90	7.50	8.50	8.70	10.20	11.20	13.50	15.00	20.00
26	....	....	....	....	10.50	12.00	14.00	16.00	18.00	23.00
28	....	....	....	....	....	....	16.00	18.50	21.00	27.00
30	....	....	....	....	....	....	18.50	21.50	24.00	30.50

BRASS WOOD SCREWS

ROUND HEAD



FLAT HEAD



Price, per Gross

No. of Screw	Length of Screw, Inches									
	¼	⅜	½	⅝	¾	⅞	1	1¼	1½	1¾
0	$0 .84	$0.84	....	....	....	....	....	....	....	....
1	.84	.87	.92	.96	....	....	....	....	....	....
2	.88	.92	.96	1.00	1.12	1.40	....	....	....	....
3	.92	.97	1.02	1.08	1.18	1.50	1.65	2.10	....	....
4	.97	1.04	1.08	1.15	1.25	1.55	1.70	2.20	2.95	....
5	1.04	1.12	1.20	1.30	1.40	1.60	1.75	2.25	3.05	....
6	....	1.20	1.30	1.40	1.55	1.65	1.80	2.35	3.10	3.95
7	....	1.35	1.45	1.60	1.75	1.90	2.10	2.45	3.20	4.00
8	....	1.50	1.65	1.85	2.00	2.20	2.45	2.85	3.30	4.10
9	....	....	1.90	2.10	2.30	2.50	2.80	3.20	3.65	4.20
10	....	....	2.15	2.40	2.65	2.90	3.15	3.50	4.25	4.70
11	....	....	....	2.65	3.00	3.35	3.65	4.10	4.65	5.35
12	....	....	....	3.00	3.35	3.70	4.10	4.65	5.35	6.05
13	....	....	....	3.35	3.70	4.10	4.55	5.35	5.95	6.70
14	....	....	....	3.70	4.10	4.55	5.05	5.85	6.65	7.35
15	....	....	....	4.10	4.55	5.05	5.60	6.55	7.60	8.65
16	....	....	....	4.55	5.05	5.60	6.65	7.20	8.35	9.50
17	....	....	....	....	....	....	....	7.85	9.15	10.45
18	....	....	....	....	....	....	7.40	9.35	10.85	12.40
20	....	....	....	....	....	....	....	10.45	12.65	14.50
22	....	....	....	....	....	....	....	....	14.50	16.85
24	....	....	....	....	....	....	....	....	....	18.90

No. of Screw	Length of Screw, Inches									
	2	2¼	2½	2¾	3	3½	4	4½	5	6
6	$5.15	....	....	....	....	....	....	....	....	....
7	5.20	....	....	....	....	....	....	....	....	....
8	5.25	6.85	....	....	....	....	....	....	....	....
9	5.30	6.95	9.40	11.50	....	....	....	....	....	....
10	5.40	7.05	9.50	11.65	13.70	15.85	....	....	....	....
11	6.15	7.25	9.60	11.80	13.85	16.00	....	....	....	....
12	6.85	7.90	9.70	11.95	14.00	16.15	18.60	....	....	....
13	7.55	8.80	9.85	12.10	14.10	16.30	18.80	....	....	....
14	8.45	9.80	10.75	12.25	14.30	16.45	19.00	22.60	....	....
15	9.75	10.75	11.85	13.00	14.60	16.60	19.25	22.80	....	....
16	10.70	11.90	13.00	14.20	15.40	17.70	20.35	23.40	26.90	31.00
17	11.70	13.00	14.30	15.65	16.80	19.40	22.30	25.75	29.60	34.05
18	13.90	15.40	16.95	18.40	19.95	22.75	26.90	30.90	35.50	40.80
20	16.30	18.00	19.85	21.60	23.40	26.90	30.80	35.40	40.70	46.80
22	18.90	20.95	23.00	25.00	27.10	31.20	36.00	41.40	47.60	54.75
24	21.00	23.30	25.50	28.00	31.15	35.80	40.70	46.80	53.80	61.90
26	....	....	....	....	35.85	41.20	47.35	54.40	62.60	72.95
28	....	....	....	....	41.15	47.45	54.55	62.70	72.15	82.95
30	....	....	....	....	47.45	54.55	62.70	72.15	82.95	93.35

IRON AND BRASS MACHINE SCREWS

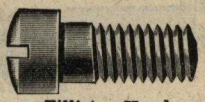
FLAT, ROUND AND FILLISTER HEADS



Flat Head



Round Head



Fillister Head

IRON

Price, per Gross

Length Inches	No. of Screw 2 and 3	4	5	6	7 and 8	9 and 10	12	14	16	18	20	24	30	34
	Standard Threads per Inch													
	48, 56 *64	32, 36, 40		30, 32 36	30, 32 †36	24, 30 32	20, 24	18, 20 24	16, 18, 20		16, 18	14, 16 18	14, 16	13
1/8	.30	.30	.35	.35	.40	....	....	....	....	....	....	....	....	....
3/16	.30	.30	.35	.35	.40	.60	....	....	....	....	....	....	....	....
1/4	.30	.30	.35	.35	.40	.60	.70	.85	....	....	....	....	....	....
5/16	.32	.32	.37	.37	.44	.65	.75	.90	1.15	....	....	....	....	....
3/8	.32	.32	.37	.37	.44	.65	.75	.90	1.15	1.50	1.90	2.30	....	....
7/16	.34	.34	.39	.39	.48	.70	.80	.95	1.20	1.60	2.00	2.40	....	....
1/2	.34	.34	.39	.39	.48	.70	.80	.95	1.20	1.60	2.00	2.40	....	....
9/16	.37	.37	.42	.42	.52	.75	.85	1.00	1.25	1.70	2.10	2.50	....	....
5/8	.37	.37	.42	.42	.52	.75	.85	1.00	1.25	1.70	2.10	2.50	....	....
3/4	.41	.41	.46	.46	.56	.80	.90	1.05	1.30	1.80	2.20	2.60	4.00	5.10
7/8	.45	.45	.50	.50	.60	.85	.95	1.15	1.40	1.90	2.30	2.70	4.25	5.85
1	...	.50	.55	.55	.65	.90	1.00	1.25	1.50	2.00	2.40	2.80	4.50	6.60
1 1/8	...	.55	.60	.60	.70	1.00	1.10	1.35	1.60	2.20	2.60	3.00	5.00	7.00
1 1/4	...	.60	.65	.65	.75	1.10	1.20	1.45	1.75	2.40	2.80	3.20	5.25	7.35
1 3/8	...	.65	.70	.70	.80	1.20	1.30	1.55	1.90	2.60	3.00	3.40	5.75	8.00
1 1/2	...	.70	.75	.75	.85	1.30	1.40	1.65	2.10	2.80	3.20	3.60	6.00	8.00
1 3/4	...	.90	.95	.95	1.05	1.50	1.60	1.85	2.50	3.20	3.60	4.20	6.65	8.60
2	...	1.10	1.15	1.15	1.25	1.70	1.80	2.20	2.90	3.60	4.00	4.60	7.35	9.40
2 1/4	...	...	1.25	1.25	1.45	1.90	2.20	2.60	3.30	4.00	4.40	4.80	8.00	10.30
2 1/2	...	...	...	...	1.65	2.20	2.50	2.80	3.50	4.40	4.90	5.30	8.90	11.50
2 3/4	...	...	...	...	1.90	2.50	2.90	3.20	4.00	4.90	5.40	5.90	9.85	....
3	...	...	...	...	2.30	2.90	3.50	3.80	4.50	5.60	6.00	7.40	11.00	....
3 1/4	...	...	...	...	....	3.30	4.25	4.50	5.50	6.50	7.00	8.80	13.00	....
3 1/2	...	...	...	...	....	3.75	5.00	5.25	6.50	7.50	8.50	10.10	15.00	....

BRASS

1/8	.32	.36	.46	.46	.70	....	....	....	....	....	....	....	....	....
3/16	.32	.36	.46	.46	.70	1.00	....	....	....	....	....	....	....	....
1/4	.32	.36	.46	.46	.70	1.00	1.25	1.65	....	....	....	....	....	....
5/16	.34	.38	.49	.49	.75	1.05	1.35	1.75	....	....	....	....	....	....
3/8	.36	.40	.52	.52	.80	1.10	1.45	1.85	2.90	3.70	4.60	5.50	....	....
7/16	.38	.42	.55	.55	.85	1.15	1.55	2.00	3.05	3.90	4.80	5.60	....	....
1/2	.40	.44	.58	.58	.90	1.25	1.65	2.15	3.20	4.10	5.00	5.75	....	....
9/16	.43	.47	.62	.62	.95	1.35	1.75	2.30	3.35	4.30	5.25	6.30	....	....
5/8	.46	.50	.66	.66	1.00	1.45	1.85	2.45	3.50	4.50	5.50	6.50	....	....
3/4	.52	.56	.74	.74	1.10	1.65	2.05	2.75	3.80	4.90	6.00	6.70	....	15.75
7/8	.58	.62	.82	.82	1.20	1.85	2.25	3.05	4.10	5.30	6.50	7.40	....	17.10
1	....	.70	.90	.90	1.30	2.05	2.45	3.35	4.40	5.70	7.00	8.50	15.75	18.50
1 1/8	....	.80	1.05	1.05	1.45	2.20	2.65	3.55	4.65	6.00	7.50	9.00	....	....
1 1/4	....	.90	1.20	1.20	1.60	2.35	2.85	3.75	4.90	6.30	8.00	9.90	18.75	22.10
1 3/8	....	1.00	1.35	1.35	1.75	2.50	3.05	3.95	5.20	6.60	8.50	11.50	....	....
1 1/2	....	1.10	1.50	1.50	1.90	2.65	3.25	4.15	5.50	6.90	9.00	12.00	22.50	26.65
1 3/4	....	1.40	1.90	1.90	2.30	3.05	3.75	4.65	6.20	7.70	10.00	12.70	24.25	28.10
2	....	1.70	2.30	2.30	2.70	3.45	4.25	5.15	7.00	8.60	11.00	13.50	26.00	30.20
2 1/4	....	....	2.70	2.70	3.10	3.85	4.75	5.65	8.00	9.75	12.00	14.90	28.00	32.95
2 1/2	....	....	....	....	....	4.65	5.80	6.80	9.00	10.50	13.50	15.50	30.50	35.65
2 3/4	....	....	....	....	....	6.00	7.00	8.00	10.00	12.50	15.00	17.00	33.00	....
3	....	....	....	....	....	7.50	8.50	9.50	11.00	15.00	16.50	19.00	36.00	....
3 1/4	....	....	....	....	....	9.00	10.50	11.50	15.00	17.50	18.50	22.50	39.50	....
3 1/2	....	....	....	....	....	11.00	12.50	15.00	18.00	19.50	22.00	25.50	42.75	....

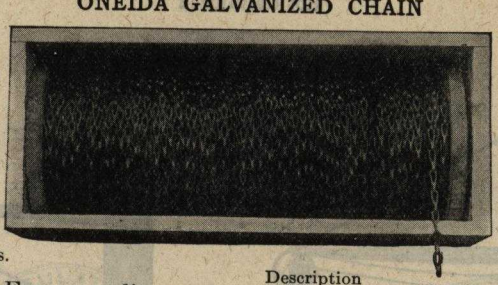
Any size of screws, not listed above, shall take the list price of the next larger or longer length.

*No. 3 not made in 64 threads. †No. 7 not made in 36 threads.

ARC LAMP CHAIN AND CORDAGE

ONEIDA GALVANIZED CHAIN





Trade No.	Mfrs. No.	Description	Price, per 100 Feet
044665	1	For suspending arc lamps	$4.20
044666	5	For suspending incandescent lamps	3.60

Galvanized Attachments

Trade No.	Mfrs. No.	Description	Price per 1000
044667	1	Lamp hooks	$20.00
044668	5	Lamp hooks	13.00
044669	1	Rings	40.00
044670	5	Rings	20.00
044671		No. 1, connecting links, per 1000 sets	13.00
044672		No. 5, connecting links, per 1000 sets	5.20

Oneida Galvanized Chain can be used with any mast arm. Packed on enclosed reels of 500 or 1000 feet.

GALVANIZED ARC LAMP CORD



Trade No.	Diam. Inches	Weight per Foot Pounds	Approx. Breaking Stress in Lbs.	Construction	Price, per 100 Feet
044673	1/2	335	4750	9x7	$7.00
044674	7/16	245	3400	9x7	6.00
044675	3/8	163	2000	9x7	5.00
044676	5/16	107	1530	9x4	$3.50
044677	1/4	77	1125	9x4	2.75

SAMSON SPOT CORD

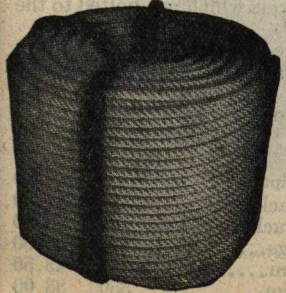
Solid Braided Cotton, Waterproof Finish



Trade No.	Size No.	Diam. Inches	Approx. Lbs. to 1200 Feet	Approx. Feet Std. Coil	Price per Lb.
33936	6	3/16	21	1200	$0.50
33937	7	7/32	26	1200	.50
044678	8	1/4	32	1200	.50
044679	9	9/32	40	1200	.50
044680	10	5/16	50	1200	$0.50
044681	12	3/8	70	1200	.50
044682	14	7/16	100	1200	.50
044683	16	1/2	125	1200	.50

Sizes 6, 7, 8, 9, 10 and 12 are most commonly used for trolley cord, and sizes, 12, 14, and 16 for raising and lowering arc lamps.

The colored spots are a trade mark used only with this extra quality.



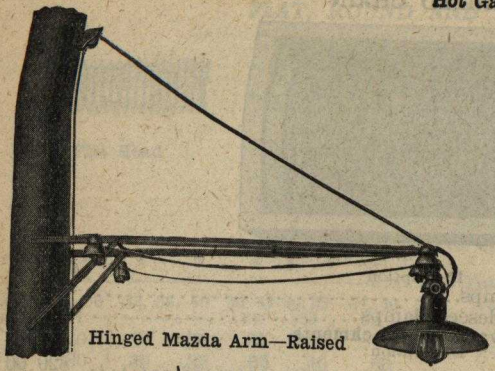
MANILA ROPE

Manila, sisal and jute ropes weigh about alike. Tarred hemp cordage will weigh about one fourth more. The relative strength of manila to sisal is about as 7 is to 5.

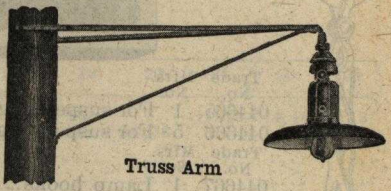
Trade No.	Diam. Inches	Circumference Inches	No. of Feet in 1 Pound	Full Coils Length Feet	Full Coils Weight Pounds	Strength Pounds
33929	1/4	6 thd. fine	55	2600	50	620
33930	5/16	9 thd. fine	41	1870	55	1000
33931	3/8	12 thd. fine	26	1690	65	1275
33932	1/2	1 1/2	13 1/2	1200	92	2400
33933	9/16	1 3/4	10	1200	130	3300
33934	5/8	2	7 1/2	1200	160	4000
33935	3/4	2 1/4	6	1200	200	4700

PEIRCE BRACKETS

Hot Galvanized



Hinged Mazda Arm—Raised



Truss Arm



Hinged Mazda Arm Lowered

HINGED MAZDA ARMS

The development of the series Mazda street lighting system made necessary an arm whereby the lamps could be hung out beyond the line of foliage and still be readily accessible to linemen for cleaning and renewals.

The Peirce Hinged Arms meet the demand. They are made of 1-inch channel steel and hot galvanized. They are thoroughly braced to resist wind pressure and are yet light and inexpensive. Furnished with standard ¾-inch threaded connection for hood.

Trade No.	Mfrs. No.	Length Feet	Wt. Lbs.	Price Each
75386	6	6½	16	$2.86
75387	8	8½	19½	3.10
75388	10	10½	22¾	3.56
75389	12	12½	25½	3.82

TRUSS ARMS

These arms are substitutes for the old goosenecks. They are made of ¾-inch channel steel, braced to resist all strains and hot galvanized. They will never need painting or renewal. Where it is unnecessary to hang the lamp more than 6 feet from the pole they have no equal.

Trade No.	Mfrs. No.	Length Feet	Wt. Lbs.	Price Each
75390	370	4	8	$1.70
75391	371	6	12	2.32

FIRE ALARM FIXTURES

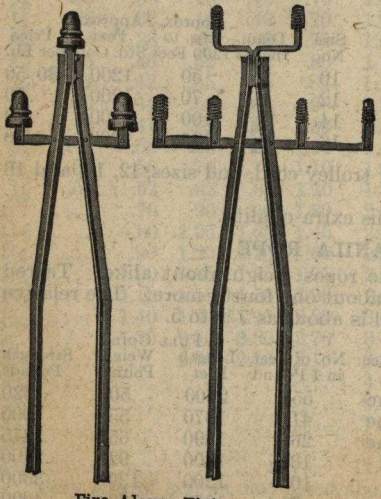
These are combination fixtures used for carrying signal wires on telephone and telegraph poles. Any number of wires, from one to six, can be correctly spaced on the various brackets which are bolted to the angle legs.

The supporting legs are made of 1¾x1¾x⅛-inch steel angle, the insulator brackets of 1x1½x⅛-inch steel channel.

The entire fixture is thoroughly galvanized.

Bolt holes, 9/16 inch, for ½-inch through bolts.

Trade No.	Mfrs. No.	Description	Wt., Lbs. per 100	Price per 100
75392	2590	One-point bracket.....	50	$11.00
75393	2591	Two-point bracket.....	175	39.00
75394	2592	Pair angle legs.....	1120	135.00
75395	2593	Two-point arm.....	150	43.50
75396	2594	Four-point arm	350	83.00



Fire Alarm Fixtures
Three-Wire Assembly
Six-Wire Assembly

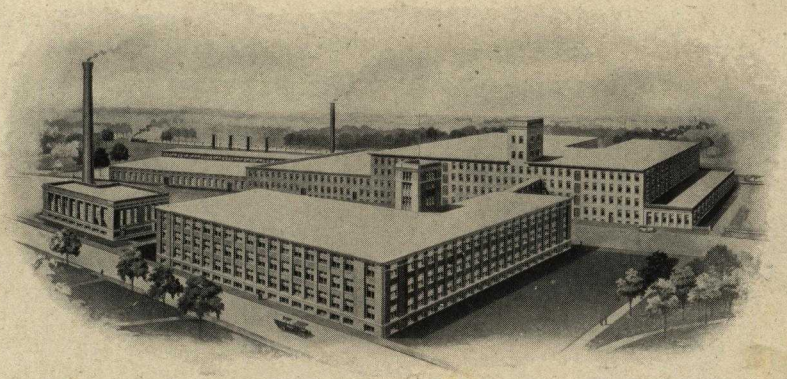
WIRE SECTION

BARE COPPER WIRES & CABLES — TRADE PHILLIPS MARK

INSULATED WIRE AND CABLES — TRADE MARK "O.K."

BLACK CORE RUBBER WIRES — TRADE "PARAC" MARK

For over twenty-five years "O. K." weatherproof wires have been the acknowledged standard with the electrical trade, their reputation having been earned by a durable insulation, desirable finish, and uniform weights.



Plant of Phillips Insulated Wire Company, Pawtucket, R. I.

INSULATED CONDUCTORS



"O. K." Weatherproof—Triple Braid



Slowburning Weatherproof



Ideal Slowburning Wire



Weatherproof Iron Wire



Weatherproof Twisted Pairs



Annunciator Wire
One lb. Spools



Cross Section of
Concentric Strand



Damp-proof Office Wire



"Parac" Rubber Covered—Single Braid



"Parac" Rubber Covered—Double Braid



"Parac" Rubber Covered—Stranded



"Parac" Rubber Covered—Duplex

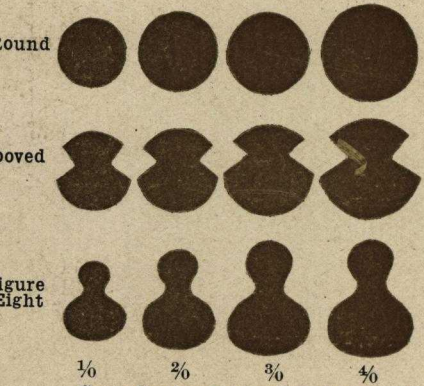


"Parac" Rubber Covered—Flexible



"Parac" Telephone Wires

BARE COPPER CONDUCTORS



1/0 2/0 3/0 4/0

Cross Sections of Trolley Wires



Tinned Copper Strand



Hard Drawn Line Wires

O. K. WEATHERPROOF WIRE

STRANDED



Trade No.	Capacity Circular Mils	Underwriters' Approved Carrying Capacity Amperes	Approx. Wt., Lbs. Per 1000 Ft.	Per Mile	Approx. Diam., In. over Insulation	Concent. Number Wires	Strands Diam. Each	Put up for Shipment — Reels Diam. Reels Inches	Approx. Length Feet	Approx. Weight Pounds
10262	1000000	1000	3675	19400	1 21/32	61	.128	45	660	2425
10263	900000	920	3330	17600	1 39/64	61	.121	45	720	2400
10264	800000	840	3000	15800	1 9/16	61	.114	45	800	2400
10265	700000	760	2650	14000	1 15/32	61	.107	45	900	2385
10266	600000	680	2235	11800	1 21/64	61	.099	45	1000	2235
10267	500000	590	1900	10000	1 1/4	37	.116	48	1320	2560
10268	450000	545	1725	9100	1 3/16	37	.110	45	1320	2280
10269	400000	500	1550	8200	1 9/64	37	.104	45	1320	2020
10270	350000	450	1345	7100	1	37	.097	42	1500	2010
10271	300000	400	1175	6200	31/32	37	.090	42	1500	1760
10272	250000	350	985	5200	29/32	37	.082	42	2000	1970
	Size B. & S.									
10273	0000	312	800	4220	55/64	19	.105	45	2640	2110
10274	000	262	653	3450	51/64	19	.094	42	2640	1725
10275	00	220	522	2760	43/64	19	.083	36	2640	1380
10276	0	185	424	2240	39/64	19	.074	36	2640	1120
10277	0000	312	800	4220	55/64	19	.105	28	385	300
10278	000	262	653	3450	51/64	19	.094	28	450	300
10279	00	220	522	2760	43/64	19	.083	28	525	275
10280	0	185	424	2240	39/64	19	.074	28	650	275
10281	1	156	328	1735	35/64	7	.109	28	800	260
10282	2	131	270	1425	33/64	7	.098	28	1000	270
10283	3	110	206	1090	15/32	7	.086	28	1200	250
10284	4	92	170	900	7/16	7	.077	28	1500	255
10285	5	77	140	740	3/8	7	.068	28	2000	280
10286	6	65	115	610	11/32	7	.061	28	2500	285
10287	8	46	78	410	9/32	7	.048	28	2500	195

SOLID



Trade No.	Size B. & S.	Underwriters' Approved Carrying Capacity Amperes	Approx. Wt., Lbs. Per 1000 Ft.	Per Mile	Approx. Diam., In. over Insulation	Put up for Shipment — Reels Diam. Reels Inches	Approx. Length Feet	Approx. Weight Pounds	Cases Containing Approx. 200 Lbs. No. Coils	Wt., Lbs.	Coils Approx. Weight Pounds
10288	0000	312	767	4050	25/32	42	2640	2025	..	..	...
10289	000	262	630	3320	47/64	42	2640	1660	..	..	...
10290	00	220	502	2650	39/64	36	2640	1325	..	..	...
10291	0	185	407	2150	9/16	36	2640	1075	..	..	...
10292	0000	312	767	4050	25/32	28	325	250	..	..	...
10293	000	262	630	3320	47/64	28	400	250	..	..	...
10294	00	220	502	2650	39/64	28	500	250	..	..	...
10295	0	185	407	2150	9/16	28	625	250	..	..	...
10296	1	156	316	1670	1/2	28	800	250	..	..	125
10297	2	131	260	1370	15/32	28	1000	260	..	..	130
10298	3	110	200	1050	27/64	28	1250	250	..	..	125
10299	4	92	164	865	25/64	28	1600	260	..	..	130
10300	5	77	134	710	11/32	28	2000	270	..	..	135
10301	6	65	112	590	5/16	28	2500	280	..	..	140
10302	8	46	75	395	17/64	28	2700	200	..	..	100
10303	10	32	53	280	1/4	28	3300	170	..	..	85
10304	8	46	75	395	17/64	..	....	...	8	25	...
10305	10	32	53	280	1/4	..	....	...	8	25	...
10306	12	23	35	185	7/32	..	....	...	8	25	...
10307	14	16	25	130	3/16	..	....	...	8	25	...
10308	16	8	14	75	5/32	..	....	...	12	17	...
10309	18	5	11	58	1/8	..	....	...	12	17	...

On account of market fluctuations, prices are quoted on application only.

This wire is insulated with three close cotton braids, all thoroughly saturated with O. K. Weatherproof Compound. The outer braid is smoothly polished.

O. K. SLOW BURNING WEATHERPROOF WIRE

STRANDED



Trade No.	Capacity Circular Mils	Underwriters' Approved Carrying Capacity Amperes	Approx. Wt., Lbs. Per 1000 Ft.	Per Mile	Approx. Diam., In. over Insulation	Concen. Number Wires	Strands Diam. Each	Put up for Shipment — Reels — Diam. Reels Inches	Approx. Length Feet	Approx. Weight Pounds
10473	1000000	1000	3860	20400	1 32/64	61	.128	45	660	2545
10474	900000	920	3520	18600	1 29/64	61	.121	45	720	2535
10475	800000	840	3180	16800	1 33/64	61	.114	45	800	2545
10476	700000	760	2820	14900	1 27/64	61	.107	45	900	2540
10477	600000	680	2350	12400	1 9/32	61	.099	45	1000	2350
10478	500000	590	1990	10500	1 13/64	37	.116	45	1320	2625
10479	450000	545	1820	9600	1 9/64	37	.110	45	1320	2400
10480	400000	500	1650	8700	1 3/32	37	.104	45	1320	2175
10481	350000	450	1440	7600	31/32	37	.097	42	1500	2160
10482	300000	400	1270	6700	15/16	37	.090	42	1500	1905
10483	250000	350	1060	5600	7/8	37	.082	42	2000	2120
	Size B. & S.									
10484	0000	312	900	4750	53/64	19	.105	45	2640	2375
10485	000	262	735	3880	49/64	19	.094	42	2640	1940
10486	00	220	583	3080	41/64	19	.083	36	2640	1540
10487	0	185	480	2530	37/64	19	.074	36	2640	1265
10488	0000	312	900	4750	53/64	19	.105	28	375	335
10489	000	262	735	3880	49/64	19	.094	28	450	335
10490	00	220	583	3080	41/64	19	.083	28	525	310
10491	0	185	480	2530	37/64	19	.074	28	650	310
10492	1	156	355	1870	33/64	7	.109	28	800	285
10493	2	131	290	1540	31/64	7	.098	28	1000	290
10494	3	110	240	1270	29/64	7	.086	28	1200	290
10495	4	92	195	1030	27/64	7	.077	28	1500	290
10496	5	77	160	845	3/8	7	.068	28	2000	320
10497	6	65	132	695	11/32	7	.061	28	2500	330
10498	8	46	87	460	9/32	7	.048	28	2500	220

SOLID



Trade No.	Size B. & S. Gauge	Underwriters' Approved Carrying Capacity Amperes	Approx. Wt., Lbs. Per 1000 Ft.	Per Mile	Approx. Diam. In. over Insulation	Put up for Shipment — Reels — Diam. Reels Inches	Approx. Length Feet	Approx. Weight Pounds	Cases Containing Approx. 200 Lbs. No. Coils	Wt., Lbs.	Coils Approx. Weight Pounds
10499	0000	312	862	4550	3/4	42	2640	2275	....	....	....
10500	000	262	710	3750	45/64	42	2640	1875	....	....	....
10501	00	220	562	2970	37/64	36	2640	1485	....	....	....
10502	0	185	462	2440	17/32	36	2640	1220	....	....	....
10503	0000	312	862	4550	3/4	28	325	280	....	....	....
10504	000	262	710	3750	45/64	28	400	280	....	....	....
10505	00	220	562	2970	37/64	28	500	280	....	....	....
10506	0	185	462	2440	17/32	28	625	285	....	....	....
10507	1	156	340	1800	15/32	28	800	270	....	....	135
10508	2	131	280	1480	7/16	28	1000	280	....	....	140
10509	3	110	230	1220	13/32	28	1250	290	....	....	145
10510	4	92	190	1000	3/8	28	1600	300	....	....	150
10511	5	77	155	820	11/32	28	2000	310	....	....	155
10512	6	65	127	670	5/16	28	2500	320	....	....	160
10513	8	46	85	450	17/64	....	....	....	8	25	....
10514	10	32	60	315	1/4	....	....	....	8	25	....
10515	12	23	42	220	7/32	....	....	....	8	25	....
10516	14	16	30	160	3/16	....	....	....	8	25	....
10517	16	8	15	80	5/32	....	....	....	12	17	....
10518	18	5	12	63	1/8	....	....	....	12	17	....

On account of market fluctuations, prices are quoted on application only.

This wire has two inner braids saturated with a white fireproof compound and an outer braid saturated with O. K. Black Weatherproof Compound. The outer braid is smoothly polished.

O. K. SLOW BURNING WIRE

STRANDED



Trade No.	Capacity Circular Mils	Approx. Wt., Lbs. Per 1000 Ft.	Per Mile	Approx. Diam., In. Over Insulation	Concentric Strands Number Wires	Diam. Each	Put up for Shipment — Reels — Diam. Reels Inches	Approx. Length Feet	Approx Weight Pounds
10416	1000000	3980	21000	1 39/64	61	.128	45	660	2600
10417	900000	3640	19200	1 9/16	61	.121	45	720	2600
10418	800000	3280	17300	1 33/64	61	.114	45	800	2600
10419	700000	2920	15400	1 27/64	61	.107	45	900	2600
10420	600000	2460	13000	1 9/32	61	.099	45	1000	2500
10421	500000	2080	11000	1 15/64	37	.116	45	1320	2750
10422	450000	1900	10000	1 9/64	37	.110	45	1320	2500
10423	400000	1700	9000	1 3/32	37	.104	45	1320	2250
10424	350000	1500	7900	31/32	37	.097	42	1500	2250
10425	300000	1310	6900	15/16	37	.090	42	1500	1950
10426	250000	1120	5900	7/8	37	.082	42	2000	2250
	Size B. & S.								
10427	0000	960	5070	53/64	19	.105	45	2640	2535
10428	000	785	4150	49/64	19	.094	42	2640	2075
10429	00	625	3300	41/64	19	.083	36	2640	1650
10430	0	510	2700	37/64	19	.074	36	2640	1350
10431	0000	960	5070	53/64	19	.105	28	375	360
10432	000	785	4150	49/64	19	.094	28	450	350
10433	00	625	3300	41/64	19	.083	28	525	375
10434	0	510	2700	37/64	19	.074	28	650	330
10435	1	380	2000	33/64	7	.109	28	800	300
10436	2	335	1770	31/64	7	.098	28	1000	335
10437	3	280	1480	29/64	7	.086	28	1200	335
10438	4	230	1220	27/64	7	.077	28	1500	340
10439	5	195	1030	3/8	7	.068	28	2000	390
10440	6	165	870	11/32	7	.061	28	2500	410
10441	8	105	555	9/32	7	.048	28	2500	260

SOLID



Trade No.	Size B. & S. Gauge	Approx. Wt., Lbs. Per 1000 Ft.	Per Mile	Approx. Diam., In. Over Insulation	Put up for Shipment — Reels — Diam. Reels Inches	Approx. Length Feet	Approx. Weight Pounds	Cases Containing Approx. 200 Lbs. No. Coils	Cases Containing Approx. 200 Lbs. Wt., Lbs.	Coils Approx. Weight Pounds
10442	0000	925	4890	3/4	42	2640	2450	..	..	....
10443	000	760	4020	45/64	42	2640	2000	..	..	....
10444	00	600	3170	37/64	36	2640	1600	..	..	....
10445	0	495	2610	17/32	36	2640	1300	..	..	....
10446	0000	925	4890	3/4	28	325	300	..	..	....
10447	000	760	4020	45/64	28	400	300	..	..	....
10448	00	600	3170	37/64	28	500	300	..	..	....
10449	0	495	2610	17/32	28	625	310	..	..	....
10450	1	365	1930	15/32	28	800	290	..	..	150
10451	2	320	1690	7/16	28	1000	320	..	..	160
10452	3	270	1425	13/32	28	1250	340	..	..	170
10453	4	220	1160	3/8	28	1600	350	..	..	175
10454	5	190	1000	11/32	28	2000	380	..	..	190
10455	6	160	845	5/16	28	2500	400	..	..	200
10456	8	100	530	17/64	..	....	...	8	25	...
10457	10	80	420	1/4	..	....	...	8	25	...
10458	12	55	290	7/32	..	....	...	8	25	...
10459	14	40	210	3/16	..	....	...	8	25	...
10460	16	18	95	5/32	..	....	...	12	17	...
10461	18	14	75	1/8	..	....	...	12	17	...

On account of market fluctuations, prices quoted on application only.

This wire has three close braids of cotton, all saturated with a white fireproof compound. The compound used on the outer braid becomes very hard, but the wire still retains its flexibility. As this insulation does not deteriorate in a continued high temperature, it is especially suitable for engine and boiler rooms, furnaces and foundries.

PARAC RUBBER COVERED WIRE

NATIONAL ELECTRICAL CODE SPECIFICATIONS—0-600

SOLID



Prices per 1000 Feet—Single Braid

Size B. & S.	Thickness of Rubber Inches	Approved Carrying Cap., Amps.	Base Prices of Copper, per Pound 23c	24c	25c	26c	27c	28c	29c	30c	31c	Extra Braid Each
0000	5/64	210	$651.0	$672.0	$692.0	$711.0	$732.0	$752.0	$771.0	$792.0	$812.0	‡$25.0
000	5/64	170	540.0	556.0	571.0	588.0	604.0	619.0	636.0	652.0	669.0	‡23.0
00	5/64	157	446.0	458.0	470.0	483.0	495.0	509.0	521.0	534.0	546.0	‡21.0
0	5/64	120	368.0	379.0	389.0	398.0	409.0	419.0	428.0	439.0	449.0	‡19.0
1	5/64	107	261.0	268.0	276.0	283.0	291.0	298.0	306.0	313.0	322.0	17.0
2	4/64	90	199.0	205.0	211.0	217.0	223.0	229.0	235.0	241.0	247.0	13.0
3	4/64	76	163.0	167.0	172.0	176.0	182.0	187.0	191.0	197.0	202.0	12.0
4	4/64	65	133.2	136.8	140.7	144.6	148.2	152.1	155.8	159.6	163.3	11.0
5	4/64	54	112.7	115.7	118.7	121.7	124.7	127.7	130.7	133.7	136.7	10.0
6	4/64	46	94.5	96.9	99.3	101.7	104.1	106.4	108.8	111.2	113.6	9.0
8	3/64	33	59.7	61.2	62.7	64.2	65.7	67.2	68.7	70.2	71.7	8.0
9	3/64	28	50.7	51.9	53.0	54.2	55.4	56.6	57.6	58.8	60.0	7.5
10	3/64	24	43.4	44.4	45.3	46.2	47.3	48.2	49.2	50.3	51.2	7.0
12	3/64	20	32.1	32.7	33.3	33.9	34.5	35.1	35.7	36.3	36.9	6.0
†14	3/64	15	24.6	25.0	25.3	25.8	26.1	26.5	26.8	27.3	27.6	5.0
16	2/64	6	18.0	18.1	18.4	18.7	18.9	19.2	19.3	19.6	19.8	4.0
18	2/64	3	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	3.8
*19	2/64	...	13.6	13.7	13.9	14.0	14.2	14.2	14.3	14.5	14.6	3.6
*20	2/64	...	12.4	12.6	12.6	12.7	12.7	12.9	13.0	13.2	13.2	3.4
*22	2/64	...	10.8	10.9	10.9	10.9	11.1	11.1	11.1	11.2	11.2	3.2

† Add $1.00 per 1000 feet list for single white paint-finished braid for exposed work on ceilings.
‡ Add only when more than tape and braid or double braid are required.
* Do not bear underwriters' stamp.

FIXTURE

Solid, Single Braid

16	..	6	18.0	18.1	18.4	18.7	18.9	19.2	19.3	19.6	19.8	4.0
18	..	3	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	3.8

DUPLEX

Solid, Single Braid



Prices per 1000 Feet

Size B. & S.	Approved Carrying Cap., Amps.	Base Prices of Copper, per Pound 23c	24c	25c	26c	27c	28c	29c	30c	31c	Extra Braid Each
6	46	$207.0	$211.8	$216.6	$221.4	$226.2	$230.8	$235.6	$240.4	$245.2	$18.0
8	33	134.4	137.4	140.4	143.4	146.4	149.4	152.4	155.4	158.4	16.0
10	24	99.6	101.6	103.4	105.2	107.4	109.2	111.2	113.4	115.2	14.0
12	20	74.7	75.9	77.1	78.3	79.5	80.7	81.9	83.1	84.3	12.0
14	15	57.7	58.5	59.1	60.1	60.7	61.5	62.1	63.1	63.7	10.0

Stranded Single Braid

6	46	238.6	243.4	248.6	253.4	258.8	263.8	268.6	273.8	278.8	18.0
8	33	159.6	159.8	162.8	166.2	169.2	172.2	175.4	178.4	181.8	16.0
10	24	115.6	117.4	119.6	121.6	123.4	125.6	127.6	129.8	131.6	14.0
12	20	88.8	90.0	91.2	92.4	93.8	95.0	96.2	97.4	98.6	12.0
14	15	69.2	69.8	70.8	71.6	72.2	72.8	74.0	75.0	75.6	10.0

Reels will be billed at cost and credited at full billing value, less return freight charges, if returned to mill in good condition, within six months of shipping date. Obtain return tags and shipping instructions before shipping reels.

PARAC RUBBER COVERED WIRE

1911 NATIONAL ELECTRICAL CODE SPECIFICATIONS—0-600 VOLTS

SOLID



Prices, per 1000 Feet—Single Braid

Size B. & S.	Thickness of Rubber Inches	Approved Carrying Cap., Amps.	Base Prices of Copper, per Pound 32c	33c	34c	35c	36c	37c	38c	39c	40c	Extra Braid Each
0000	5/64	175	$831.0	$852.0	$872.0	$891.0	$912.0	$932.0	$951.0	$972.0	$992.0	‡$25.0
000	5/64	...	684.0	700.0	715.0	732.0	743.0	763.0	780.0	796.0	813.0	‡23.0
00	5/64	150	560.0	572.0	584.0	597.0	609.0	623.0	635.0	648.0	660.0	‡21.0
0	5/64	125	458.0	469.0	479.0	488.0	499.0	509.0	518.0	529.0	539.0	‡19.0
1	5/64	100	330.0	337.0	345.0	352.0	360.0	367.0	375.0	382.0	391.0	17.0
2	4/64	90	254.0	260.0	266.0	272.0	278.0	284.0	290.0	296.0	302.0	13.0
3	4/64	80	206.0	211.0	215.0	220.0	226.0	230.0	235.0	240.0	245.0	12.0
4	4/64	70	167.2	170.8	174.7	178.6	182.2	186.1	189.9	193.6	197.4	11.0
5	4/64	55	139.7	142.7	145.7	148.7	151.7	154.7	157.7	160.7	163.7	10.0
6	4/64	50	115.8	118.2	120.6	123.0	125.4	127.7	130.1	132.5	134.9	9.0
8	3/64	35	73.2	74.7	76.2	77.7	79.2	80.7	82.2	83.7	85.2	8.0
9	3/64	..	61.2	62.4	63.5	64.7	65.9	67.1	68.1	69.3	70.5	7.5
10	3/64	25	52.1	53.1	54.0	54.9	56.0	56.9	57.9	59.0	59.9	7.0
12	3/64	20	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	6.0
†14	3/64	15	27.9	28.3	28.6	29.1	29.4	29.8	30.1	30.6	30.9	5.0
16	2/64	6	20.1	20.2	20.5	20.8	21.0	21.3	21.4	21.7	21.9	4.0
18	2/64	3	16.4	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	3.8
*19	2/64	...	14.6	14.8	14.9	15.1	15.2	15.2	15.4	15.5	15.7	3.6
*20	2/64	...	13.3	13.5	13.5	13.6	13.6	13.8	13.9	14.1	14.1	3.4
*22	2/64	...	11.2	11.4	11.4	11.4	11.5	11.5	11.5	11.7	11.7	3.2

† Add $1.00 per 1000 feet list for single white paint-finished braid for exposed work on ceilings.
‡ Add only when more than tape and braid or double braid are required.
* Do not bear underwriters' stamp.

FIXTURE

Solid, Single Braid

16	..	6	20.1	20.2	20.5	20.8	21.0	21.3	21.4	21.7	21.9	4.0
18	..	3	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	3.8

DUPLEX

Solid, Single Braid



Prices, per 1000 Feet

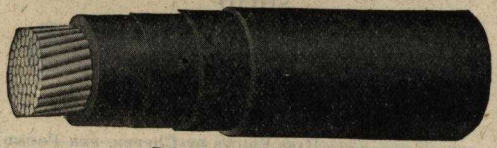
Size B. & S.	Approved Carrying Cap., Amps.	Base Prices of Copper, per Pound 32c	33c	34c	35c	36c	37c	38c	39c	40c	Extra Braid Each
6	50	$249.6	$254.4	$259.2	$264.0	$268.8	$273.4	$278.2	$283.0	$287.8	$18.0
8	35	161.4	164.4	167.4	170.4	173.4	176.4	179.4	182.4	185.4	16.0
10	25	117.0	119.0	120.8	122.6	124.8	126.6	128.6	130.8	132.6	14.0
12	20	85.5	86.7	87.9	89.1	90.3	91.5	92.7	93.9	95.1	12.0
14	15	64.3	65.1	65.7	66.7	67.3	68.1	68.7	69.7	70.3	10.0
		Stranded Single Braid									
6	50	284.0	288.8	293.8	298.6	304.0	309.2	314.0	319.0	324.2	18.0
8	35	184.8	188.0	191.0	194.4	197.4	200.4	203.6	206.6	210.0	16.0
10	25	133.6	135.4	137.6	139.6	141.4	143.6	145.6	147.8	149.6	14.0
12	20	100.2	101.4	102.6	103.8	105.2	106.4	107.6	108.8	110.0	12.0
14	15	76.4	77.0	78.0	78.8	79.4	80.0	81.2	82.2	82.8	10.0

Reels will be billed at cost and credited at full billing value, less return freight charges, if returned to mill in good condition within six months of shipping date. Obtain return tags and shipping instructions before shipping reels.

PARAC RUBBER COVERED WIRE

1911 NATIONAL ELECTRICAL CODE SPECIFICATIONS—0-600 VOLTS

CIRCULAR MIL CABLES



Prices, per 1000 Feet

Size B. & S.	Thickness of Rubber Inches	Approved Carrying Cap. Amps.	Base Prices of Copper, per Pound 23c	24c	25c	26c	27c	28c	29c	30c	31c	Extra Braid Each
2000000	4/32	1050	$5173	$5362	$5551	$5740	$5929	$6118	$6307	$6496	$6685	$69
1750000	4/32	950	4564	4729	4894	5060	5225	5390	5555	5720	5887	66
1500000	4/32	850	3960	4101	4244	4385	4527	4668	4811	4953	5094	62
1250000	4/32	750	3371	3489	3608	3726	3843	3962	4080	4199	4317	58
1000000	7/64	650	2701	2796	2890	2985	3079	3174	3268	3363	3457	52
950000	7/64	625	2580	2668	2758	2848	2938	3028	3118	3208	3298	51
900000	7/64	600	2453	2538	2624	2708	2793	2879	2963	3048	3132	50
850000	7/64	575	2332	2411	2492	2572	2653	2732	2813	2894	2974	49
800000	7/64	550	2206	2283	2358	2433	2509	2584	2661	2736	2812	48
750000	7/64	525	2080	2150	2221	2293	2363	2434	2504	2575	2647	47
700000	7/64	500	1956	2022	2090	2156	2222	2288	2354	2420	2486	46
650000	7/64	475	1832	1894	1955	2017	2078	2140	2201	2263	2324	45
600000	7/64	450	1709	1766	1823	1880	1937	1992	2049	2106	2163	44
550000	7/64	420	1585	1638	1689	1741	1794	1845	1897	1950	2001	43
500000	3/32	390	1427	1473	1521	1568	1616	1662	1710	1758	1805	40
450000	3/32	360	1297	1339	1382	1424	1468	1510	1552	1594	1637	38
400000	3/32	330	1170	1207	1245	1282	1320	1359	1396	1434	1471	36
350000	3/32	300	1041	1074	1107	1140	1173	1206	1240	1273	1306	34
300000	3/32	270	912	941	969	996	1025	1053	1082	1110	1139	32
250000	3/32	235	782	806	830	854	877	901	925	949	973	30
225000	3/32	200	719	741	762	783	804	825	846	867	888	28

STRANDED



Prices per 1000 Feet—Single Braid

Size B. & S.	Thickness of Rubber Inches	Approved Carrying Cap. Amps.	Base Prices of Copper, per Pound 23c	24c	25c	26c	27c	28c	28c	30c	31c	Extra Braid Each	Flexible Cond. Each
0000	5/64	210	$651.0	$672.0	$692.0	$711.0	$732.0	$752.0	$771.0	$792.0	$812.0	†$25.0	$40.0
000	5/64	177	540.0	556.0	571.0	588.0	604.0	619.0	636.0	652.0	669.0	†23.0	38.0
00	5/64	150	446.0	458.0	470.0	483.0	495.0	509.0	521.0	534.0	546.0	†21.0	35.0
0	5/64	127	368.0	379.0	389.0	398.0	409.0	419.0	428.0	439.0	449.0	†19.0	30.0
1	5/64	107	291.0	299.0	308.0	315.0	323.0	330.0	339.0	348.0	356.0	17.0	23.0
2	4/64	90	221.0	227.0	233.0	241.0	247.0	253.0	259.0	266.0	272.0	13.0	18.0
3	4/64	76	183.0	189.0	193.0	198.0	202.0	208.0	213.0	219.0	223.0	12.0	15.0
4	4/64	65	153.7	157.4	161.3	165.2	169.3	173.2	177.1	181.0	185.0	11.0	12.3
5	4/64	54	128.8	131.8	135.0	138.1	141.3	144.4	147.4	150.6	153.7	10.0	10.5
6	4/64	46	110.3	112.7	115.3	117.7	120.4	122.9	125.3	127.9	130.4	9.0	9.2
8	3/64	33	70.3	71.9	73.4	75.1	76.6	78.1	79.7	81.2	82.9	8.0	5.9
9	3/64	28	59.7	60.9	62.1	63.4	64.5	65.8	67.0	68.2	69.4	7.5	5.1
10	3/64	24	50.8	51.7	52.8	53.8	54.7	55.8	56.8	57.9	58.8	7.0	4.5
12	3/64	20	38.4	39.0	39.6	40.2	40.9	41.5	42.1	42.7	43.3	6.0	3.5
14	2/64	15	29.6	29.9	30.4	30.8	31.1	31.4	32.0	32.5	32.8	5.0	2.7
16	2/64	6	22.9	23.2	23.4	23.7	24.0	24.1	24.4	24.7	25.0	4.0	2.4
18	2/64	3	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	3.8	2.0
*19	2/64	....	16.9	16.9	17.0	17.2	17.3	17.5	17.5	17.6	17.8	3.6	1.9
*20	2/64	....	15.0	15.1	15.3	15.3	15.4	15.4	15.6	15.7	15.9	3.4	1.6
*22	2/64	....	13.7	13.7	13.7	13.8	13.8	14.0	14.0	14.1	14.1	3.2	1.5

Use table for flexible conductors when strand is not cotton or paper wound. When strand is cotton or paper wound, for flexible conductor, add 10 per cent to final list.

*Do not bear underwriters' stamp.

†The list prices for 0000 to 0, inclusive, include double braid.

Reels will be billed at cost and credited at full billing value, less return freight charges, if returned to mill in good condition within six months of shipping date. Obtain return tags and shipping instructions before shipping reels.

PARAC RUBBER COVERED WIRE

NATIONAL ELECTRICAL CODE STANDARD

CIRCULAR MIL CABLES

Tape and Braid or Double Braid



List—Prices, per 1000 Feet

Size of B.& S.	Thickness of Rubber Inches	Approved Carrying Cap., Amp.	Base Prices of Copper, per Pound									Extra Braid Each
			32c	33c	34c	35c	36c	37c	38c	39c	40c	
2000000	4/32	1050	$6874	$7063	$7252	$7441	$7630	$7819	$8008	$8197	$8386	$69
1750000	4/32	950	6052	6217	6382	6548	6713	6878	7043	7208	7375	66
1500000	4/32	850	5237	5378	5520	5661	5804	5945	6087	6230	6371	62
1250000	4/32	750	4434	4553	4671	4790	4907	5025	5144	5262	5381	58
1000000	7/64	650	3552	3646	3741	3835	3930	4024	4119	4213	4308	52
950000	7/64	625	3388	3477	3567	3657	3747	3837	3927	4017	4107	51
900000	7/64	600	3218	3303	3389	3473	3558	3644	3728	3813	3897	50
850000	7/64	575	3055	3134	3215	3295	3376	3455	3536	3617	3697	49
800000	7/64	550	2887	2964	3039	3114	3190	3265	3342	3417	3493	48
750000	7/64	525	2717	2788	2858	2930	3001	3071	3142	3212	3284	47
700000	7/64	500	2552	2618	2685	2751	2817	2883	2949	3015	3081	46
650000	7/64	475	2386	2447	2509	2570	2632	2693	2755	2816	2878	45
600000	7/64	450	2219	2276	2333	2390	2447	2502	2559	2616	2673	44
550000	7/64	425	2053	2106	2159	2209	2262	2313	2365	2418	2469	43
500000	3/32	400	1853	1899	1947	1994	2042	2088	2136	2184	2231	40
450000	3/32	360	1679	1721	1765	1807	1850	1892	1934	1976	2020	38
400000	3/32	325	1510	1548	1585	1623	1660	1699	1737	1774	1812	36
350000	3/32	300	1339	1372	1405	1438	1471	1504	1539	1572	1605	34
300000	3/32	275	1167	1196	1224	1251	1280	1308	1337	1365	1394	32
250000	3/32	235	995	1019	1043	1067	1090	1114	1138	1162	1186	30
225000	3/32	200	909	932	953	974	995	1016	1037	1058	1079	28

STRANDED CONDUCTOR



List—Prices, per 1000 Feet—Single Braid

Size of B.& S.	Thickness of Rubber Inches	Approved Carrying Cap., Amps.	Base Prices of Copper, per Pound									Extra Braid Each	Flexible Cond. Each
			32c	33c	34c	35c	36c	37c	38c	39c	40c		
0000	5/64	225	$831.0	$852.0	$872.0	$891.0	$912.0	$932.0	$951.0	$972.0	$992.0	†$25.0	$40.0
000	5/64	175	684.0	700.0	715.0	732.0	748.0	763.0	780.0	796.0	813.0	†23.0	38.0
00	5/64	150	560.0	572.0	584.0	597.0	609.0	623.0	635.0	648.0	660.0	†21.0	35.0
0	5/64	125	458.0	469.0	479.0	488.0	499.0	509.0	518.0	529.0	539.0	†19.0	30.0
1	5/64	100	363.0	371.0	380.0	387.0	395.0	402.0	411.0	420.0	428.0	17.0	23.0
2	4/64	90	278.0	284.0	290.0	298.0	304.0	310.0	316.0	323.0	329.0	13.0	18.0
3	4/64	80	228.0	234.0	238.0	243.0	247.0	253.0	258.0	264.0	268.0	12.0	15.0
4	4/64	70	189.1	192.8	196.7	200.6	204.7	208.6	212.5	216.4	220.4	11.0	12.3
5	4/64	55	156.9	159.9	163.0	166.2	169.3	172.5	175.5	178.6	181.8	10.0	10.5
6	4/64	50	133.0	135.4	137.9	140.3	143.0	145.6	148.0	150.5	153.1	9.0	9.2
8	3/64	35	84.4	86.0	87.5	89.2	90.7	92.2	93.8	95.3	97.0	8.0	5.9
9	3/64	...	70.8	72.0	73.2	74.5	75.6	76.9	78.1	79.3	80.5	7.5	5.1
10	3/64	25	59.8	60.7	61.8	62.8	63.7	64.8	65.8	66.9	67.8	7.0	4.5
12	3/64	20	44.1	44.7	45.3	45.9	46.6	47.2	47.8	48.4	49.0	6.0	3.5
14	3/64	15	33.2	33.5	34.0	34.4	34.7	35.0	35.6	36.1	36.4	5.0	2.7
16	2/64	6	25.2	25.5	25.6	25.9	26.2	26.4	26.7	27.0	27.3	4.0	2.4
18	2/64	3	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	3.8	2.0
*19	2/64	...	17.9	17.9	18.1	18.2	18.4	18.5	18.5	18.7	18.8	3.6	1.9
*20	2/64	...	15.9	16.0	16.2	16.2	16.3	16.3	16.5	16.6	16.8	3.4	1.6
*22	2/64	...	14.3	14.3	14.3	14.4	14.4	14.6	14.6	14.7	14.7	3.2	1.5

Use table for flexible conductors when strand is not cotton or paper wound. When strand is cotton or paper wound, for flexible conductor add 10 per cent to final list.

*Do not bear underwriters' stamp.

†The list prices for 0000 to 0, inclusive, include double braid.

Reels will be billed at cost and credited at full billing value, less return freight charges, if returned to mill in good condition within six months of shipping date. Obtain return tags and shipping instructions before shipping reels.

FLEXIBLE SWITCHBOARD CABLE

If It's PARANITE It's Right

SINGLE BRAID



Size B. & S.	Stranding	Wall of Rubber	Diam. Over All	Weight per 1000 Feet	Wire Base, Price per 1000 Feet							
					23c	24c	25c	26c	27c	28c	29c	30c
14	13/25	3/64	9/32	38	$32.30	$32.60	$33.10	$33.50	$33.80	$34.10	$34.70	$35.20
12	21/25	3/64	10/32	48	41.90	42.50	43.10	43.70	44.40	45.00	45.60	46.20
10	21/23	3/64	23/64	65	55.30	56.20	57.30	58.30	59.20	60.30	61.30	62.40
8	49/25	3/64	25/64	94	76.20	77.80	79.30	81.00	82.50	84.00	85.60	87.10
6	49/23	1/16	14/32	149	119.50	121.90	124.50	126.90	129.60	132.10	134.50	137.10
5	49/22	1/16	31/64	175	139.30	142.30	145.50	148.60	151.80	154.90	157.90	161.10
4	49/21	1/16	17/32	209	166.00	169.70	173.60	177.50	181.60	185.50	189.40	193.30
3	133/24	1/16	37/64	252	198.00	204.00	208.00	213.00	217.00	223.00	228.00	234.00
2	133/23	1/16	20/32	306	239.00	245.00	251.00	259.00	265.00	271.00	277.00	284.00
1	133/22	5/64	45/64	391	314.00	322.00	331.00	338.00	246.00	353.00	362.00	371.00
0	133/21	5/64	24/32	497	398.00	409.00	419.00	428.00	439.00	449.00	458.00	469.00
00	133/20	5/64	26/32	613	481.00	493.00	505.00	518.00	530.00	544.00	556.00	569.00
000	133/19	5/64	57/64	747	578.00	594.00	609.00	626.00	642.00	657.00	674.00	690.00
0000	133/18	5/64	61/64	908	691.00	712.00	732.00	751.00	772.00	792.00	811.00	832.00

DOUBLE BRAID



14	13/25	3/64	20/64	40	37.30	37.60	38.10	38.50	38.80	39.10	39.70	40.20
12	21/25	3/64	11/32	56	47.90	48.50	49.10	49.70	50.40	51.00	51.60	52.20
10	21/23	3/64	25/64	74	62.30	63.20	64.30	65.30	66.20	67.30	68.30	69.40
8	49/25	3/64	27/64	107	84.20	85.80	87.30	89.00	90.50	92.00	93.60	95.10
6	49/23	1/16	15/32	166	128.50	130.90	133.50	135.90	138.60	141.10	143.50	146.10
5	49/22	1/16	33/64	194	149.30	152.30	155.50	158.60	161.80	164.90	167.90	171.10
4	49/21	1/16	9/16	230	177.00	180.70	184.60	188.50	192.60	196.50	200.40	204.30
3	133/24	1/16	39/64	275	210.00	216.00	220.00	225.00	229.00	235.00	240.00	246.00
2	133/23	1/16	21/32	333	252.00	258.00	264.00	272.00	278.00	284.00	290.00	297.00
1	133/22	5/64	47/64	422	331.00	339.00	348.00	355.00	363.00	370.00	379.00	588.00
0	133/21	5/64	25/32	532	398.00	409.00	419.00	428.00	439.00	449.00	458.00	469.00
00	133/20	5/64	27/32	654	481.00	493.00	505.00	518.00	530.00	544.00	556.00	569.00
000	133/19	5/64	59/64	790	578.00	594.00	609.00	626.00	642.00	657.00	674.00	690.00
0000	133/18	5/64	63/64	951	691.00	712.00	732.00	751.00	772.00	792.00	811.00	832.00

PARANITE FLEXIBLE SWITCHBOARD CABLE

If It's **PARANITE** It's Right

SINGLE BRAID



Size B.&S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
14	$35.50	$35.90	$36.20	$36.70	$37.10	$37.40	$37.70	$38.30	$38.80	$39.10
12	46.80	47.60	48.20	48.80	49.40	50.10	50.70	51.30	51.90	52.50
10	63.30	64.30	65.20	66.30	67.30	68.20	69.30	70.30	71.40	72.30
8	98.80	90.30	91.90	93.40	95.10	96.60	98.10	99.70	101.20	102.90
6	139.60	142.20	144.60	147.10	149.50	152.20	154.80	157.20	159.70	162.30
5	164.20	167.40	170.40	173.50	176.70	179.80	183.00	186.00	189.10	192.40
4	197.30	201.40	205.10	209.00	212.90	217.00	220.90	224.80	228.70	232.70
3	238.00	243.00	249.00	253.00	258.00	262.00	268.00	273.00	279.00	283.00
2	290.00	296.00	302.00	308.00	316.00	322.00	328.00	334.00	341.00	347.00
1	379.00	386.00	394.00	403.00	410.00	418.00	425.00	434.00	443.00	451.00
0	479.00	488.00	499.00	509.00	518.00	529.00	539.00	548.00	559.00	569.00
00	581.00	595.00	607.00	619.00	632.00	644.00	658.00	670.00	683.00	695.00
000	707.00	722.00	738.00	753.00	770.00	786.00	801.00	818.00	834.00	851.00
0000	852.00	871.00	892.00	912.00	931.00	952.00	972.00	991.00	1012.00	1032.00

DOUBLE BRAID



14	40.50	41.90	41.20	41.70	42.10	42.40	42.70	43.30	43.80	44.10
12	52.80	53.60	54.20	54.80	55.40	56.10	56.70	57.30	57.90	58.50
10	70.30	71.30	72.20	73.30	74.30	75.20	76.30	77.30	78.40	79.30
8	96.80	98.30	99.90	101.40	103.10	104.60	106.10	107.70	109.20	110.90
6	148.60	151.20	153.20	156.10	158.50	161.20	163.80	166.20	168.70	171.30
5	174.20	177.40	180.40	183.50	186.70	189.80	193.00	196.00	199.10	202.40
4	208.30	212.40	216.10	220.00	223.90	228.00	231.90	235.80	239.70	243.70
3	250.00	255.00	261.00	265.00	270.00	274.00	280.00	285.00	291.00	295.00
2	303.00	309.00	315.00	321.00	329.00	335.00	341.00	347.00	354.00	360.00
1	396.00	403.00	411.00	420.00	427.00	435.00	442.00	451.00	460.00	468.00
0	479.00	488.00	499.00	509.00	518.00	529.00	539.00	548.00	559.00	569.00
00	581.00	595.00	607.00	619.00	632.00	644.00	658.00	670.00	683.00	695.00
000	707.00	722.00	738.00	753.00	770.00	786.00	801.00	818.00	834.00	851.00
0000	852.00	871.00	892.00	912.00	931.00	952.00	972.00	991.00	1012.00	1032.00

PARANITE HIGH TENSION WIRE

If It's **PARANITE** It's Right

1500 VOLTS

Solid Single Conductor, Single Braid

Size B. & S.	Wall of Rubber	Diam. Over All	Weight per 1000 Feet	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
14	1/16	.25	43	$31.70	$32.20	$32.50	$32.90	$33.20	$33.70	$34.00	$34.40
12	1/16	.27	54	39.40	40.00	40.60	41.20	41.80	42.40	43.00	43.60
10	1/16	.29	70	51.40	52.50	53.40	54.30	55.30	56.20	57.30	58.30
8	1/16	.33	97	68.60	70.10	71.60	73.10	74.60	76.10	77.60	79.10
6	5/64	.39	148	105.50	107.90	111.30	112.70	115.10	117.30	119.80	122.10

2500 VOLTS

Solid Single Conductor, Double Braid

14	3/32	.36	80	59.90	60.30	60.60	61.10	61.40	61.80	62.10	62.60
12	3/32	.38	93	69.80	70.40	71.00	71.60	72.20	72.80	73.40	74.00
10	3/32	.40	112	83.70	84.80	85.60	86.50	87.60	88.50	89.50	90.60
8	3/32	.42	139	102.50	104.00	105.50	107.00	108.50	110.00	111.50	113.00
6	3/32	.46	180	131.40	133.80	136.20	138.60	141.00	143.20	145.60	148.00

3500 VOLTS

Solid Single Conductor, Double Braid

14	4/32	.42	108	80.90	81.30	81.60	82.10	82.40	82.80	83.10	83.60
12	4/32	.44	121	90.70	91.30	91.90	92.50	93.10	93.70	94.30	94.90
10	4/32	.46	142	105.90	107.00	107.90	108.80	109.80	110.70	111.80	112.80
8	4/32	.51	171	126.30	127.80	129.30	130.80	132.30	133.80	135.30	136.80
6	4/32	.52	215	157.80	160.20	162.60	165.00	167.40	169.70	172.10	174.50

5000 VOLTS

Solid Single Conductor, Double Braid

14	6/32	.55	182	135.70	136.10	136.40	136.90	137.20	137.60	137.90	138.40
12	6/32	.57	197	147.10	147.70	148.30	148.90	149.50	150.10	150.70	151.30
10	6/32	.59	223	165.50	166.50	167.40	168.30	169.40	170.30	171.30	172.40
8	6/32	.62	258	190.20	191.70	193.20	194.70	196.20	197.70	199.20	200.70
6	6/32	.65	308	226.60	229.00	231.40	233.80	236.20	238.40	240.80	243.20

High tension wires and cables are not carried in stock. Must be made up and shipped from factory.

When asking for quotations on high tension wires and cables give full specifications and state quantity desired.

PARANITE HIGH TENSION WIRE

If It's **PARANITE** It's Right

1500 VOLTS

Solid Single Conductor, Single Braid

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	65c	36c	37c	38c	39c	40c
14	$34.70	$35.00	$35.50	$35.80	$36.20	$36.50	$37.00	$37.30	$37.70	$38.00
12	44.20	44.80	45.40	46.00	46.60	47.20	47.80	48.40	49.00	49.60
10	59.20	60.10	61.20	62.10	63.00	64.00	64.90	66.00	67.00	67.90
8	80.60	82.10	83.60	85.10	86.60	88.10	89.60	91.10	92.60	94.10
6	124.50	126.80	129.20	131.60	134.00	136.40	138.60	141.00	143.40	145.80

2500 VOLTS

Solid Single Conductor, Double Braid

14	62.90	63.20	63.60	63.90	64.40	64.70	65.10	65.40	65.90	66.20
12	74.60	75.20	75.80	76.40	77.00	77.60	78.20	78.80	79.40	80.00
10	91.50	92.40	93.40	94.30	95.20	96.30	97.20	98.20	99.30	100.20
8	114.50	116.00	117.50	119.00	120.50	122.00	123.50	125.00	126.50	128.00
6	150.40	152.70	155.10	157.50	159.90	162.30	164.50	166.90	169.30	171.70

3500 VOLTS

Solid Single Conductor, Double Braid

14	83.90	84.20	84.60	84.90	85.40	85.70	86.10	86.40	86.90	87.20
12	95.50	96.10	96.70	97.30	97.90	98.50	99.10	99.70	100.30	100.90
10	113.70	114.60	115.70	116.60	117.50	118.50	119.40	120.50	121.50	122.40
8	138.30	139.80	141.30	142.80	144.30	145.80	147.30	148.80	150.30	151.80
6	176.90	179.10	181.50	183.90	186.30	188.70	191.00	193.40	195.80	198.20

5000 VOLTS

Solid Single Conductor, Double Braid

14	138.70	139.00	139.40	139.70	140.20	140.50	140.90	141.20	141.70	142.00
12	151.90	152.50	153.10	153.70	154.30	154.90	155.50	156.10	156.70	157.30
10	173.30	174.20	175.20	176.10	177.00	178.10	179.00	180.00	181.10	182.00
8	202.20	203.70	205.20	206.70	208.20	209.70	211.20	212.70	214.20	215.70
6	245.60	247.90	250.30	252.70	255.10	257.50	259.70	262.10	264.50	266.90

High tension wires and cables are not carried in stock. Must be made up and shipped from factory.

When asking for quotations on high tension wires and cables give full specifications and state quantity desired.

PARANITE HIGH TENSION CABLE

If It's **PARANITE** It's Right

1500 VOLTS

Stranded Single Conductor

Size B.& S.	Wall of Rubber	Diam. Over All	Add for Do'bl Braid	Weight per 1000 Feet	Wire Base, Price per 1000 Feet							
					23c	24c	25c	26c	27c	28c	29c	30c
14	1/16	.26	$6.00	46	$36.90	$37.20	$37.70	$38.10	$38.40	$38.70	$39.30	$39.80
12	1/16	.28	6.50	59	46.70	47.30	47.90	48.50	49.20	49.80	50.40	51.00
10	1/16	.31	7.50	79	60.40	61.30	62.40	63.40	64.30	65.40	66.40	67.50
8	1/16	.34	8.50	105	80.00	81.70	83.20	84.80	86.30	87.80	89.50	91.00
6	5/64	.41	9.50	163	121.90	124.80	126.90	129.30	132.00	134.50	136.90	139.50
5	5/64	.44	11.00	190	141.10	144.10	147.30	150.40	153.60	156.70	159.70	162.90
4	5/64	.46	12.00	225	166.80	170.50	174.40	178.30	182.40	186.30	190.20	194.10
3	5/64	.49	13.00	268	196.00	202.00	207.00	211.00	216.00	222.00	226.00	232.00
2	5/64	.52	15.00	324	237.00	243.00	249.00	256.60	263.00	269.00	275.00	282.00
1	3/32	.63	.....	431	327.00	335.00	343.00	351.00	359.00	366.00	375.00	384.00
0	3/32	.67	.....	518	389.00	399.00	410.00	417.00	429.00	440.00	449.00	459.00
00	3/32	.73	.....	638	468.00	480.00	492.00	506.00	518.00	531.00	543.00	593.00
000	3/32	.79	.....	771	563.00	579.00	594.00	611.00	627.00	642.00	659.00	675.00
0000	3/32	.84	.....	932	676.00	697.00	716.00	736.00	757.00	776.00	796.00	817.00

2500 VOLTS

Stranded Single Conductor, Double Braid

Size B. & S.	Wall of Rubber	Diam. Over All	Weight per 1000 Feet	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
14	3/32	.37	84	$66.90	$67.20	$67.60	$68.10	$68.40	$68.70	$69.30	$69.70
12	3/32	.39	100	78.30	78.90	79.50	80.10	80.80	81.40	82.00	82.60
10	3/32	.41	120	93.00	93.80	94.90	96.00	96.90	97.90	99.00	100.00
8	3/32	.44	150	115.20	116.90	118.40	120.00	121.50	123.00	124.70	126.20
6	3/32	.48	196	148.50	151.40	153.50	155.90	158.60	161.10	163.50	166.10
5	3/32	.50	224	169.10	172.10	175.20	178.40	181.50	184.70	187.70	190.80
4	3/32	.53	261	196.10	199.90	203.80	207.70	211.70	215.60	219.50	223.40
3	3/32	.55	308	228.00	234.00	239.00	243.00	248.00	254.00	258.00	264.00
2	3/32	.59	368	271.00	277.00	283.00	291.00	297.00	303.00	309.00	316.00
1	7/64	.66	455	345.00	352.00	361.00	369.00	376.00	384.00	393.00	402.00
0	7/64	.72	557	411.00	421.00	432.00	441.00	452.00	462.00	471.00	482.00
00	7/64	.76	666	489.00	501.00	513.00	526.00	538.00	552.00	564.00	577.00
000	7/64	.82	800	585.00	601.00	616.00	633.00	649.00	664.00	681.00	697.00
0000	7/64	.87	964	698.00	719.00	739.00	758.00	779.00	799.00	818.00	839.00

High tension wires and cables are not carried in stock. Must be made up and shipped from factory.

When asking for quotations on high tension wires and cables give full specifications and state quantity desired.

PARANITE HIGH TENSION CABLE

If It's **PARANITE** It's Right

1500 VOLTS

Stranded Single Conductor

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
14	$40.10	$40.50	$40.80	$41.30	$41.70	$42 00	$42.30	$42.90	$43.40	$43.70
12	51.60	52.40	53.00	53.60	54.20	54.90	55.50	56.10	56.70	57.30
10	68.90	69.40	70.30	71.40	72.40	73.30	74.40	75.40	76.50	77.90
8	92.60	94.10	95.80	97.30	98.90	100.40	101.90	103.60	105.10	106.70
6	142.00	144.60	147.50	149.50	151.90	154.60	157.20	159.60	162.10	164.70
5	166.00	169.20	172.20	175.30	178.50	181.60	184.80	187.80	190.90	194.10
4	198.10	202.20	205.90	210.80	213.70	217.80	221.70	225.60	229.50	233.50
3	237.00	241.00	247.00	252.00	256.00	261.00	267.00	271.00	277.00	282.00
2	288.00	294.00	300.00	306.00	314.00	320.00	326.00	332.00	339.00	345.00
1	392.00	399.00	407.00	415.00	423.00	431.00	438.00	447.00	456.00	464.00
0	470.00	479.00	489.00	500.00	509.00	519.00	530.00	539.00	549.00	560.00
00	605.00	618.00	630.00	642.00	656.00	668.00	681.00	693.00	706.00	719.00
000	692.00	707.00	723.00	738.00	755.00	771.00	786.00	803.00	819.00	836.00
0000	836.00	856.00	877.00	896.00	916.00	937.00	956.00	976.00	997.00	1016.00

2500 VOLTS

Stranded Single Conductor, Double Braid

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
14	$70.00	$70.50	$70.80	$71.20	$71.70	$72.00	$72.30	$72.90	$73.30	$73.60
12	83.20	84.00	84.60	85.20	85.80	86.50	87.10	87.70	88.30	88.90
10	101.40	102.00	102.90	103.90	105.00	105.90	106.90	108.00	109.00	110.40
8	127.80	129.30	131.00	132.50	134.10	135.60	137.10	138.80	140.30	141.90
6	168.60	171.20	174.10	176.10	178.50	181.20	183.80	186.20	188.70	191.30
5	194.00	197.10	200.10	203.30	206.40	209.60	212.70	215.70	218.90	222.00
4	227.50	231.50	235.30	239.20	243.10	247.10	251.00	254.90	258.80	262.90
3	269.00	273.00	279.00	284.00	288.00	293.00	299.00	303.00	309.00	314.00
2	322.00	328.00	334.00	340.00	348.00	354.00	360.00	366.00	373.00	379.00
1	409.00	417.00	424.00	433.00	441.00	448.00	456.00	465.00	474.00	481.00
0	492.00	501.00	511.00	522.00	531.00	542.00	552.00	561.00	572.00	582.00
00	589.00	603.00	615.00	627.00	640.00	652.00	666.00	678.00	691.00	703.00
000	714.00	729.00	745.00	760.00	777.00	793.00	808.00	825.00	841.00	858.00
0000	858.00	878.00	899.00	919.00	938.00	959.00	979.00	998.00	1019.00	1038.00

High tension wires and cables are not carried in stock. Must be made up and shipped from factory.

When asking for quotations on high tension wires and cables give full specifications and state quantity desired.

PARANITE HIGH TENSION CABLE

If It's **PARANITE** It's Right

3500 VOLTS

Stranded Single Conductor, Double Braid

Size B. & S.	Wall of Rubber	Diam. Over All	Wt. per 1000 Ft.	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
14	4/32	.43	113	$87.40	$87.70	$88.20	$88.60	$88.90	$89.20	$89.80	$90.30
12	4/32	.45	129	99.90	100.50	101.10	101.70	102.50	103.10	103.70	104.30
10	4/32	.47	152	114.60	115.50	116.60	117.60	118.50	119.60	120.60	121.70
8	4/32	.50	183	139.90	141.60	143.10	144.70	146.20	147.70	149.40	150.90
6	4/32	.54	233	176.90	179.80	181.80	184.20	186.90	189.50	191.90	194.40
5	4/32	.56	263	197.70	200.70	203.80	207.00	210.10	213.30	216.30	219.40
4	4/32	.59	304	227.30	231.10	235.00	238.90	242.90	246.80	250.70	254.60
3	4/32	.62	353	261.00	267.00	272.00	276.00	281.00	287.00	291.00	297.00
2	4/32	.65	413	306.00	312.00	318.00	326.00	332.00	338.00	344.00	351.00
1	4/32	.71	481	364.00	372.00	380.00	388.00	396.00	403.00	412.00	421.00
0	4/32	.75	585	432.00	442.00	453.00	462.00	473.00	482.00	492.00	503.00
00	4/32	.80	696	511.00	523.00	535.00	549.00	561.00	574.00	586.00	600.00
000	4/32	.85	832	609.00	625.00	640.00	657.00	673.00	688.00	705.00	721.00
0000	4/32	.91	999	725.00	746.00	765.00	785.00	806.00	825.00	845.00	866.00

5000 VOLTS

Stranded Single Conductor, Double Braid

Size B. & S.	Wall of Rubber	Diam. Over All	Wt. per 1000 Ft.	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
14	6/32	.56	188	107.80	108.10	108.60	109.00	109.30	109.60	110.20	110.70
12	6/32	.58	207	119.80	120.40	121.00	121.60	122.30	122.90	123.50	124.10
10	6/32	.60	236	135.40	136.30	137.40	138.40	138.30	140.40	141.40	142.50
8	6/32	.63	273	161.60	163.20	164.70	166.40	167.90	169.40	171.00	172.50
6	6/32	.67	328	196.70	199.60	201.70	204.10	206.80	209.30	211.70	214.30
5	6/32	.71	363	218.20	221.20	224.40	227.50	230.70	233.80	236.80	240.00
4	6/32	.74	406	246.40	250.20	254.10	258.00	262.00	265.90	269.80	273.70
3	6/32	.77	460	280.00	286.00	291.00	295.00	300.00	306.00	310.00	316.00
2	6/32	.80	540	329.00	335.00	341.00	348.00	354.00	360.00	366.00	374.00
1	6/32	.84	615	387.00	395.00	403.00	411.00	419.00	426.00	435.00	444.00
0	6/32	.88	713	451.00	461.00	472.00	481.00	492.00	502.00	511.00	522.00
00	6/32	.93	832	528.00	540.00	552.00	566.00	578.00	591.00	603.00	617.00
000	6/32	.98	977	624.00	641.00	656.00	672.00	689.00	704.00	720.00	737.00
0000	6/32	1.04	1153	739.00	760.00	780.00	799.00	820.00	840.00	859.00	880.00

High tension wires and cables are not carried in stock. Must be made up and shipped from factory.

When asking for quotations on high tension wires and cables give full specifications and quantity desired.

PARANITE HIGH TENSION CABLE

If It's **PARANITE** It's Right

3500 VOLTS

Stranded Single Conductor, Double Braid

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
14	$90.60	$91.00	$91.30	$91.80	$92.20	$92.50	$92.80	$93.40	$93.90	$94.20
12	104.90	105.60	106.20	106.80	107.40	108.20	108.80	109.40	110.00	110.60
10	123.10	123.60	124.50	125.60	126.60	127.50	128.60	129.60	130.70	132.10
8	152.50	154.00	155.70	157.20	158.80	160.30	161.80	163.50	165.00	166.60
6	197.00	199.50	202.40	204.50	206.90	209.60	212.10	214.50	217.10	219.60
5	222.60	225.70	228.70	231.90	235.00	238.20	242.30	244.30	247.50	250.60
4	258.70	262.70	266.50	270.40	274.30	278.30	282.20	286.10	290.00	294.10
3	302.00	306.00	312.00	317.00	321.00	326.00	332.00	336.00	342.00	347.00
2	357.00	363.00	369.00	375.00	383.00	389.00	395.00	401.00	408.00	414.00
1	429.00	436.00	444.00	452.00	460.00	468.00	475.00	484.00	493.00	501.00
0	513.00	522.00	532.00	543.00	552.00	563.00	573.00	582.00	593.00	603.00
00	612.00	625.00	637.00	649.00	663.00	675.00	688.00	700.00	714.00	726.00
000	738.00	753.00	769.00	784.00	801.00	817.00	832.00	849.00	865.00	882.00
0000	885.00	905.00	926.00	945.00	965.00	986.00	1005.00	1025.00	1046.00	1065.00

5000 VOLTS

Stranded Single Conductor, Double Braid

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
14	$111.00	$111.40	$111.70	$112.20	$112.60	$112.90	$113.20	$113.80	$114.30	$114.60
12	124.70	125.50	126.10	126.70	127.30	128.00	128.60	129.20	129.80	130.40
10	143.90	144.40	145.30	146.40	147.40	148.30	149.40	150.40	151.50	152.90
8	174.20	175.70	177.30	178.80	180.50	182.00	183.50	185.10	186.60	188.30
6	216.80	219.40	222.30	224.30	226.70	229.40	232.00	234.40	236.90	239.50
5	243.10	246.20	249.30	252.40	255.60	258.70	261.90	264.90	268.00	271.20
4	277.80	281.80	285.60	289.50	293.40	297.40	301.30	305.20	309.10	313.20
3	321.00	325.00	331.00	336.00	340.00	345.00	351.00	355.00	361.00	366.00
2	380.00	386.00	392.00	398.00	405.00	411.00	417.00	423.00	431.00	437.00
1	452.00	459.00	467.00	475.00	483.00	491.00	498.00	507.00	516.00	524.00
0	532.00	541.00	551.00	562.00	571.00	582.00	592.00	601.00	612.00	622.00
00	629.00	642.00	654.00	666.00	680.00	692.00	705.00	717.00	731.00	743.00
000	753.00	768.00	785.00	800.00	816.00	833.00	848.00	864.00	881.00	897.00
0000	899.00	919.00	940.00	960.00	979.00	1000.00	1020.00	1039.00	1060.00	1079.00

High tension wires and cables are not carried in stock. Must be made up and shipped from factory.

When asking for quotations on high tension wires and cables give full specifications and quantity desired.

PARANITE NEW CODE LAMP CORD

If It's **PARANITE** It's Right

LAMP CORD, TYPE C



Glazed Cotton Twisted

Size B. & S.	Wall of Rubber	Strand-ing	Weight per 1000 Ft.	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
*22	1/32	6–30	20	$20.30	$20.50	$20.80	$20.80	$21.00	$21.30	$21.50	$21.80
*20	1/32	10–30	24	25.00	25.30	25.50	26.00	26.50	26.80	27.00	27.30
18	1/32	16–30	28	29.80	30.30	30.80	31.30	31.80	32.30	32.80	33.30
16	1/32	26–30	37	39.50	40.30	41.00	41.80	42.80	43.50	44.30	45.00
14	3/64	41–30	67	59.00	60.50	61.50	63.00	64.30	65.50	67.00	68.00
12	3/64	65–30	95	92.30	94.30	96.50	98.50	100.50	102.80	104.80	107.00
10	3/64	104–30	120	141.80	145.30	148.50	151.80	155.00	158.30	161.80	165.00
Silk Covered Braided and Twisted											
*22	1/32	6–30	18	34.00	34.30	34.50	34.50	34.80	35.00	35.30	35.50
*20	1/32	10–30	22	38.80	39.00	39.30	39.80	40.30	40.50	40.80	41.00
18	1/32	16–30	26	46.00	46.50	47.00	47.50	48.00	48.50	49.00	49.50
16	1/32	26–30	34	57.00	57.80	58.50	59.30	60.30	61.00	61.80	62.50
14	3/64	41–30	64	80.30	81.80	82.80	84.30	85.50	86.80	88.30	89.30
12	3/64	65–30	90	114.80	116.80	119.00	121.00	123.00	125.30	127.30	129.50
10	3/64	104–30	115	173.00	176.50	179.80	183.00	186.30	189.50	193.00	196.30

PARALLEL LAMP CORD, TYPE PO



Glazed Cotton Covered

*22	1/32	6–30	22	20.30	20.50	20.80	20.80	21.00	21.30	21.50	21.80
*20	1/32	10–30	27	25.00	25.30	25.50	26.00	26.50	26.80	27.00	27.30
18	1/32	16–30	31	29.80	30.30	30.80	31.30	31.80	32.30	32.80	33.30
16	1/32	26–30	40	39.50	40.30	41.00	41.80	42.80	43.50	44.30	45.00
14	3/64	41–30	72	59.00	60.50	61.50	63.00	64.30	65.50	67.00	68.00
12	3/64	65–30	100	92.30	94.30	96.50	98.50	100.50	102.80	104.80	107.00
10	3/64	104–30	127	141.80	145.30	148.50	151.80	155.00	158.30	161.80	165.00
Silk Covered											
*22	1/32	6–30	21	34.00	34.30	34.50	34.50	34.80	35.00	35.30	35.50
*20	1/32	10–30	25	38.80	39.00	39.30	39.80	40.30	40.50	40.80	41.00
18	1/32	16–30	29	46.00	46.50	47.00	47.50	48.00	48.50	49.00	49.50
16	1/32	26–30	38	57.00	57.80	58.50	59.30	60.30	61.00	61.80	62.50
14	3/64	41–30	69	80.30	81.80	82.80	84.30	85.50	86.80	88.30	89.30
12	3/64	65–30	97	114.80	116.80	119.00	121.00	123.00	125.30	127.30	129.50
10	3/64	104–30	123	173.00	176.50	179.80	183.00	186.30	189.50	193.00	196.30

*Sizes 20 and 22 are not allowed by the Underwriters.

PARANITE NEW CODE LAMP CORD

If It's **PARANITE** It's Right

LAMP CORD, TYPE C



Glazed Cotton Twisted

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
*22	$21.80	$22.00	$22.30	$22.50	$22.80	$23.10	$23.30	$23.60	$23.80	$24.10
*20	27.80	28.30	28.50	28.80	29.00	29.50	30.00	30.30	30.50	31.00
18	33.80	34.30	34.80	35.30	35.80	36.30	36.80	37.30	37.80	38.30
16	45.80	46.80	47.50	48.30	49.00	50.00	51.00	51.70	52.50	53.20
14	69.50	70.80	72.00	73.50	74.50	75.70	77.00	78.20	79.70	80.70
12	109.00	111.00	113.30	115.30	117.50	119.50	121.50	123.80	125.80	178.00
10	168.30	171.50	174.80	178.30	181.50	184.80	188.00	191.30	194.80	198.00

Silk Covered Braided and Twisted

*22	35.50	35.80	36.00	36.30	36.50	36.70	37.00	37.20	37.50	37.70
*20	41.50	42.00	42.30	42.50	42.80	43.30	43.80	44.00	44.30	44.50
18	50.00	50.50	51.00	51.50	52.00	52.50	53.00	53.50	54.00	54.50
16	63.30	64.30	65.00	65.80	66.50	67.50	68.50	69.20	70.00	70.70
14	90.80	92.00	93.30	94.80	95.80	97.10	98.30	99.60	101.10	102.10
12	131.50	133.50	135.80	137.80	140.00	142.00	144.00	146.30	148.30	150.50
10	199.50	202.80	206.00	209.50	212.80	216.00	219.30	222.50	226.00	229.30

PARALLEL LAMP CORD, TYPE P.O.



Glazed Cotton Covered

*22	21.80	22.00	22.30	22.50	22.80	23.10	23.30	23.60	23.80	24.10
*20	27.80	28.30	28.50	28.80	29.00	29.50	30.00	30.30	30.50	31.00
18	33.80	34.30	34.80	35.30	35.80	36.30	36.80	37.30	37.80	38.30
16	45.80	46.80	47.50	48.30	49.00	50.00	51.00	51.70	52.50	53.20
14	69.50	70.80	72.00	73.50	74.50	75.70	77.00	78.20	79.70	80.70
12	109.00	111.00	113.30	115.30	117.50	119.50	121.50	123.80	125.80	178.00
10	168.30	171.50	174.80	178.30	181.50	184.80	188.00	191.30	194.80	198.00

Silk Covered

*22	35.50	35.80	36.00	36.30	36.50	36.70	37.00	37.20	37.50	37.70
*20	41.50	42.00	42.30	42.50	42.80	43.30	43.80	44.00	44.30	44.50
18	50.00	50.50	51.00	51.50	52.00	52.50	53.00	53.50	54.00	54.50
16	63.30	64.30	65.00	65.80	66.50	67.50	68.50	69.20	70.00	70.70
14	90.80	92.00	93.30	94.80	95.80	97.10	98.30	99.60	101.10	102.10
12	131.50	133.50	135.80	137.80	140.00	142.00	144.00	146.30	148.30	150.50
10	199.50	202.80	206.00	209.50	212.80	216.00	219.30	222.50	226.00	229.30

*Sizes 20 and 22 are not allowed by the underwriters.

PARANITE NEW CODE LAMP CORD

If It's **PARANITE** It's Right

RE-ENFORCED PORTABLE CORD, TYPE P



Cotton Covered

Made up of two conductors flexible new code lamp cord twisted, covered with a belt of rubber and then covered with a glazed cotton braid.

Size B. & S.	Wall of Rubber	Strand-ing	Wt. per 1000 lbs.	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
18	1/32	16–30	80	$57 30	$57.80	$58.30	$58.80	$59.30	$59.80	$60.30	$60.80
16	1/32	26–30	95	70.80	71.50	72.30	73.00	74.00	74.80	75.50	76.30
14	3/64	41–30	150	90.30	91.80	92.80	94.30	95.50	96.80	98.30	99.30
12	3/64	65–30	190	127.30	129.30	131.50	133.50	135.50	137.80	139.80	142.00
10	3/64	104–30	240	173.00	176.50	179.80	183.00	186.30	189.50	193.00	196.30

Silk Covered

Made up same as above except covered with a silk braid.

18	1/32	16–30	78	84.80	85.30	85.80	86.30	86.80	87.30	87.80	88.30
16	1/32	26–30	93	100.80	101.50	102.30	103.00	104.00	104.80	105.50	106.30
14	3/64	41–30	146	131.50	133.00	134.00	135.50	136.80	138.00	139.50	140.50
12	3/64	65–30	185	177.30	179.30	181.50	183.50	185.50	187.80	189.80	192.00
10	3/64	104–30	235	235.50	239.00	242.30	245.50	248.80	252.00	255.50	258.70

Type P.W.P. Weatherproof

Made up same as above except covered with a weatherproof braid.

18	1/32	16–30	84	57.30	57.80	58.30	58.80	59.30	59.80	60.30	60.80
16	1/32	26–30	100	70.80	71.50	72.30	73.00	74.00	74.80	75.50	76.30
14	3/64	41–30	155	90.30	91.80	92.80	94.30	95.50	96.80	98.30	99.30
12	3/64	65–30	195	127.30	129.30	131.50	133.50	135.50	137.80	139.80	142.00
10	3/64	104–30	250	173.00	176.50	179.80	183.00	186.30	189.50	193.00	196.30

SPECIAL RE-ENFORCED PORTABLE CORD, TYPE P.S.



Made up of two flexible conductors, cotton wound, insulated with $\frac{1}{64}$-inch new code seamless rubber, braided with cotton, twisted and then covered with a light rubber belt, over which is placed a cotton braid.

Cotton Covered

18	1/64	16–30	65	43.20	43.70	44.20	44.70	45.20	45.70	46.20	46.70
16	1/64	26–30	80	55.20	55.90	56.70	57.40	58.40	59.20	59.90	60.70

Silk Covered

Made up same as above except that it has a silk outside braid.

18	1/64	16–30	63	64.90	65.40	65.90	66.40	66.90	67.40	67.90	68.40
16	1/64	26–30	77	77.70	78.40	79.10	79.80	80.80	81.60	82.30	83.10

Type P.S.W.P. Weatherproof

Made same as Type P. S. except that the outside braid is weatherproof.

18	1/64	16–30	67	43.20	43.70	44.20	44.70	45.20	45.70	46.20	46.70
16	1/64	26–30	83	55.20	55.90	56.70	57.40	58.40	59.20	59.90	60.70

Put up in standard coils of 250 feet.

PARANITE NEW CODE LAMP CORD

If It's PARANITE It's Right

RE-ENFORCED PORTABLE CORD, TYPE P



Made up of two conductors flexible new code lamp cord twisted, covered with a belt of rubber and then covered with a glazed cotton braid.

Cotton Covered

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	4Cc
18	$61.30	$61.80	$62.30	$62.80	$63.30	$63.80	$64.30	$64.80	$65.30	$65.80
16	77.00	78.00	78.80	79.50	80.30	81.30	82.30	83.10	83.80	84.60
14	100.80	102.00	103.30	104.80	105.80	107.10	108.30	109.60	111.10	112.10
12	144.00	146.00	148.30	150.30	152.50	154.50	156.50	158.80	160.80	163.00
10	199.50	202.80	206.00	209.50	212.80	216.00	219.30	222.50	226.00	229.30

Silk Covered

Made up same as above except covered with a silk braid.

18	88.80	89.30	89.80	90.30	90.80	91.30	91.80	92.30	92.80	93.30
16	107.00	108.00	108.80	109.50	110.30	111.30	112.30	113.10	113.80	114.60
14	142.00	143.30	144.50	146.00	147.00	148.20	149.50	150.70	152.20	153.20
12	194.00	196.00	198.30	200.30	202.50	204.50	206.50	208.80	210.80	213.00
10	261.90	265.20	268.40	271.90	275.20	278.40	281.70	284.90	288.40	291.70

Type P.W.P. Weatherproof

Made up same as above except covered with a weatherproof braid.

18	61.30	61.80	62.30	62.80	63.30	63.80	64.30	64.80	65.30	65.80
16	77.00	78.00	78.80	79.50	80.30	81.30	82.30	83.10	83.80	84.60
14	100.80	102.00	103.30	104.80	105.80	107.10	108.30	109.60	111.10	112.10
12	144.00	146.00	148.30	150.30	152.50	154.50	156.50	158.80	160.80	163.00
10	199.50	202.80	206.00	209.50	212.80	216.00	219.30	222.50	226.00	229.30

SPECIAL RE-ENFORCED PORTABLE CORD, TYPE P.S.



Made up of two flexible conductors, cotton wound, insulated with $\frac{1}{64}$-inch new code seamless rubber, braided with cotton, twisted and then covered with a light rubber belt, over which is placed a cotton braid.

Cotton Covered

18	47.20	47.70	48.20	48.70	49.20	49.70	50.20	50.70	51.20	51.70
16	61.40	62.40	63.20	63.90	64.70	65.70	66.70	67.50	68.20	69.00

Silk Covered

Made up same as above except that it has a silk outside braid.

18	68.90	69.40	69.90	70.40	70.90	71.40	71.90	72.40	72.90	73.40
16	83.80	84.80	85.60	86.30	87.10	88.10	89.10	89.90	90.60	91.40

Type P.S.W.P. Weatherproof

Made same as Type P. S. except that the outside braid is weatherproof.

18	47.20	47.70	48.20	48.70	49.20	49.70	50.20	50.70	51.20	51.70
16	61.40	62.40	63.20	63.90	64.70	65.70	66.70	67.50	68.20	69.00

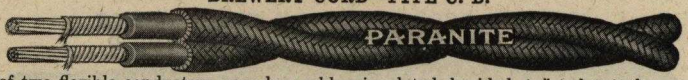
Put up in standard coils of 250 feet.

PARANITE RUBBER INSULATED CABLES

If It's **PARANITE** It's Right

NEW CODE FLEXIBLE CONDUCTORS

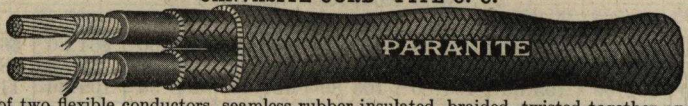
BREWERY CORD—TYPE C. B.



Made up of two flexible conductors, seamless rubber insulated, braided, twisted together and saturated with weatherproof compound.

Size B. & S.	Wall of Rubber	Wt. per 1000 Feet	Wire Base, Price per 1000 Feet							
			23c	24c	25c	26c	27c	28c	29c	30c
18	1/32	30	$43.00	$43.20	$43.70	$43.90	$44.40	$44.60	$45.10	$45.30
16	1/32	40	52.70	53.40	53.80	54.50	55.20	55.40	56.10	56.80
14	3/64	67	68.10	68.80	69.90	70.80	71.50	72.20	73.60	74.80
12	3/64	90	88.30	89.70	91.10	92.50	94.10	95.50	96.80	98.20
10	3/64	120	116.80	118.90	121.40	123.70	125.80	128.30	130.60	133.20

CANVASITE CORD—TYPE C. C.



Made up of two flexible conductors, seamless rubber insulated, braided, twisted together and finished with a weatherproof braid over all.

18	1/32	53	56.30	56.50	57.00	57.30	57.80	58.00	58.50	58.80
16	1/32	68	67.30	68.00	68.50	69.30	70.00	70.30	71.00	71.80
14	3/64	83	86.50	87.30	88.50	89.50	90.30	91.00	92.50	93.80
12	3/64	105	111.00	112.50	114.00	115.50	117.30	118.80	120.30	121.80
10	3/64	170	144.50	146.80	149.50	152.00	154.30	157.00	159.50	162.30

PACKING HOUSE CORD—TYPE PK. WP.



Made up of two flexible conductors, seamless rubber insulated, braided, twisted together with jute and finished with two weatherproof braids.

18	1/32	55	65.80	66.00	66.50	66.80	67.30	67.50	68.00	68.30
16	1/32	70	77.30	78.00	78.50	79.30	80.00	80.30	81.00	81.80
14	3/64	120	99.00	99.80	101.00	102.00	102.80	103.50	105.00	106.30
12	3/64	150	126.00	127.50	129.00	130.50	132.30	133.80	135.30	136.80
10	3/64	190	162.00	164.30	167.00	169.50	171.80	174.50	177.00	179.80

DECK CABLE



Made up of two flexible conductors, seamless rubber insulated, braided, twisted together with jute filler and covered with a seamless belt of rubber and a weatherproof braid.

18	1/32	90	83.30	83.60	84.40	84.70	85.50	85.80	86.60	87.00
16	1/32	100	99.50	100.60	101.40	102.50	103.60	104.00	105.10	106.20
14	3/64	130	128.00	129.10	131.00	132.50	133.60	134.70	136.90	138.80
12	3/64	170	164.30	166.50	168.72	170.90	173.50	175.80	178.00	180.20
10	3/64	220	213.90	217.20	221.30	225.00	228.30	232.40	236.10	240.10

THEATER OR STAGE CABLE



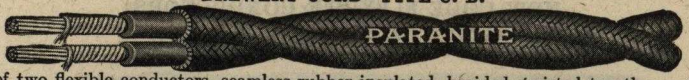
Made up of two flexible conductors, seamless rubber insulated, braided and twisted together with jute and finished with two weatherproof braids.

14	3/64	120	99.00	99.80	101.00	102.00	102.80	103.50	105.00	106.30
12	3/64	150	126.00	127.50	129.00	130.50	132.30	133.80	135.30	136.80
10	3/64	190	162.00	164.30	167.00	169.50	171.80	174.50	177.00	179.80
8	3/64	255	215.80	219.80	223.50	227.80	231.50	235.30	239.30	243.00
6	1/16	365	320.80	326.80	333.30	339.30	346.00	352.30	358.30	364.80
5	1/16	450	372.00	379.50	387.50	395.30	403.30	411.00	418.50	426.50
4	1/16	525	439.30	448.50	458.30	468.00	478.30	488.00	497.80	507.50
3	1/16	625	518.00	533.00	543.00	555.00	565.00	580.00	593.00	608.00
2	1/16	750	618.00	633.00	648.00	668.00	683.00	698.00	713.00	730.00

PARANITE RUBBER INSULATED CABLES

If It's **PARANITE** It's Right

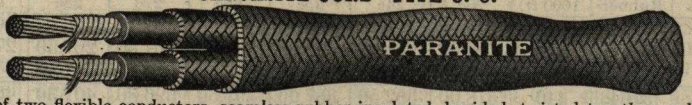
NEW CODE FLEXIBLE CONDUCTORS
BREWERY CORD—TYPE C. B.



Made up of two flexible conductors, seamless rubber insulated, braided, twisted together and saturated with weatherproof compound.

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
18	$45.80	$46.00	$46.50	$46.70	$47.20	$47.40	$47.80	$48.10	$48.50	$48.80
16	57.50	58.00	58.70	58.90	59.60	60.30	60.70	61.40	62.10	62.80
14	75.40	76.40	77.10	78.20	79.10	79.80	80.50	81.90	83.00	83.70
12	99.60	101.40	102.80	104.20	105.60	107.20	108.60	109.90	111.30	112.70
10	135.20	137.50	139.60	142.10	144.40	146.50	149.00	151.30	153.90	155.90

CANVASITE CORD—TYPE C. C.



Made up of two flexible conductors, seamless rubber insulated, braided, twisted together and finished with a weatherproof braid over all.

18	59.30	59.50	60.00	60.30	60.80	61.00	61.50	61.80	62.30	62.50
16	72.50	73.00	73.80	74.00	74.80	75.50	76.00	76.80	77.50	78.30
14	94.50	95.50	96.30	97.50	98.50	99.30	100.00	101.50	102.80	103.50
12	123.30	125.30	126.80	128.30	129.80	131.50	133.00	134.50	136.00	137.50
10	164.50	167.00	169.30	172.00	174.50	176.80	179.50	182.00	184.80	187.00

PACKING HOUSE CORD—TYPE PK. WP.



Made up of two flexible conductors, seamless rubber insulated, braided, twisted together with jute and finished with two weatherproof braids.

18	68.80	69.00	69.50	69.80	70.30	70.50	71.00	71.30	71.80	72.00
16	82.50	83.00	83.80	84.00	84.80	85.50	86.00	86.80	87.50	88.30
14	107.00	108.00	108.80	110.00	111.00	111.80	112.50	114.00	115.30	116.00
12	138.30	140.30	141.80	143.30	144.80	146.50	148.00	149.50	151.00	152.50
10	182.00	184.50	186.80	189.50	192.00	194.30	197.00	199.50	202.30	204.50

DECK CABLE



Made up of two flexible conductors, seamless rubber insulated, braided, twisted together with jute filler and covered with a seamless belt of rubber and a weatherproof braid.

18	87.70	88.10	88.80	89.20	89.90	90.30	91.00	91.40	92.10	92.50
16	107.30	108.00	109.20	109.50	110.60	111.70	112.50	113.60	114.70	115.80
14	139.90	141.30	142.50	144.30	145.80	146.90	148.00	150.20	152.10	153.20
12	182.40	185.40	187.60	189.80	192.00	194.60	196.80	199.10	201.30	203.50
10	243.50	247.20	250.50	254.60	258.30	261.60	265.70	269.40	273.40	276.80

THEATER OR STAGE CABLE



Made up of two flexible conductors, rubber insulated, braided and twisted together with jute and finished with two weatherproof braids.

14	107.00	108.00	108.80	110.00	111.00	111.80	112.50	114.00	115.30	116.00
12	138.30	140.30	141.80	143.30	144.80	146.50	148.00	149.50	151.00	152.50
10	182.00	184.50	186.80	189.50	192.00	194.30	197.00	199.50	202.30	204.50
8	247.30	251.00	255.00	258.80	263.00	266.80	270.50	274.50	278.30	282.50
6	371.50	377.50	383.50	389.80	395.80	402.50	409.00	415.00	421.30	427.80
5	434.30	442.30	449.80	457.50	465.50	473.30	481.30	488.80	496.50	504.50
4	517.50	527.80	537.00	546.80	556.50	566.80	576.50	586.30	596.00	606.00
3	618.00	630.00	645.00	655.00	668.00	678.00	693.00	705.00	720.00	730.00
2	745.00	760.00	775.00	790.00	810.00	825.00	840.00	855.00	873.00	888.00

PARANITE RUBBER INSULATED CABLES

If It's PARANITE It's Right

NEW CODE FLEXIBLE CONDUCTORS

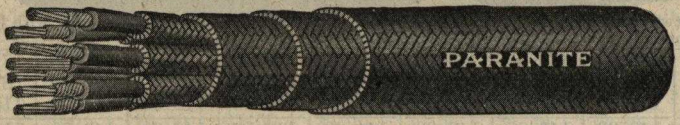
BORDER LIGHT CABLES—TYPE B



Are exactly the same as theater or stage cable but consist of more than two conductors.

Size B. & S.	No. of Cond.	Wall of Rubber	Wt. per 1000 ft.	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
12	3	3/64	250	$189.00	$191.30	$193.50	$195.80	$198.40	$200.60	$202.90	$205.10
12	4	3/64	310	252.00	255.00	258.00	261.00	264.50	267.50	270.50	273.50
12	5	3/64	385	315.00	318.80	322.50	326.30	330.60	334.40	338.10	341.90
12	6	3/64	440	378.00	382.50	387.00	391.50	396.80	401.30	405.80	410.30
12	8	3/64	580	504.00	510.00	516.00	522.00	529.00	535.00	541.00	547.00
12	10	3/64	710	630.00	637.50	645.00	652.50	661.30	668.80	676.30	683.80
14	3	3/64	180	148.50	149.60	151.50	153.00	154.10	155.30	157.50	159.40
14	4	3/64	240	198.00	199.50	202.00	204.00	205.50	207.00	210.00	212.50
14	5	3/64	300	247.50	249.40	252.50	255.00	256.90	258.80	262.50	265.60
14	6	3/64	375	297.00	299.30	303.00	306.00	308.30	310.50	315.00	318.80
14	8	3/64	500	396.00	399.00	404.00	408.00	411.00	414.00	420.00	425.00
14	10	3/64	620	495.00	498.80	505.00	510.00	513.80	517.50	525.00	531.30

ELEVATOR CONTROL CABLES—TYPE E



Made up from 4 to 12 conductors No. 16 flexible rubber insulated, twisted together and covered with 3 outside braids.

With Steel Supporting Strands

Size B. & S.	No. of Cond.	Wall of Rubber	Wt. per 1000 ft.	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
16	4	1/32	180	$188.30	$190.40	$191.80	$193.90	$196.00	$196.70	$198.80	$200.90
16	5	1/32	220	226.00	228.50	230.20	232.70	235.20	236.00	238.60	241.10
16	6	1/32	250	263.60	266.60	268.50	271.50	274.40	275.40	278.30	281.30
16	7	1/32	280	301.30	304.60	306.90	310.20	313.60	314.70	318.10	321.40
16	8	1/32	310	338.90	342.70	345.20	349.00	352.80	354.10	357.80	361.60
16	9	1/32	350	376.60	380.80	383.60	387.80	392.00	393.40	397.60	401.80
16	10	1/32	380	414.30	418.90	422.00	426.60	431.20	432.70	437.40	442.00
16	11	1/32	410	451.90	457.00	460.30	465.40	470.40	472.10	477.10	482.20
16	12	1/32	450	489.60	495.00	498.70	504.10	509.60	511.40	516.90	522.30

ELEVATOR LIGHTING CABLES—TYPE P.WP.



With Two Steel Supporting Strands

Size B. & S.	Wall of Rubber	Wt. per 1000 ft.	Wire Base, Price per 1000 Feet							
			23c	24c	25c	26c	27c	28c	29c	30c
14	3/64	165	$193.80	$195.40	$198.20	$200.40	$202.20	$203.80	$207.20	$210.00

Without Steel Supporting Strands

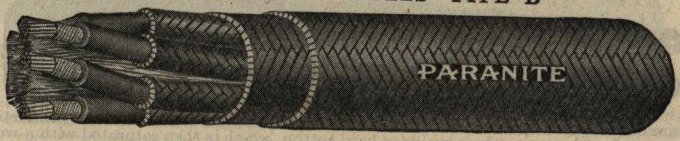
14	3/64	120	96.90	97.70	99.10	100.20	101.10	101.90	103.60	105.00

PARANITE RUBBER INSULATED CABLES

If It's PARANITE It's Right

NEW CODE FLEXIBLE CONDUCTORS

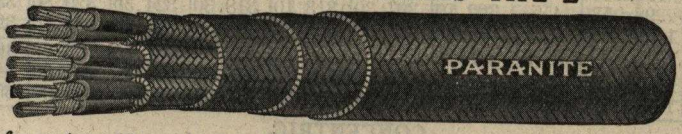
BORDER LIGHT CABLES—TYPE B



Are exactly the same as theater or stage cable but consist of more than two conductors.

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
12	$207.40	$210.40	$212.60	$214.90	$217.10	$219.80	$222.00	$224.30	$226.50	$228.80
12	276.50	280.50	283.50	286.50	289.50	293.00	296.00	299.00	302.00	305.00
12	345.60	350.60	354.40	358.10	361.90	366.30	370.00	373.80	377.50	381.30
12	414.80	420.80	425.30	429.80	434.30	439.50	444.00	448.50	453.00	457.50
12	553.00	561.00	567.00	573.00	579.00	586.00	592.00	598.00	604.00	610.00
12	691.30	701.30	708.80	716.30	723.80	732.50	740.00	747.50	755.00	762.50
14	160.50	162.00	163.10	165.00	166.50	167.60	168.80	171.00	173.20	174.00
14	214.00	216.00	217.50	220.00	222.00	223.50	225.00	228.00	230.50	232.00
14	267.50	270.00	271.90	275.00	277.50	279.40	281.30	285.00	288.10	290.00
14	321.00	324.00	326.30	330.00	333.00	336.30	337.50	342.00	345.80	348.00
14	428.00	432.00	435.00	440.00	444.00	447.00	450.00	456.00	461.00	464.00
14	535.00	540.00	543.80	550.00	555.00	558.80	562.50	570.00	576.30	580.00

ELEVATOR CONTROL CABLES—TYPE E



Made up from 4 to 12 conductors No. 16 flexible rubber insulated, twisted together and covered with 3 outside braids.

With Steel Supporting Strands

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
16	$203.00	$204.40	$206.50	$207.20	$209.30	$211.40	$212.80	$214.90	$217.00	$219.10
16	243.60	245.30	247.80	248.60	251.20	253.70	255.40	257.90	260.40	262.90
16	284.20	286.20	289.10	290.10	293.00	296.00	297.90	300.90	303.80	306.70
16	324.80	327.00	330.00	331.50	334.90	338.20	340.50	343.80	347.20	350.60
16	365.40	367.90	371.70	373.00	376.70	380.50	383.00	386.80	390.60	394.40
16	406.00	408.80	413.00	414.40	418.60	422.80	425.60	429.80	434.00	438.20
16	446.60	449.70	454.30	455.80	460.50	465.10	468.20	472.80	477.40	482.00
16	487.20	490.60	495.60	497.30	502.30	507.40	510.70	515.80	520.80	525.80
16	527.80	531.40	536.90	538.70	544.20	549.60	553.30	558.70	564.20	569.70

ELEVATOR LIGHTING CABLES—TYPE P. WP.



With Two Steel Supporting Strands

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
14	$211.70	$213.90	$215.60	$218.40	$220.60	$222.30	$224.00	$227.40	$230.20	$231.80

Without Steel Supporting Strands

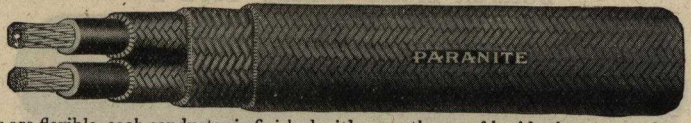
14	105.80	107.00	107.80	109.20	110.30	111.20	112.00	113.70	115.10	115.90

PARANITE MINING MACHINE CABLE

If It's **PARANITE** It's Right

DUPLEX

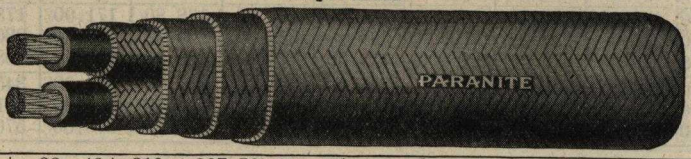
Double Braid



The strands are flexible, each conductor is finished with a weatherproof braid, the two conductors are then laid side by side and covered with two or three braids of hard cotton, which is then saturated with a weatherproof compound.

Size B. & S.	Wall of Rubber	Diameter Over All	Wt., per 1000 Ft.	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
8	3/64	.85x.45	300	$189.90	$193.40	$196.70	$200.40	$203.70	$207.00	$210.50	$213.80
6	1/16	.95x.50	440	282.30	287.50	293.30	298.50	304.50	310.00	315.30	321.00
5	1/16	1.00x.55	510	327.40	334.00	341.00	347.80	354.90	361.70	368.30	375.30
4	1/16	1.10x.60	590	386.50	394.70	403.30	411.80	420.90	429.40	438.00	446.60
3	1/16	1.20x.65	700	455.00	469.00	477.00	488.00	497.00	510.00	521.00	535.00
2	1/16	1.30x.70	830	543.00	557.00	570.00	587.00	601.00	614.00	627.00	642.00

Triple Braid



8	3/64	.88x.48	310	207.50	211.00	214.30	218.00	221.30	224.60	228.10	231.40
6	1/16	.98x.53	455	302.10	307.30	313.10	318.30	324.30	329.80	335.10	340.80
5	1/16	1.03x.58	525	349.40	356.00	363.00	369.80	376.90	383.70	390.30	397.30
4	1/16	1.13x.63	610	410.70	418.90	427.50	436.00	445.10	453.60	462.20	470.80
3	1/16	1.23x.68	720	482.00	495.00	504.00	515.00	524.00	537.00	548.00	561.00
2	1/16	1.33x.73	855	572.00	585.00	598.00	616.00	629.00	642.00	656.00	671.00

CONCENTRIC

Construction A



The center is flexible strand, insulated with rubber $\frac{1}{64}$ inch thicker than code standard. This is finished with a tape and a braid. Over this are placed fine wires, equal in area to the center conductor. A belt of rubber code thickness is then applied and the whole cable finished with a tape and a double braid, saturated with a weatherproof compound.

Size B. & S.	Wall of Rubber	Thick. of Belt	Diam. Over All	Wt., per 1000 Ft.	Wire Base, Price per 1000 Feet							
					23c	24c	25c	26c	27c	28c	29c	30c
8	1/16	3/64	.68	300	$258.40	$263.70	$268.60	$274.20	$279.20	$284.10	$289.40	$294.40
6	5/64	1/16	.81	440	369.80	377.30	385.30	392.80	401.10	408.90	416.30	424.40
5	5/64	1/16	.83	510	416.40	425.40	435.00	444.30	453.90	463.20	472.20	481.80
4	5/64	1/16	.85	590	477.60	488.40	499.70	511.00	522.90	534.20	545.50	556.80
3	5/64	1/16	.88	700	546.00	563.00	574.00	588.00	599.00	616.00	630.00	647.00
2	5/64	1/16	.92	830	632.00	648.00	664.00	686.00	702.00	718.00	734.00	753.00

Construction B



This is the same as A without the outside belt of rubber.

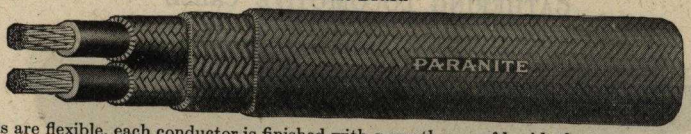
8	1/16	....	.63	280	195.80	199.80	203.50	207.80	211.50	215.30	219.30	223.00
6	5/64	....	.66	410	286.30	292.10	298.30	304.10	310.60	316.60	322.30	328.60
5	5/64	....	.68	480	333.10	340.30	348.00	355.40	363.10	370.60	377.80	385.40
4	5/64	....	.70	550	378.80	387.40	396.30	405.30	414.70	423.70	432.60	441.60
3	5/64	....	.73	650	449.00	462.00	472.00	483.00	492.00	506.00	518.00	531.00
2	5/64	....	.79	780	515.00	528.00	541.00	559.00	572.00	585.00	598.00	614.00

PARANITE MINING MACHINE CABLE

If It's **PARANITE** It's Right

DUPLEX

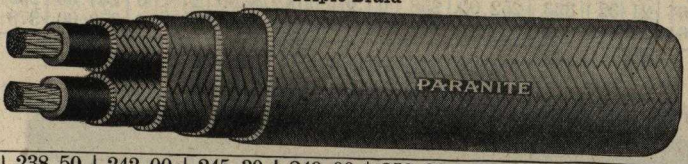
Double Braid



The strands are flexible, each conductor is finished with a weatherproof braid, the two conductors are then laid side by side and covered with two or three braids of hard cotton, which is then saturated with a weatherproof compound.

Size B.&S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
8	$217.60	$220.90	$224.40	$227.70	$231.40	$234.70	$238.00	$241.60	$244.90	$248.60
6	326.50	332.20	337.50	343.00	348.30	354.20	359.90	365.20	370.70	376.40
5	382.10	389.20	395.80	403.20	409.60	416.50	423.50	430.10	436.90	444.00
4	455.40	464.40	472.60	481.10	489.70	498.70	507.30	515.90	524.50	533.30
3	543.00	554.00	568.00	576.00	587.00	596.00	609.00	620.00	634.00	642.00
2	656.00	669.00	682.00	695.00	713.00	726.00	739.00	752.00	768.00	781.00

Triple Braid



8	235.20	238.50	242.00	245.30	249.00	252.30	255.60	259.20	262.50	266.20
6	346.30	352.00	357.30	362.80	368.10	374.00	379.70	385.00	390.50	396.20
5	404.10	411.20	417.80	424.60	431.60	438.50	445.50	452.10	458.90	466.00
4	479.60	488.60	496.80	505.30	513.90	522.90	531.50	540.10	548.70	557.50
3	570.00	581.00	594.00	603.00	614.00	623.00	636.00	647.00	660.00	669.00
2	684.00	697.00	711.00	724.00	741.00	755.00	768.00	781.00	796.00	810.00

CONCENTRIC

Construction A



The center is flexible strand, insulated with rubber—$\frac{1}{64}$-inch thicker than code standard. This is finished with a tape and a braid. Over this are placed fine wires, equal in area to the center conductor. A belt of rubber code thickness is then applied and the whole cable finished with a tape and a double blade, saturated with a weatherproof compound.

Size B.&S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
8	$300.00	$304.90	$310.20	$315.20	$320.80	$325.70	$330.70	$335.90	$340.00	$346.50
6	432.10	440.20	447.60	455.40	462.80	471.20	479.30	486.70	494.50	502.50
5	491.10	500.70	509.70	519.00	528.60	537.90	547.50	556.50	565.80	575.40
4	568.40	580.30	591.00	602.30	613.60	625.50	636.80	648.20	659.50	671.10
3	658.00	672.00	689.00	700.00	714.00	725.00	742.00	756.00	773.00	784.00
2	770.00	786.00	802.00	818.00	840.00	856.00	872.00	888.00	907.00	923.00

Construction B



This is the same as A without the outside belt of rubber.

8	227.30	231.00	235.00	238.80	243.00	246.80	250.50	254.50	258.30	262.50
6	334.60	340.80	346.60	352.60	358.30	364.80	371.00	376.80	382.80	389.00
5	392.90	400.60	407.80	415.20	422.90	430.30	438.00	445.20	452.60	460.30
4	450.80	460.20	468.70	477.70	486.70	496.10	505.10	514.10	523.00	532.20
3	541.00	552.00	566.00	575.00	587.00	596.00	610.00	621.00	635.00	644.00
2	627.00	640.00	653.00	667.00	684.00	697.00	711.00	724.00	739.00	752.00

PARANITE LOCOMOTIVE CABLE AND HEATER CORD

If It's **PARANITE** It's Right

GATHERING LOCOMOTIVE CABLE

Tape and Braid



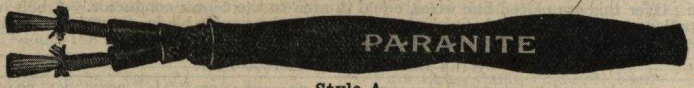
Size B. & S.	Strand-ing	Wall of Rubber	Diam. Over All	Wt. per 1000 Ft.	Wire Base, Price per 1000 Feet							
					23c	24c	25c	26c	27c	28c	29c	30c
8	49–25	3/64	27/64	107	$84.20	$85.80	$87.30	$89.00	$90.50	$92.00	$93.60	$95.10
6	49–23	1/16	15/32	166	128.50	130.90	133.50	135.90	138.60	141.10	143.50	146.10
5	49–22	1/16	33/64	194	149.30	152.30	155.50	158.60	161.80	164.90	167.90	171.10
4	49–21	1/16	18/32	230	177.00	180.70	184.60	188.50	192.60	196.50	200.40	204.30
3	133–24	1/16	39/64	275	210.00	216.00	220.00	225.00	229.00	235.00	240.00	246.00
2	133–23	5/64	21/32	333	252.00	258.00	264.00	272.00	278.00	284.00	290.00	297.00
1	133–22	5/64	47/64	422	331.00	339.00	348.00	355.00	363.00	370.00	379.00	388.00

Taped with Special Seine Braid



8	49–25	3/64	29/64	120	92.20	93.80	95.30	97.00	98.50	100.00	101.60	103.10
6	49–23	1/16	16/32	186	137.50	139.90	142.50	144.90	147.60	150.10	152.50	155.10
5	49–22	1/16	35/64	215	159.30	162.30	165.50	168.60	171.80	174.90	177.90	181.10
4	49–21	1/16	19/32	252	188.00	191.70	195.60	199.50	203.60	207.50	211.40	215.30
3	133–24	1/16	41/64	303	222.00	228.00	232.00	237.00	241.00	247.00	252.00	258.00
2	133–23	5/64	22/32	360	265.00	271.00	277.00	285.00	291.00	297.00	303.00	310.00
1	133–22	5/64	49/64	452	348.00	356.00	365.00	372.00	380.00	387.00	396.00	405.00

HEATER CORD



Style A



Style C



Style D

Size B. & S.	Strand-ing	Wall of Rubber	Wt., per 1000 Ft.	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
18	No. 34	1/32	35	$44.50	$45.00	$45.50	$46.00	$46.50	$47.00	$47.50	$48.00
16	No. 34	1/32	53	50.40	51.00	51.60	52.20	52.80	53.40	54.00	54.60
14	No. 34	1/32	69	76.30	77.20	78.10	79.00	79.90	80.80	81.70	82.60
12	No. 34	1/32	105	110.50	112.10	113.70	115.30	116.90	118.50	120.10	121.70
10	No. 34	1/32	130	175.30	177.80	180.30	182.80	185.30	187.80	190.30	192.80

PARANITE LOCOMOTIVE CABLE AND HEATER CORD

If It's **PARANITE** It's Right

GATHERING LOCOMOTIVE CABLE

Tape and Braid



Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
8	$96.80	$98.30	$99.90	$101.40	$103.10	$104.60	$106.10	$107.70	$109.20	$110.90
6	148.60	151.20	153.20	156.10	158.50	161.20	163.80	166.20	168.70	171.30
5	174.20	177.40	180.40	183.50	186.70	189.80	193.00	196.00	199.10	202.40
4	208.30	212.40	216.10	220.00	223.90	228.00	231.90	235.80	239.70	243.70
3	250.00	255.00	261.00	265.00	270.00	274.00	280.00	285.00	291.00	295.00
2	303.00	309.00	315.00	321.00	329.00	335.00	341.00	347.00	354.00	360.00
1	396.00	403.00	411.00	420.00	427.00	435.00	442.00	451.00	460.00	468.00

Taped with Special Seine Braid



8	104.80	106.30	107.90	109.40	111.10	112.60	114.10	115.70	117.20	118.90
6	157.60	160.20	162.20	165.10	167.50	170.20	172.80	175.20	177.70	180.30
5	184.20	187.40	190.40	193.50	196.70	199.80	203.00	206.00	209.10	212.40
4	219.30	223.40	227.10	231.00	234.90	239.00	242.90	246.80	250.70	254.70
3	262.00	267.00	273.00	277.00	282.00	286.00	292.00	297.00	303.00	307.00
2	316.00	322.00	328.00	334.00	342.00	348.00	354.00	360.00	367.00	373.00
1	413.00	420.00	428.00	437.00	444.00	452.00	459.00	468.00	477.00	485.00

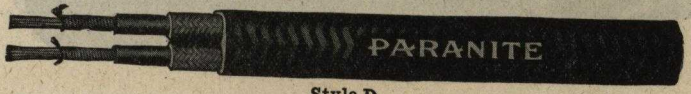
HEATER CORD



Style A



Style C



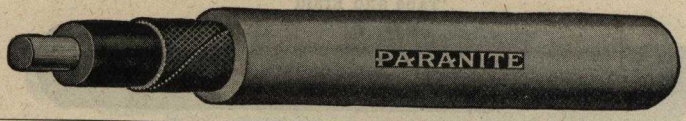
Style D

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
18	$48.50	$49.00	$49.50	$50.00	$50.50	$51.00	$51.50	$52.00	$52.50	$53.00
16	55.20	55.80	56.40	57.00	57.60	58.20	58.80	59.40	60.00	60.60
14	83.50	84.40	85.30	86.20	87.10	88.00	88.90	89.80	90.70	91.60
12	123.30	124.90	126.50	128.10	129.70	131.30	132.90	134.50	136.10	137.70
10	195.30	197.80	200.30	202.80	205.30	207.80	210.30	212.80	215.30	217.80

PARANITE LEAD COVERED CABLES

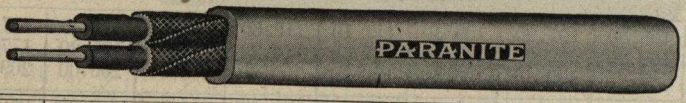
If It's **PARANITE** It's Right

SINGLE CONDUCTOR—SOLID



Size B.& S.	Wall of Rubber	Wall of Lead	Diam. Over All	Weight per 1000 Feet	Wire Base, Price per 1000 Feet							
					23c	24c	25c	26c	27c	28c	29c	30c
*18	1/32	1/32	.23	165	$33.45	$33.60	$33.75	$33.90	$34.05	$34.20	$34.35	$34.50
16	1/32	1/32	.25	180	38.80	39.05	39.30	39.55	39.80	40.05	40.30	40.55
14	3/64	1/32	.28	215	61.05	61.45	61.85	62.25	62.65	63.05	63.45	63.85
12	3/64	1/32	.30	240	71.20	71.85	72.50	73.15	73.80	74.45	75.10	75.75
10	3/64	3/64	.33	285	87.10	88.15	89.20	90.25	91.30	92.35	93.40	94.45
8	3/64	3/64	.35	325	107.30	108.95	110.60	112.25	113.90	115.55	117.20	118.85
6	1/16	1/16	.47	540	169.75	172.35	174.95	177.55	180.15	182.75	185.35	187.95
*5	1/16	1/16	.50	595	195.00	198.30	201.60	204.90	208.20	211.50	214.80	218.10
*4	1/16	1/16	.52	650	223.20	227.35	231.50	235.65	239.80	243.95	248.10	252.25

DUPLEX CONDUCTORS—SOLID



*18	1/32	1/32	.23x.38	250	55.90	56.20	56.50	56.80	57.10	57.40	57.70	58.00
16	1/32	1/32	.25x.41	280	65.10	65.60	66.10	66.60	67.10	67.60	68.10	68.60
14	3/64	1/32	.28x.47	350	103.90	104.70	105.50	106.30	107.10	107.90	108.70	109.50
12	3/64	3/64	.30x.51	390	123.10	124.40	125.70	127.00	128.30	129.60	130.90	132.20
10	3/64	3/64	.33x.57	465	153.10	155.10	157.20	159.30	161.40	163.50	165.60	167.70
8	3/64	1/16	.39x.66	670	214.70	218.00	221.30	224.60	227.90	231.20	234.50	237.80
6	1/16	1/16	.45x.78	880	304.90	310.10	315.30	320.50	325.70	330.90	336.10	341.30
*5	1/16	1/16	.47x.81	990	353.10	359.70	366.30	372.90	379.50	386.10	392.70	399.30
*4	1/16	1/16	.48x.84	1085	407.80	416.10	424.40	432.70	441.00	449.30	457.60	465.90

THREE CONDUCTORS—SOLID



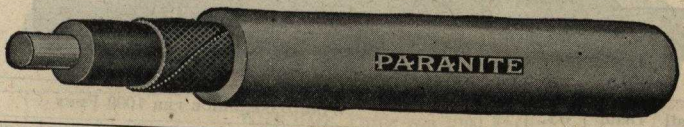
14	3/64	1/16	.56	...	188.80	190.10	191.40	192.70	194.00	195.30	196.60	197.90
12	3/64	1/16	.59	...	218.00	220.00	222.00	224.00	226.00	228.00	230.00	232.00
10	3/64	1/16	.66	...	268.90	272.05	275.20	278.35	281.50	284.65	287.80	290.95
8	3/64	5/64	.73	...	366.00	371.00	376.00	381.00	386.00	391.00	396.00	401.00
*6	1/16	5/64	.91	...	524.00	532.00	540.00	548.00	556.00	564.00	572.00	580.00

*These sizes are not carried in stock at factory but must be made up on special order.

PARANITE LEAD COVERED CABLES

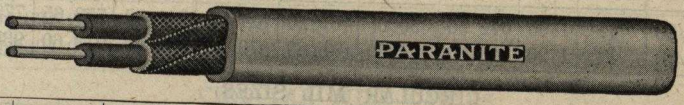
If It's **PARANITE** It's Right

SINGLE CONDUCTOR—SOLID



Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
*18	$34.65	$34.80	$34.95	$35.10	$35.25	$35.40	$35.55	$35.70	$35.85	$36.00
16	40.80	41.05	41.30	41.55	41.80	42.05	42.30	42.55	42.80	43.05
14	64.25	64.65	65.05	65.45	65.85	66.25	66.65	67.05	67.45	67.85
12	76.40	77.05	77.70	78.35	79.00	79.65	80.30	80.95	81.60	82.25
10	95.50	96.55	97.60	98.65	99.70	100.75	101.80	102.85	103.90	104.95
8	120.50	122.15	123.80	125.45	127.10	128.75	130.40	132.05	133.70	135.35
6	190.55	193.15	195.75	198.35	200.95	203.55	206.15	208.75	211.35	213.95
* 5	221.40	224.70	228.00	231.50	234.60	237.90	241.20	244.50	247.80	251.10
* 4	256.40	260.55	264.70	268.85	273.00	277.15	281.30	285.45	289.60	293.75

DUPLEX CONDUCTORS—SOLID



*18	58.30	58.60	58.90	59.20	59.50	59.80	60.10	60.40	60.70	61.00
16	69.10	69.60	70.10	70.60	71.10	71.60	72.10	72.60	73.10	73.60
14	110.30	111.10	115.90	112.70	113.50	114.30	115.10	115.90	116.70	117.50
12	133.50	134.80	136.10	137.40	138.70	140.00	141.30	142.60	143.90	145.20
10	169.80	171.90	174.00	176.10	178.20	180.30	182.40	184.50	186.60	188.70
8	241.10	244.40	247.70	251.00	254.30	257.60	260.90	264.20	267.50	270.80
6	346.50	351.70	356.90	362.10	367.30	372.50	377.70	382.90	388.10	393.30
* 5	405.90	412.50	419.10	425.70	432.30	438.90	445.50	452.10	458.70	465.30
* 4	474.20	482.50	490.80	499.10	507.40	515.70	524.00	532.30	540.60	548.90

THREE CONDUCTORS—SOLID



14	199.20	200.50	201.80	203.10	204.40	205.70	207.00	208.30	209.60	210.90
12	234.00	236.00	238.00	240.00	242.00	244.00	246.00	248.00	250.00	252.00
10	294.10	297.25	300.40	303.55	306.70	309.85	313.00	316.15	319.30	322.45
8	406.00	411.00	416.00	421.00	426.00	431.00	436.00	441.00	446.00	451.00
* 6	588.00	596.00	604.00	612.00	620.00	628.00	636.00	644.00	652.00	660.00

*These sizes are not carried in stock at factory, but must be made up on special order.

PARANITE LEAD COVERED CABLES

If It's **PARANITE** It's Right

SINGLE CONDUCTOR—STRANDED



Size B. & S.	Wall of Rubber	Wall of Lead	Diam Over All	Wt., per 1000 Ft.	Wire Base, Price per 1000 Feet							
					23c	24c	25c	26c	27c	28c	29c	30c
*14	3/64	3/64	.30	235	$67.55	$67.95	$68.35	$68.75	$69.15	$69.55	$69.95	$70.35
*12	3/64	3/64	.31	260	78.50	79.15	79.80	80.45	81.10	81.75	82.40	83.05
*10	3/64	3/64	.34	300	95.70	96.75	97.80	98.85	94.90	100.95	102.00	103.05
8	3/64	3/64	.38	340	118.50	120.20	121.90	123.60	125.30	127.00	128.70	130.40
6	1/16	1/16	.47	580	188.90	191.60	194.30	197.00	199.70	202.40	205.10	207.80
*5	1/16	1/16	.50	620	212.70	216.10	219.50	222.90	226.30	229.70	233.10	236.50
4	1/16	1/16	.52	690	244.90	249.15	253.40	257.65	261.90	266.15	270.50	274.65
3	1/16	1/16	.55	770	281.00	286.35	291.70	297.05	302.40	307.75	313.10	318.45
2	1/16	1/16	.58	840	325.50	332.25	339.00	345.75	352.50	359.25	366.00	372.75
1	5/64	1/16	.66	1000	409.65	418.20	426.75	435.30	443.85	452.40	460.95	469.50
0	5/64	1/16	.69	1150	482.30	493.05	503.80	514.55	525.30	536.05	546.80	557.55
00	5/64	1/16	.73	1300	565.00	578.55	592.10	605.65	619.20	632.75	646.30	659.85
000	5/64	1/16	.78	1490	672.90	690.05	707.20	724.35	741.50	758.65	775.80	792.95
0000	5/64	1/16	.84	1720	805.60	827.20	848.80	870.40	892.00	913.60	935.20	956.80

CIRCULAR MIL SIZES

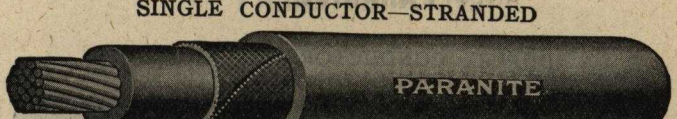
Size C. M.	Wall of Rubber	Wall of Lead	Diam. Over All	Wire Base, Price per 1000 Feet							
				23c	24c	25c	26c	27c	28c	29c	30c
250.000	3/32	5/64	.95	$994.0	$1019.0	$1044.0	$1069.0	$1094.0	$1119.0	$1194.0	$1169.0
300.000	3/32	5/64	1.02	1150.0	1181.0	1212.0	1243.0	1274.0	1305.0	1336.0	1367.0
350.000	3/32	5/64	1.08	1304.0	1340.0	1376.0	1412.0	1448.0	1484.0	1520.0	1556.0
400.000	3/32	5/64	1.11	1448.0	1489.0	1530.0	1571.0	1612.0	1653.0	1694.0	1735.0
*450.000	3/32	5/64	1.19	1593.0	1639.0	1685.0	1731.0	1777.0	1823.0	1869.0	1915.0
500.000	3/32	5/64	1.20	1740.0	1791.0	1842.0	1893.0	1944.0	1995.0	2046.0	2097.0
*550.000	7/64	3/32	1.33	1986.0	2042.0	2098.0	2154.0	2210.0	2266.0	2322.0	2378.0
600.000	7/64	3/32	1.34	2130.0	2191.0	2252.0	2313.0	2374.0	2435.0	2496.0	2557.0
*650.000	7/64	3/32	1.38	2271.0	2337.0	2403.0	2469.0	2535.0	2601.0	2667.0	2733.0
*700.000	7/64	3/32	1.41	2415.0	2486.0	2557.0	2628.0	2699.0	2770.0	2841.0	2912.0
750.000	7/64	3/32	1.44	2565.0	2642.0	2719.0	2796.0	2873.0	2950.0	3027.0	3104.0
800.000	7/64	3/32	1.47	2707.0	2789.0	2871.0	2953.0	3035.0	3117.0	3199.0	3281.0
*850.000	7/64	3/32	1.50	2850.0	2937.0	3024.0	3111.0	3198.0	3285.0	3372.0	3459.0
*900.000	7/64	3/32	1.53	2993.0	3085.0	3177.0	3269.0	3361.0	3453.0	3545.0	3637.0
*950.000	7/64	3/32	1.56	3136.0	3233.0	3330.0	3427.0	3524.0	3621.0	3718.0	3815.0
1000.000	7/64	3/32	1.59	3265.0	3367.0	3469.0	3571.0	3673.0	3775.0	3877.0	3979.0
*1250.000	4/32	7/64	1.78	4114.0	4242.0	4370.0	4498.0	4626.0	4754.0	4882.0	5010.0
*1500.000	4/32	7/64	1.91	4814.0	4967.0	5120.0	5273.0	5426.0	5579.0	5732.0	5885.0
*1750.000	4/32	7/64	2.03	5544.0	5723.0	5902.0	6081.0	6260.0	6439.0	6618.0	6797.0
*2000.000	4/32	7/64	2.12	6182.0	6386.0	6590.0	6794.0	6998.0	7202.0	7406.0	7610 .0

*These sizes are not carried in stock at factory but must be made up on order.

PARANITE LEAD COVERED CABLES

If It's **PARANITE** It's Right

SINGLE CONDUCTOR—STRANDED



Size B.&S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
*14	$70.75	$71.15	$71.55	$71.95	$72.35	$72.75	$73.15	$73.55	$73.95	$74.35
*12	83.70	84.35	85.00	85.65	86.30	86.95	87.60	88.25	88.90	89.55
*10	104.10	105.15	106.20	107.25	108.30	109.35	110.40	111.45	112.50	113.55
8	132.10	133.80	135.50	137.20	138.90	140.60	142.30	144.00	145.70	147.40
6	210.50	213.20	215.90	218.60	221.30	224.00	226.70	229.40	232.10	234.80
*5	239.90	243.30	246.70	250.10	253.50	256.90	260.30	263.70	267.10	270.50
4	278.90	283.15	287.40	291.65	295.90	300.15	304.40	308.65	312.90	317.15
3	323.80	329.15	334.50	339.85	345.20	350.55	355.90	361.25	366.60	371.95
2	379.50	386.25	393.00	399.75	406.50	413.25	420.00	426.75	433.50	440.25
1	478.05	486.60	495.15	503.70	512.25	520.80	529.35	537.90	546.45	555.00
0	568.30	579.05	589.80	600.85	611.30	622.05	632.80	643.55	654.30	665.05
00	673.40	686.95	700.50	714.05	727.60	741.15	754.70	768.25	781.80	795.35
000	810.10	827.25	844.40	861.55	878.70	895.85	913.00	930.15	947.30	964.45
0000	978.40	1000.00	1021.60	1043.20	1064.80	1086.40	1108.00	1129.60	1151.20	1172.80

CIRCULAR MILL CABLES

Size C. M.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
250.000	$1194.0	$1219.0	$1244.0	$1269.0	$1294.0	$1319.0	$1344.0	$1369.0	$1394.0	$1419.0
300.000	1398.0	1429.0	1460.0	1491.0	1522.0	1553.0	1584.0	1615.0	1646.0	1677.0
350.000	1592.0	1628.0	1664.0	1700.0	1736.0	1772.0	1808.0	1844.0	1880.0	1916.0
400.000	1776.0	1817.0	1858.0	1899.0	1940.0	1981.0	2022.0	2063.0	2104.0	2145.0
*450.000	1961.0	2007.0	2053.0	2099.0	2145.0	2191.0	2237.0	2283.0	2329.0	2375.0
500.000	2148.0	2199.0	2250.0	2301.0	2352.0	2403.0	2454.0	2505.0	2556.0	2607.0
*550.000	2434.0	2490.0	2546.0	2602.0	2658.0	2714.0	2770.0	2826.0	2882.0	2938.0
600.000	2618.0	2679.0	2740.0	2801.0	2862.0	2923.0	2984.0	3045.0	3106.0	3167.0
*650.000	2799.0	2865.0	2931.0	2997.0	3063.0	3129.0	3195.0	3261.0	3327.0	3393.0
*700.000	2983.0	3054.0	3125.0	3196.0	3267.0	3338.0	3409.0	3480.0	3551.0	3622.0
750.000	3181.0	3258.0	3335.0	3412.0	3489.0	3566.0	3643.0	3720.0	3797.0	3874.0
800.000	3363.0	3445.0	3527.0	3609.0	3691.0	3773.0	3855.0	3937.0	4019.0	4101.0
*850.000	3546.0	3633.0	3720.0	3807.0	3894.0	3981.0	4068.0	4155.0	4242.0	4329.0
*900.000	3729.0	3821.0	3913.0	4005.0	4097.0	4189.0	4281.0	4373.0	4465.0	4557.0
*950.000	3912.0	4009.0	4106.0	4203.0	4300.0	4397.0	4494.0	4591.0	4688.0	4785.0
1000.000	4081.0	4183.0	4285.0	4387.0	4489.0	4591.0	4693.0	4795.0	4897.0	4999.0
*1250.000	5183.0	5266.0	5394.0	5522.0	5650.0	5778.0	5906.0	6034.0	6162.0	6290.0
*1500.000	6038.0	6191.0	6344.0	6497.0	6650.0	6803.0	6956.0	7109.0	7262.0	7415.0
*1750.000	6976.0	7155.0	7334.0	7513.0	7692.0	7871.0	8050.0	8229.0	8408.0	8587.0
*2000.000	7814.0	8018.0	8222.0	8426.0	8630.0	8834.0	9038.0	9242.0	9446.0	9650.0

*These sizes are not carried in stock at factory but must be made up on order.

PARANITE LEAD COVERED CABLES

If It's **PARANITE** It's Right

DUPLEX CONDUCTORS—STRANDED



Size B. & S.	Wall of Rubber	Wall of Lead	Diam. Over All	Wt., per 1000 Ft.	Wire Base, Price per 1000 Feet							
					23c	24c	25c	26c	27c	28c	29c	30c
*12	3/64	3/64	.31x .53	420	$136.80	$138.10	$139.40	$140.70	142.00	$143.30	$144.60	$145.90
*10	3/64	3/64	.34x .59	495	169.50	171.60	173.70	175.80	177.90	180.00	182.10	184.20
8	3/64	1/16	.41x .69	715	237.75	241.15	244.55	247.95	251.35	254.75	258.15	261.55
6	1/16	1/16	.47x .81	960	339.85	345.25	350.65	356.05	361.45	366.85	372.25	377.65
*5	1/16	1/16	.50x .88	1045	387.70	394.50	401.30	408.10	414.90	421.70	428.50	435.30
4	1/16	1/16	.52x .91	1170	450.75	459.25	467.75	476.25	484.75	493.25	501.75	510.25
*3	1/16	1/16	.55x .97	1310	519.80	530.50	541.20	551.90	562.60	573.30	584.00	594.70
*2	1/16	5/64	.61x1.06	1680	633.65	647.15	660.65	684.35	697.85	711.35	724.85	738.35
*1	5/64	5/64	.69x1.22	2020	811.00	828.10	845.20	862.30	879.40	896.50	913.60	930.70
*0	5/64	5/64	.72x1.28	2295	957.00	978.50	1000.00	1021.50	1043.00	1064.50	1086.00	1107.50
*00	5/64	5/64	.77x1.38	2630	1121.15	1148.25	1175.35	1202.45	1229.55	1256.65	1283.75	1310.85
*000	5/64	5/64	.81x1.47	2985	1338.30	1372.60	1406.90	1441.20	1475.50	1509.80	1544.10	1578.40
*0000	5/64	5/64	.88x1.59	3460	1601.05	1644.25	1687.45	1730.65	1773.85	1817.05	1860.25	1903.45

THREE CONDUCTORS—STRANDED



*12	3/64	1/16	.63	775	242.30	244.35	246.40	248.45	250.50	252.55	254.60	256.65
*10	3/64	1/16	.70	880	293.20	296.40	299.60	302.80	306.00	309.20	312.40	315.60
*8	3/64	5/64	.77	1240	404.90	410.05	415.20	420.35	435.50	430.65	435.80	440.95
6	1/16	5/64	.93	1630	571.20	579.40	587.60	595.80	604.00	612.20	620.40	628.60
4	1/16	5/64	1.03	1990	751.00	764.00	777.00	790.00	803.00	816.00	829.00	842.00
*2	1/16	5/64	1.16	2480	1011.20	1031.90	1052.60	1073.30	1094.00	1114.70	1135.40	1156.10
*1	5/64	3/32	1.29	3078	1324.60	1350.70	1376.80	1402.90	1429.00	1455.10	1481.20	1507.30
*0	5/64	3/32	1.39	3531	1557.40	1590.30	1623.20	1656.10	1689.00	1721.90	1754.80	1787.70
*00	5/64	3/32	1.47	4029	1818.30	1859.85	1901.40	1942.95	1984.50	2026.05	2067.60	2109.15
*000	5/64	3/32	1.57	4618	2167.00	2219.50	2272.00	2324.50	2377.00	2429.50	2482.00	2534.50
*0000	5/64	3/32	1.69	5264	2652.00	2718.00	2784.00	2850.00	2916.00	2982.00	3048.00	3114.00

*These sizes are not carried in stock at factory but must be made up on order.

PARANITE LEAD COVERED CABLES

If It's **PARANITE** It's Right

DUPLEX CONDUCTORS—STRANDED



Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
*12	$147.20	$148.50	$149.80	$151.10	$152.40	$153.70	$155.00	$156.30	$157.60	$158.90
*10	186.30	188.40	190.50	192.60	194.70	196.80	198.90	201.00	203.10	205.20
8	264.95	268.35	271.75	275.15	278.55	281.95	285.35	288.75	292.15	295.55
6	383.05	388.45	393.85	399.25	404.65	410.05	415.45	420.85	426.25	431.65
*5	442.10	448.90	455.70	462.50	469.30	476.10	482.90	489.70	496.50	503.30
4	518.75	527.25	535.75	544.25	552.75	561.25	569.75	578.25	586.75	595.25
*3	605.40	616.10	626.80	637.50	648.20	658.90	669.60	680.30	691.00	701.70
*2	751.85	765.35	778.85	792.35	805.85	819.35	832.85	846.35	859.85	873.35
*1	947.80	964.90	982.00	999.10	1016.20	1033.30	1050.40	1067.50	1084.60	1101.70
*0	1129.00	1150.50	1172.00	1193.50	1215.00	1236.50	1258.00	1279.50	1301.00	1322.50
*00	1337.95	1365.05	1392.15	1419.25	1446.35	1473.45	1500.55	1527.65	1554.75	1581.85
*000	1612.70	1647.00	1681.30	1715.60	1749.90	1784.20	1818.50	1852.80	1887.10	1921.40
*0000	1946.65	1989.85	2033.05	2076.25	2119.45	2162.65	2205.85	2249.05	2292.25	2335.45

THREE CONDUCTORS—STRANDED



*12	258.70	260.75	262.80	264.85	266.90	268.95	271.00	273.05	275.10	277.15
*10	318.80	322.00	325.20	328.40	331.60	334.80	338.00	341.20	344.40	347.60
*8	446.10	451.25	456.40	461.55	466.70	471.85	477.00	482.15	487.30	492.45
6	636.80	645.00	653.20	661.40	669.60	677.80	686.00	694.20	702.40	710.60
4	855.00	868.00	881.00	894.00	907.00	920.00	933.00	946.00	959.00	972.00
*2	1176.80	1197.50	1218.20	1238.90	1259.60	1280.30	1301.00	1321.70	1342.40	1363.10
*1	1533.40	1559.50	1585.60	1611.70	1637.80	1663.90	1690.00	1716.10	1742.20	1768.30
*0	1820.60	1853.50	1886.40	1919.30	1952.20	1985.10	2018.00	2050.90	2083.80	2116.70
*00	2150.70	2192.25	2233.80	2275.35	2316.00	2358.45	2400.00	2441.55	2483.10	2524.65
*000	2587.00	2639.50	2692.00	2744.50	2797.00	2849.50	2902.00	2954.50	3007.00	3059.50
*0000	3180.00	3246.00	3312.00	3378.00	3444.00	3510.00	3576.00	3642.00	3708.00	3774.00

*These sizes are not carried in stock at factory but must be made up on order.

STEEL TAPED CABLES



Safety steel taped cables are the ideal means of underground transmission without the use of ducts or other forms of protection. The special construction guards against all disturbing elements, maintains efficiency and reliability of service and reduces the cost of installation. Nine insulating and protecting coverings surround the conductors.

The use of these cables is not confined to ornamental street lighting but is equally suitable for any underground transmission, and is extensively used in street railway work, large industrial plants, mines, etc.

Trade No.	Size B. & S.	Thickness Rubber Inches	Single-Conductor Outside Diameter Inches	Single-Conductor Approx. Wt., Lbs. per 1000 Ft.	Two-Conductor Outside Diameter Inches	Two-Conductor Approx. Wt., Lbs. per 1000 Ft.	Three-Conductor Outside Diameter Inches	Three-Conductor Approx. Wt., Lbs. per 1000 Ft.
600 VOLTS, SOLID								
54811	12	1/16	.687	1100	.970	1450	1.030	1900
54812	10	1/16	.720	1200	1	1650	1.062	2200
54813	8	1/16	.750	1300	1.062	1800	1.125	2300
54814	6	1/16	.782	1400	1.125	2050	1.187	2650
600 VOLTS, STRANDED								
54815	4	1/16	.875	1700	1.312	2500	1.375	3600
54816	2	1/16	.906	1900	1.437	2900	1.500	4200
54817	1	5/64	1	2100	1.625	3300	1.687	5100
54818	0	5/64	1.030	2300	1.687	3800	1.812	5800
54819	00	5/64	1.062	2500	1.750	4100	1.906	6400
54820	000	5/64	1.125	2700	1.875	4600	2.030	7100
54821	0000	5/64	1.187	3000	2	5100	2.156	8800
2400 VOLTS, SOLID								
54822	12	4/32	.781	1500	1.188	2300	1.281	3100
54823	10	4/32	.813	1600	1.218	2500	1.328	3300
54824	8	4/32	.828	1700	1.250	2600	1.375	3400
54825	6	4/32	.859	1800	1.313	2800	1.453	3700
2400 VOLTS, STRANDED								
54826	4	4/32	.938	2000	1.469	3200	1.609	4600
54827	2	4/32	1.015	2200	1.625	4000	1.734	5700
54828	1	4/32	1.047	2300	1.688	4100	1.828	6100
54829	0	4/32	1.094	2500	1.781	4400	1.921	6700
54830	00	4/32	1.140	2700	1.875	5000	2.046	7500
54831	000	4/32	1.218	3100	1.969	5700	2.156	8500
54832	0000	4/32	1.281	3700	2.094	6600	2.281	9500
5000 VOLTS, SOLID, FOR SERIES ARC CIRCUITS								
54833	8	11/64	1.062	1800	1.375	3000	.....	....
54834	6	5/32	1.094	1850	1.500	3000	.....	....
5000 VOLTS, STRANDED, FOR SERIES ARC CIRCUITS								
54835	4	5/32	1.156	2050	1.719	3500	.....	....

Prices will be quoted upon receipt of information, giving location of job, size and number of conductors desired, operating voltage and quantity of each size required.

VARNISHED CAMBRIC INSULATED WIRES AND CABLES

SINGLE CONDUCTOR—LEADED AND BRAIDED

Stranded Conductor

Trade No.	Size B. & S. Gauge	Thickness Insulation in Inches	Thickness Lead in Inches	Approximate Diameter Leaded	Approximate Diameter Braided	Approx. Weight in Lbs. per 1000 Ft. Leaded	Approx. Weight in Lbs. per 1000 Ft. Braided
076843	6	2/32	3/64	.40	.40	386	151
076844	4	2/32	3/64	.45	.45	490	202
076845	2	2/32	2/32	.54	.54	725	279
076846	1	5/64	2/32	.61	.61	880	362
076847	0	5/64	2/32	.66	.66	1015	448
076848	00	5/64	2/32	.70	.70	1120	534
076849	000	5/64	2/32	.75	.75	1301	642
076850	0000	5/64	5/64	.84	.84	1690	778
076851	250,000	3/32	3/32	.95	.95	2267	1034
076852	300,000	3/32	3/32	1.01	1.01	2520	1220
076853	350,000	3/32	3/32	1.06	1.06	2780	1409
076854	400,000	3/32	3/32	1.11	1.11	2994	1556
076855	500,000	3/32	3/32	1.19	1.19	3473	1893
076856	600,000	7/64	3/32	1.30	1 30	3999	2281
076857	700,000	7/64	3/32	1.37	1.37	4388	2562
076858	750,000	7/64	3/32	1.41	1.41	4589	2731
076859	800,000	7/64	3/32	1.44	1.44	4794	2901
076860	900,000	7/64	3/32	1.50	1.50	5241	3245
076861	1,000,000	7/64	3/32	1.56	1.56	5656	3589
076862	1,250,000	4/32	7/64	1.76	1.76	7185	4453
076863	1,500,000	4/32	4/32	1.92	1.92	8700	5297
076864	1,750,000	4/32	4/32	2.03	2.03	9793	6157
076865	2,000,000	4/32	4/32	2.14	2.14	10835	7010

For working pressure not exceeding 1000 volts.

Specifications, diameters and weights for solid conductor approximate same as above.

Prices on the above will be furnished on application. Also specifications and prices for cables exceeding 1000 volts.

THREE CONDUCTOR—LEADED AND BRAIDED

Stranded Conductor

076866	6	1/16–1/64	1/16	.824	.824	1245	538
076867	4	1/16–1/64	5/64	.959	.959	1820	760
076868	2	1/16–1/64	5/64	1.085	1.085	2290	1089
076869	1	5/64–1/64	3/32	1.279	1.279	3066	1384
076870	0	5/64–1/64	3/32	1.357	1.357	3446	1660
076871	00	5/64–1/64	3/32	1.456	1.456	3933	2003
076872	000	5/64–1/64	3/32	1.566	1.566	4528	2416
076873	0000	5/64–1/64	7/64	1.723	1.723	5642	2955
076874	250,000	3/32–1/64	7/64	1.891	1.891	6470	3537
076875	300,000	3/32–1/64	7/64	2.023	2.023	7296	4155
076876	350,000	3/32–1/64	1/8	2.150	2.150	8595	4770
076877	400,000	3/32–1/64	1/8	2.253	2.253	9347	5288
076878	500,000	3/32–1/64	1/8	2.438	2.438	10870	6483

For working pressure not exceeding 1000 volts.

NOTE—Under thickness insulation the first fraction is thickness of insulation on each conductor, the second fraction is thickness of insulation over all.

Prices will be furnished upon application, also specifications and prices for cables exceeding 1000 volts.

PARANITE TELEPHONE WIRES

If It's PARANITE It's Right

TWISTED PAIR INSIDE OR SUB-STATION WIRE



Conductors are soft drawn tinned copper rubber insulated, braided and twisted. Stock colors are oak tan and olive green, carried in stock in single conductor twisted pair and triplex.

Size B. & S.	Diam. Over Rubber	Weight per 1000 Feet	Wire Base, Price per 1000 Feet							
			23c	24c	25c	26c	27c	28c	29c	30c
19	3/32	28	$18.60	$18.80	$19.00	$19.20	$19.40	$19.40	$19.60	$19.80
18	7/64	32	23.40	23.60	23.80	24.00	24.20	24.40	24.60	24.80

PLAIN (NO BRAID) POT HEAD WIRE



Conductors are soft drawn tinned copper rubber insulated, plain (no braid); one conductor black rubber, one conductor red rubber.

22	3/32	23	15.60	15.80	15.80	15.80	16.00	16.00	16.00	16.20
20	3/32	23	16.40	16.60	16.60	16.80	16.80	17.00	17.20	17.40
19	3/32	25	16.40	16.60	16.80	17.00	17.20	17.20	17.40	17.60

TWISTED PAIR BRIDAL WIRE



Conductors are soft drawn tinned copper rubber insulated, braided and twisted, saturated with a weatherproof compound, wax finish, one conductor having a raised tracer to distinguish it from the other.

19	3/32	28	18.60	18.80	19.00	19.20	19.40	19.40	19.60	19.80
18	7/64	32	23.40	23.60	23.80	24.00	24.20	24.40	24.60	24.80
16	4/32	40	28.40	28.60	29.00	29.40	29.60	30.00	30.20	30.60

TWISTED PAIR FLAME PROOF OR JUMPER WIRE



Conductors are soft drawn tinned copper rubber insulated, braided and twisted, one conductor white cotton, one conductor red cotton and then saturated with flame proof compound.

22	3/32	24	20.00	20.20	20.20	20.20	20.40	20.40	20.40	20.60
20	3/32	24	20.80	21.00	21.00	21.20	21.20	21.40	21.60	21.80
19	3/32	28	20.80	21.00	21.20	21.40	21.60	21.60	21.80	22.00

All prices are for twisted pairs. Single conductors are one-half the price of twisted pairs. Triplex conductors are one and one-half times the price of twisted pairs. Four conductors are twice the price of twisted pairs.

Prices are f. o. b. factory with freight allowance not to exceed 50 cents per cwt. when ordered in not less than 150 pounds

PARANITE TELEPHONE WIRES

If It's **PARANITE** It's Right

Twisted Pair Inside or Sub-Station Wire



Conductors are soft drawn tinned copper rubber insulated, braided and twisted. Stock colors are oak, tan and olive green, carried in stock in single conductor, twisted pair and triplex.

Size B. & S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
19	$20.00	$20.00	$20.20	$20.40	$20.60	$20.80	$20.80	$21.00	$21.20	$21.40
18	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80

Plain (No Braid) Pot Head Wire



Conductors are soft drawn tinned copper rubber insulated, plain (no braid); one conductor black rubber, one conductor red rubber.

22	16.20	16.20	16.40	16.40	16.40	16.60	16.60	16.60	16.80	16.80
20	17.40	17.60	17.80	17.80	18.00	18.00	18.20	18.40	18.60	18.60
19	17.80	17.80	18.00	18.20	18.40	18.60	18.60	18.80	19.00	19.20

Twisted Pair Bridal Wire



Conductors are soft drawn tinned copper rubber insulated, braided and twisted, saturated with a weatherproof compound, wax finish, one conductor having a raised tracer to distinguish it from the other.

19	20.00	20.00	20.20	20.40	20.60	20.80	20.80	21.00	21.20	21.40
18	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80
16	30.80	31.20	31.40	31.80	32.20	32.40	32.80	33.00	33.40	33.60

Twisted Pair Flame Proof or Jumper Wire



Conductors are soft drawn tinned copper rubber insulated, braided and twisted, one conductor white cotton, one conductor red cotton and then saturated with flame proof compound.

22	20.60	20.60	20.80	20.80	20.80	21.00	21.00	21.00	21.20	21.20
20	21.80	22.00	22.20	22.20	22.40	22.40	22.60	22.80	23.00	23.00
19	22.20	22.20	22.40	22.60	22.80	23.00	23.00	23.20	23.40	23.60

All prices are for twisted pairs. Single conductors are one-half the price of twisted pairs. Triplex conductors are one and one-half times the price of twisted pairs. Four conductors are twice the price of twisted pairs.

Prices are f. o. b. factory with freight allowance not to exceed 50 cents per cwt. when ordered in not less than 150 pounds.

PARANITE TELEPHONE WIRES

If It's **PARANITE** It's Right

TWISTED PAIR HARD DRAWN OUTSIDE DISTRIBUTING WIRE



Conductors are hard drawn tinned copper rubber insulated, braided and twisted, saturated with black weatherproof compound, wax finish, one conductor having a raised tracer to distinguish it from the other.

Size B. & S.	Diam. Over Rubber	Weight per 1000 Ft.	Wire Base, Price, per 1000 Feet							
			23c	24c	25c	26c	27c	28c	29c	30c
18	7/64	32	$23.40	$23.60	$23.80	$24.00	$24.20	$24.40	$24.60	$24.80
*18	4/32	35	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
16	4/32	40	28.40	28.60	29.00	29.40	29.60	30.00	30.20	30.60
*16	9/64	55	33.00	33.20	33.60	34.00	34.20	34.60	34.80	35.20
*16	5/32	72	37.60	37.80	38.20	38.60	38.80	39.20	39.40	39.80
14	5/32	68	38.60	39.20	39.60	40.20	40.60	41.20	41.60	42.20
*14	11/64	75	42.80	43.40	43.80	44.40	44.80	45.40	45.80	46.40

IRON TELEPHONE DROP WIRE



Conductors are iron telephone wire rubber insulated, braided and twisted, saturated with a weatherproof compound, wax finish, one conductor with a raised tracer to distinguish it from the other.

Size B. W. G.	Size B. & S.	Diameter Over Rubber	No Test	100 Megohms	Over 100 Megohms
*14	12	11/64	$31.50	$33.70	$38.30
14	12	5/32	26.10	28.10	32.50
16	14	5/32	21.30	23.30	27.70
16	14	9/64	20.40	22.00	26.40
*16	14	4/32	17.50	18.70	23.10
16	16	4/32	19.70	20.90	25.30
*18	16	7/64	15.60	16.80	21.20

In iron wire B.W.G. is considered the standard gauge and orders specifying size without designating the style of gauge will be filled with B.W.G.

Prices are for twisted pairs. For plain pairs following reductions will be made:

Twisted Pairs

3/32 Outside diameter	$2.20	9/64 Outside diameter	$4.00
7/64 Outside diameter	2.60	5/32 Outside diameter	5.00
4/32 Outside diameter	3.00	11/64 Outside diameter	6.00

*These sizes are not carried in stock. Must be made up on order and shipped from factory.

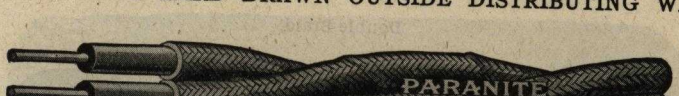
All prices are for twisted pairs. Single conductors are one-half the price of twisted pairs. Triplex conductors are one and one-half times the price of twisted pairs. Four conductors are twice the price of twisted pairs.

Prices are f. o. b. factory with freight allowance not to exceed 50 cents per cwt. when ordered in not less than 150 pounds.

PARANITE TELEPHONE WIRES

If It's **PARANITE** It's Right

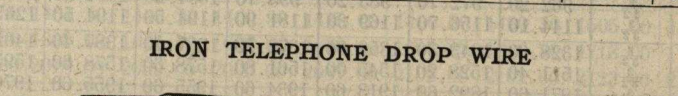
TWISTED PAIR HARD DRAWN OUTSIDE DISTRIBUTING WIRE



Conductors are hard drawn tinned copper rubber insulated, braided and twisted, saturated with black weatherproof compound, wax finish, one conductor having a raised tracer to distinguish it from the other.

Size B.-& S.	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
18	$25.00	$25.20	$25.40	$25.60	$25.80	$26.00	$26.20	$26.40	$26.60	$26.80
*18	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
16	30.80	31.20	31.40	31.80	32.20	32.40	32.80	33.00	33.40	33.60
*16	35.40	35.80	36.00	36.40	36.80	37.00	37.40	37.60	38.00	38.20
*16	40.00	40.40	40.60	41.00	41.40	41.60	42.00	42.20	42.60	42.80
14	42.60	43.00	43.60	44.00	44.60	45.00	45.60	46.00	46.60	47.00
*14	46.80	47.20	47.80	48.20	48.80	49.20	49.80	50.20	50.80	51.20

IRON TELEPHONE DROP WIRE



Conductors are iron telephone wire rubber insulated, braided and twisted, saturated with a weatherproof compound, wax finish, one conductor with a raised tracer to distinguish it from the other.

Size B. W. G.	Size B. & S.	Diam. Over Rubber Inches	No. Test	100 Megohms	Over 100 Megohms
*14	12	$\frac{11}{64}$	$31.50	$33.70	$38.30
14	12	$\frac{5}{32}$	26.10	28.10	32.50
16	14	$\frac{5}{32}$	21.30	23.30	27.70
16	14	$\frac{9}{64}$	20.40	22.00	26.40
*16	14	$\frac{4}{32}$	17.50	18.70	23.10
18	16	$\frac{4}{32}$	19.70	20.90	25.30
*18	16	$\frac{7}{64}$	15.60	16.80	21.20

In iron wire B. W. G. is considered the standard gauge and orders specifying by size without designating the style of gauge will be filled with B. W. G.

Prices are for twisted pairs. For plain pairs the following reductions will be made.

Twisted Pairs

$\frac{3}{32}$ Outside diameter..... $2.20
$\frac{7}{64}$ Outside diameter..... 2.60
$\frac{4}{32}$ Outside diameter..... 3.00
$\frac{9}{64}$ Outside diameter..... $4.00
$\frac{5}{32}$ Outside diameter..... 5.00
$\frac{11}{64}$ Outside diameter..... 6.00

*These sizes are not carried in stock. Must be made up on order and shipped from factory.

All prices are for twisted pairs. Single conductors are one-half the price of twisted pairs. Triplex conductors are one and one-half times the price of twisted pairs. Four conductors are twice the price of twisted pairs.

Prices are f. o. b. factory with freight allowance not to exceed 50 cents per cwt. when ordered in not less than 150 pounds.

PARANITE TELEPHONE CABLE

If It's **PARANITE** It's Right

RUBBER COVERED TELEPHONE CABLE

Double Braid



No. of Pairs	Size	Diam. Over Each Conductor	Wire Base, Price per 1000 Feet							
			23c	24c	25c	26c	27c	28c	29c	0c
5	19	3/32	$116.90	$118.00	$119.00	$120.10	$121.10	$121.10	$122.20	$123.20
10	19	3/32	208.30	210.40	212.50	214.60	216.70	216.70	218.80	220.90
15	19	3/32	305.80	308.50	312.10	315.30	318.40	318.40	321.60	324.70
20	19	3/32	400.70	404.90	409.10	413.30	417.50	417.50	421.60	425.90
25	19	3/32	494.30	499.60	504.80	510.10	515.30	515.30	520.60	525.80
30	19	3/32	587.90	594.20	600.50	606.80	613.10	613.10	619.40	625.70
40	19	3/32	776.80	785.20	793.60	802.00	810.40	810.40	818.80	827.70
50	19	3/32	962.20	972.70	983.20	993.70	1004.20	1004.20	1014.70	1025.20
*60	19	3/32	1144.10	1156.70	1169.30	1181.90	1194.50	1194.50	1207.10	1219.70
*70	19	3/32	1328.60	1343.30	1358.00	1372.70	1387.40	1387.40	1402.10	1416.80
*80	19	3/32	1511.40	1528.20	1545.00	1561.80	1578.60	1578.60	1595.40	1612.20
100	19	3/32	1871.60	1892.60	1913.60	1934.60	1955.60	1955.60	1976.60	1997.60

Lead Encased



No. of Pairs	Size	Wall of Lead	Diam. Over All	Weight per 1000 Ft.	Wire Base, Price per 1000 Feet							
					23c	24c	25c	26c	27c	28c	29c	30c
1	16 4/32	1/32	.25x.41	250	$ 63.90	$ 64.10	$ 64.50	$ 64.90	$ 65.10	$ 65.50	$ 65.70	$ 66.10
1	18 7/64	1/32	.23x.38	210	55.50	55.70	55.90	56.10	56.30	56.50	56.70	56.90
1	19 3/32	1/32	.21x.35	180	48.30	48.50	48.70	48.90	48.90	49.10	49.30	49.50
5	19 3/32	5/64	.75	1008	231.50	232.40	233.20	234.00	234.80	235.60	236.50	237.30
10	19 3/32	6/64	.96	1578	372.90	374.50	376.20	377.80	379.40	381.10	382.70	384.40
15	19 3/32	6/64	1.09	1881	493.10	495.60	498.00	500.50	503.00	505.40	507.90	510.30
20	19 3/32	6/64	1.20	2151	597.40	600.60	603.90	607.20	610.50	613.80	617.00	620.30
25	19 3/32	6/64	1.29	2390	710.40	714.50	718.60	722.70	726.80	730.90	735.00	739.10
*30	19 3/32	6/64	1.38	2627	814.70	819.60	824.50	829.50	834.40	839.30	844.20	849.10
*35	19 3/32	7/64	1.50	2234	963.30	969.00	974.70	980.50	986.20	991.90	997.60	1003.40
*40	19 3/32	7/64	1.57	3458	1066.50	1073.10	1079.60	1086.20	1092.70	1099.30	1105.80	1112.40
50	19 3/32	7/64	1.71	3886	1280.00	1288.20	1296.40	1304.60	1312.70	1320.90	1329.10	1337.30
*60	19 3/32	7/64	1.84	4331	1488.40	1498.20	1508.00	1517.90	1527.70	1537.50	1547.30	1557.20
*70	19 3/32	7/64	1.96	4738	1696.70	1708.20	1719.70	1731.20	1742 60	1754.10	1765.60	1777.00
*80	19 3/32	8/64	2.10	5648	1952.70	1965.80	1978.90	1992.00	2005.10	2018.20	2031.30	2044.40
*90	19 3/32	8/64	2.20	6044	2156.40	2171.10	2185.90	2200.60	2215.30	2230.10	2244.80	2259.60
100	19 3/32	8/64	2.30	6459	2360.00	2376.30	2392.70	2409.10	2425.50	2441 90	2458.20	2474.60

*These sizes are not carried in stock.

Braided cables freight allowance not to exceed 50 cents per 100 pounds when ordered in lots of not less than 150 pounds.

PARANITE TELEPHONE CABLE

If It's PARANITE It's Right

RUBBER COVERED TELEPHONE CABLE

Double Braid



No. of Pairs	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
5	$124.30	$124.30	$125.30	$126.40	$127.40	$128.50	$128.50	$129.50	$130.60	$131.60
10	223.00	223.00	225.10	227.20	229.30	231.40	231.40	233.50	235.60	237.70
15	327.90	327.90	331.00	334.20	337.30	340.50	340.50	343.60	346.80	349.90
20	430.10	430.10	434.30	438.50	442.70	446.90	446.90	451.10	455.30	459.50
25	531.10	531.10	536.30	541.60	546.80	552.10	552.10	557.30	562.60	567.80
30	632.00	632.00	638.30	644.60	650.90	657.20	657.20	663.50	669.80	676.10
40	835.60	835.60	844.00	852.40	860.80	869.20	869.20	877.60	886.00	894.40
50	1035.70	1035.70	1046.20	1056.70	1067.20	1077.70	1077.70	1088.20	1098.70	1109.20
*60	1232.30	1232.30	1244.90	1257.50	1270.10	1282.70	1282.70	1295.30	1307.90	1320.50
*70	1431.50	1431.50	1446.20	1460.90	1475.60	1490.30	1490.30	1505.00	1519.70	1534.40
*80	1629.00	1629.00	1645.80	1662.60	1679.40	1696.20	1696.20	1713.00	1729.80	1746.60
100	2018.60	2018.60	2039.60	2060.60	2081.60	2102.60	2102.60	2123.60	2144.60	2165.60

Lead Encased



No. of Pairs	Wire Base, Price per 1000 Feet									
	31c	32c	33c	34c	35c	36c	37c	38c	39c	40c
1	$66.30	$66.70	$66.90	$67.30	$67.70	$67.90	$68.30	$68.50	$68.90	$69.10
1	57.10	57.30	57.50	57.70	57.90	58.10	58.30	58.50	58.70	58.90
1	49.50	49.70	49.90	50.10	50.30	50.30	50.50	50.70	50.90	50.90
5	238.10	238.90	239.70	240.60	241.40	242.20	243.00	243.80	244.70	245.50
10	386.00	387.60	389.30	390.90	392.60	394.20	395.80	397.50	399.10	400.80
15	512.80	515.30	517.70	520.20	522.60	525.10	527.60	530.00	532.50	534.90
20	623.60	626.90	630.20	633.40	636.70	640.00	643.30	646.60	649.80	653.10
25	743.20	747.30	751.40	755.50	759.60	763.70	767.80	771.90	776.00	780.10
*30	854.00	858.90	863.80	868.70	873.60	878.60	883.50	888.40	893.30	898.20
*35	1009.10	1014.80	1020.60	1026.30	1032.00	1037.80	1043.50	1049.20	1054.90	1060.70
*40	1118.90	1125.50	1132.00	1138.60	1145.10	1151.70	1158.20	1164.80	1171.30	1177.90
50	1345.50	1353.70	1361.90	1370.10	1378.30	1386.50	1394.60	1402.80	1411.00	1419.20
*60	1567.00	1576.80	1586 70	1596.50	1606.30	1616.20	1626.00	1635.80	1645.60	1655.50
*70	1788.50	1800.00	1811.40	1822.90	1834.40	1845.90	1857.30	1868.80	1880.30	1891.70
*80	2057.50	2070.60	2083.70	2096.80	2109.90	2123.00	2136.10	2149.20	2162.30	2175.40
*90	2274.30	2289.00	2303.80	2318.50	2333.30	2348.00	2362.70	2377.50	2392.20	2407.00
100	2491.00	2507.40	2523.80	2540.10	2556.50	2572.90	2589.30	2605.70	2622.00	2638.40

*These sizes are not carried in stock.

Braided cables freight allowance not to exceed 50 cents per 100 pounds when ordered in lots of not less than 150 pounds.

ANNUNCIATOR WIRES AND CABLES



Annunciator wire is made of plain or tinned copper wire insulated with two wraps of cotton wound in reverse direction, saturated in paraffine and highly polished. Furnished in the following colors: Red, white, blue, green, yellow, brown, red and white, blue and white.

This wire is put up on 7-pound spools, ½ and 1-pound coils.

Single Conductor				Double Conductor			
Trade No.	Size B. & S.	No. of Ft. per Lb.	Advance over Base	Trade No.	Size B. & S.	No. of Ft. per Lb.	Advance over Base
57371	16	109	$0.05	57383	16	54	$0.05
57372	18	170	.06	57384	18	85	.06
57373	20	238	.07	57385	20	119	.07
57374	22	350	.09	57386	22	175	.09

Tinned annunciator wire can be furnished when specified at 2 cents a pound additional.

WEATHERPROOF ANNUNCIATOR WIRE

Weatherproof annunciator wire is made by saturating the insulated wire in black weatherproof compound and is suitable for use where exposed to dampness. Furnished in black only. Put up on 7-pound spools.

Trade No.	Size B. & S.	Description	No. of Ft. per Lb.	Advance over Base
57375	18	Weatherproof annunciator wire.....	125	$0.06

DAMP-PROOF OFFICE WIRE



Damp-proof office wire is made by saturating the inner wraps only in black weatherproof compound and then applying the outer braid, which is saturated in paraffine compound and then given a high polish. This style is used where protection against dampness and moisture is necessary. Furnished in the following colors: Red, blue, white, red and white, blue and white. Put up in 17-pound coils.

Single Conductor				Double Conductor			
Trade No.	Size B. & S.	No. of Ft. per Lb.	Advance over Base	Trade No.	Size B. & S.	No. of Ft. per Lb.	Advance over Base
57376	16	71	$0.05	57387	16	35	$0.05
57377	18	98	.06	57388	18	49	.06

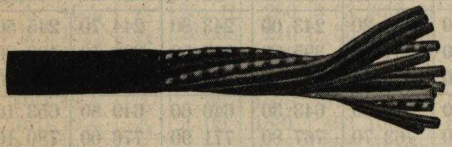
Tinned wire can be furnished when specified.

Extra for Special Packages—Extra over the Above, Advances per Pound

	Annunciator Wire	Office Wire		Annunciator Wire	Office Wire
½-pound coils	$0.02	$0.02	2-pound spools	$0.02	$0.02
1-pound coils	.01	.01	5-pound spools and over	None	.01
2-pound coils	.00½	.00½	Cabling	.04	.04
1-pound spools	.02	.02			

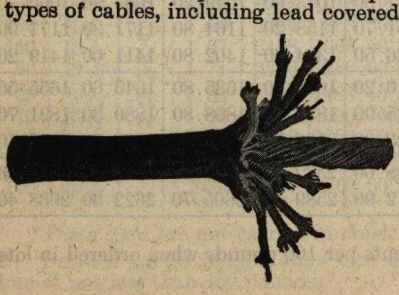
Extra for twisted pairs or duplex, 1 cent per pound over price of wires composing the pairs.

INTERCOMMUNICATING TELEPHONE CABLE



Trade No.	No. of Cond.	Description	Price per Ft.
57378	8	2 cond. No. 18; 6 cond. No. 20	$0.08
57379	11	2 cond. No. 18; 9 cond. No. 20	.09
57380	15	4 cond. No. 18; 11 cond. No. 20	.12
57381	21	4 cond. No. 16; 17 cond. No. 20	.13
57382	25	4 cond. No. 16; 21 cond. No. 20	.20

The Nos. 18 and 16 wires are rubber covered; the No. 20 wires are tinned cotton covered wires saturated in paraffine with tape and braid over all. Prices of larger sizes and other types of cables, including lead covered, lead encased, etc., on application.



ELEVATOR ANNUNCIATOR CABLE

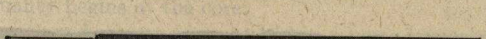
Each conductor is composed of 16 strands of No. 30 soft copper wire laid together and insulated with two wrappings of cotton wound in reverse directions and one cotton braid. These insulated conductors are cabled around a stout core of jute which gives extra tensile strength and increased flexibility, and the whole is covered with an outside braid of cotton. This is a dry cable, no saturation.

Price, per conductor foot, 3 cents.

DELTABESTON WIRE

APPROVED BY THE UNDERWRITERS' LABORATORIES, INC.

PLAIN FIXTURE WIRE

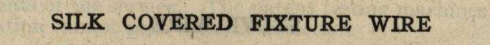


For installations where temperature makes rubber covered wires impracticable, this smooth, flexible, tenacious asbestos fiber covering will give best protection and longest service. Especially adapted for wiring Type C fixtures.

Size B. & S.	Conductor No. of Wires	B. & S. Gauge of Each Wire	Approx. Diam. Over Insulation Inches	Approx. Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.
14	41	30	.125	18	$32.00
16	26	30	.110	12	25.00
18	16	30	.100	9	22.00

All sizes put up on 250-foot spools.

SILK COVERED FIXTURE WIRE



Same construction as the plain fixture wire, with the addition of a silk covering over the asbestos fiber to give a neat, attractive appearance where wiring of fixture is exposed to view. Made in single, parallel, and twisted pair conductors.

Single Conductor

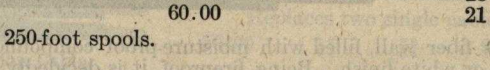
Size B. & S.	Conductor No. of Wires	B. & S. Gauge of Each Wire	Approx. Diam. Over Insulation Inches	Approx. Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.
14	41	30	.145	19	$45.00
16	26	30	.130	13	35.00
18	16	30	.120	10	30.00

Parallel and Twisted Pair Conductors

Size B. & S.	Parallel Conductors Approx. Wt., Lbs. per 1000 Ft.	Parallel Conductors Price per 1000 Ft.	Twisted Pair Conductors Approx. Wt., Lbs. per 1000 Ft.	Twisted Pair Conductors Price per 1000 Ft.
14	38	$90.00	40	$93.00
16	26	70.00	28	72.00
18	20	60.00	21	62.00

All sizes put up on 250-foot spools.

MOVING PICTURE CABLE



A very flexible conductor having a wall of asbestos fiber and a braided asbestos covering; moisture-proof; widely used where wires are subjected to high temperatures—projectors, searchlights, railroad controllers, cranes, etc.

Size B. & S.	Conductor No. of Wires	B. & S. Gauge of Each Wire	Approx. Thickness Asbestos Wall Mils	Approx. Diameter Over All Inches	Approx. Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.
1	133	22	.035	$\frac{17}{32}$	310	$275.00
2	133	23	.034	$\frac{31}{64}$	255	240.00
4	82	23	.032	$\frac{15}{32}$	170	170.00
6	84	25	.029	$\frac{11}{32}$	115	125.00
8	52	25	.027	$\frac{19}{64}$	75	100.00
10	104	30	.025	$\frac{15}{64}$	50	80.00
12	65	30	.022	$\frac{13}{64}$	35	60.00
14	41	30	.020	$\frac{7}{32}$	25	45.00

DELTABESTON WIRE

APPROVED BY THE UNDERWRITERS' LABORATORIES, INC.

HEATER CORD



Asbestos insulated throughout; will not burn or deteriorate like rubber. The special application of the asbestos fiber re-enforces the strands of the conductor against their breaking and puncturing the insulation. The occurrence of short circuits is thereby eliminated and longer life obtained.

With Cotton Braid.				With Asbestos Braid			
Size B. & S.	Style	Approx. Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.	Size B. & S.	Style	Approx. Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.
12	C	65	$130.00	12	A	82	$140.00
14	C	45	90.00	14	A	60	105.00
16	C	30	63.00	16	A	43	75.00
18	C	22	56.00	18	A	34	60.00

STOVE WIRE



Furnishes perfect wiring for electric stoves and ranges, in and around ovens and boiler rooms. Insulated with specially treated asbestos fiber and tightly braided asbestos covering.

Size B. & S.	Approx. Thickness Asbestos Wall Mils	Approx. Diameter Over All Inches	Approx. Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.
6	.029	19/64	105	$90.00
8	.027	1/4	70	68.00
10	.025	7/32	45	50.00
12	.022	13/64	30	42.00
14	.020	3/16	20	38.00

All sizes put up on 1000-foot coils.

SWITCHBOARD WIRE



Over the asbestos fiber wall, filled with moisture-proof compound, is braided an asbestos cover in either black or white finish. Being fireproof, it is decidedly better for switchboards than the slow burning wires commonly used.

Size B. & S.	Approx. Thickness Asbestos Wall Mils	Approx. Diameter Over All Inches	Approx. Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.
6	.029	19/64	110	$100.00
8	.027	1/4	75	75.00
10	.025	7/32	50	55.00
12	.022	13/64	35	45.00
14	.020	3/16	25	38.00

All sizes put up on 1000-foot coils.

MAGNET WIRE



Covered with pure asbestos fiber in a smooth, flexible layer, which will not crack or break, even when sharp bends are made. Tough, moisture-proof, and indestructible under any commercial temperature. Manufactured in sizes 0–31, B. & S. gauge, also in flat, square and rectangular sections. Prices quoted on application.

PACKARD AUTOMOBILE CABLE

Packard Cable is built to meet the peculiar requirements of automobile, motorcycle and motor boat service.

In Packard Cable quality begins at the core.

Strands of soft-drawn tinned copper wire are laid in reverse layers, making the core flexible and round in cross section.

As many strands are employed as is practicable without introducing the danger of individual strands breaking when cable is sharply bent.

By this construction the highest possible factor of conductivity consistent with mechanical strength is obtained.

Packard Cables have two layers of braid, the thread of which is made exclusively for them. It is tough and hard and strong. When tightly woven it furnishes a flexible armor against abrasion and also serves as a web to carry the special Packard heat, oil and water resisting enamel.

Owing to a distinctive quality of this enamel the braid is not made stiff or less flexible by its impregnation with enamel.

The fact that the enamel and braids retain their flexibility makes Packard Cable less liable to deterioration from vibration.

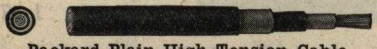
Every foot of cable before it leaves the Packard factory has had a breakdown test far in excess of any possible requirements of the service. The patent testing machines are so constructed that a weak spot in the insulation cannot pass without detection.



Packard High Tension Cable



Packard High Tension Magneto Cable



Packard Plain High Tension Cable



Packard Low Tension Cable, 1-conductor



Packard Low Tension Cable, 2-conductor



Packard Low Tension Cable, 3-conductor



Packard Jr. Starting Cable No. 4,



Packard Jr. Starting Cable, No. 1,

PACKARD IGNITION CABLE

Packard High Tension

Suitable for all kinds of high tension service.

Trade No.	Outside Dimens., In. Single Strand	Finished Cable	Ship. Wt., Lbs. per 1000 Ft.	Price per 1000 Ft. 30c Cop. Base	Differential* List Change per 1000 Ft. for 1c Base Change
50396	....	$\frac{31}{64}$	170	$351.05	$0.67

Packard High Tension Magneto

Popular size for magneto service.

50397	....	$\frac{23}{64}$	85	190.05	.67

Packard Plain High Tension

For those who desire a plain unprotected cable.

50398	....	$\frac{18}{64}$	75	117.65	.51

Packard Low Tension—1-conductor

Standard for all kinds of low tension service.

50399	....	$\frac{15}{64}$	40	104.04	.67

Packard Low Tension—2-conductor

Replaces two single cables.

50400	$\frac{12}{64}$	$\frac{28}{64}$	90	287.95	1.33

Packard Low Tension—3-conductor

Suitable for wiring a double set of batteries.

50401	$\frac{12}{64}$	$\frac{31}{64}$	125	371.00	2.00

PACKARD JR. STARTING CABLE

Trade No.	Mfrs. No.	Size B. & S. Gauge	Number Strands	Size of Wire	Outside Diam. Inches	Price per 1000 Ft. Copper Base 30c	Differential* List, Change per 1000 Ft 1c Change · Copper Base
109858	60	8	19	21	$\frac{9}{32}$	$123.80	$1.92
109859	61	6	61	24	$\frac{5}{16}$	191.50	3.10
109860	63	4	61	22	$\frac{7}{32}$	259.80	4.72
109861	64	3	61	21	$\frac{13}{32}$	320.70	5.98
109862	65	2	127	23	$\frac{29}{64}$	413.75	7.65
109863	66	1	127	22	$\frac{1}{2}$	483.30	9.42
109864	67	0	127	21	$\frac{35}{64}$	618.20	11.88
109865	68	00	127	20	$\frac{39}{64}$	759.30	15.62

*This is the amount to be added to or deducted from the prices given for each change of 1 cent per pound, in the base price of copper over or under 30 cents as listed in the previous column.

PACKARD AUTOMOBILE CABLES



Lighting Cable
No. 14, 1-conductor



Lighting Cable
No. 12, 1-conductor



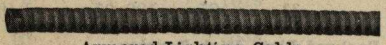
Lighting Cable
No. 12, 2-conductor



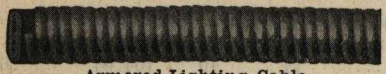
Lighting Cable
No. 12, 3-conductor



Lighting Cable
No. 10, 1-conductor



Armored Lighting Cable
No. 14, Single Conductor



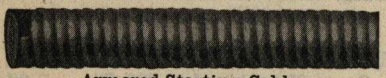
Armored Lighting Cable
No. 14, Twin Conductor



Armored Lighting Cable
No. 12, Single Conductor



Armored Starting Cable
No. 8, Single Conductor



Armored Starting Cable
No. 3, Single Conductor



Armored Starting Cable
No. 1, Single Conductor

PACKARD LIGHTING CABLE

No. 14, 1-conductor

Recommended for wiring tail and small side lamps.

Trade No.	Mfrs. No.	Outside Dimens., Inches Single Strand	Outside Dimens., Inches Finished Cable	Ship. Wt., Lbs., per 1000 Feet	Price per 1000 Ft. 30c Cop. Base	Differential* List Change per 1000 Ft. for 1c Base Change
50406	30	....	15/64	40	$104.05	$0.67

No. 14, 2-conductor

Replaces two single cables, making a neater job.

50410	31	12/64	29/64	85	287.95	1.33

No. 14, 3-conductor

Replaces three single cables, making a neater job.

50414	32	12/64	31/64	125	371.00	2.00

No. 12, 1-conductor

Recommended for wiring large side or small head lamps.

50407	33	....	16/64	50	113.25	.95

No. 12, 2-conductor

50411	34	13/64	32/64	105	297.65	1.91

No. 12, 3-conductor

50415	35	13/64	03/42	190	403.05	2.87

No. 10, 1-conductor

Suitable for wiring large head lamps.

50408	36	....	18/64	65	141.05	1.47

No. 10, 2-conductor

50412	37	15/64	33/64	135	418.10	2.94

No. 10, 3-conductor

50416	38	15/64	36/64	265	492.15	4.41

*This is the amount to be added to or deducted from the prices given for each change of 1 cent per pound, in the base price of copper over or under 30 cents as listed in the previous column.

ARMORED CABLE

Designed for hard service on automobiles, motor trucks, and motor boats. This is really a double-protected cable. The insulating materials and braids are protected from oil by Packard Enamel, and in addition, this cable is protected against wear and tear or injury of any kind by strong, flexible, metal ribbon armor.

There are two styles of inner construction.

Style A consists of a fine copper stranding, a single cotton covering, the braid, enamel and then the armor.

Style C is the same as A with the addition of a layer of insulating cambric between cotton covering and braid.

Single conductor is made in all sizes from No. 16 to No. 00 inclusive. Twin conductor is made in all sizes from No. 16 to No. 10 inclusive.

Any size core may have Style A or C insulation and use any one of the three kinds of armor.

Can be furnished in 68 different combinations of size and style.

Prices and Further Information on Application

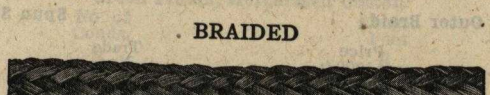
BELDEN FLEXIBLE COPPER CABLES

FOR CARBON BRUSH PIGTAILS

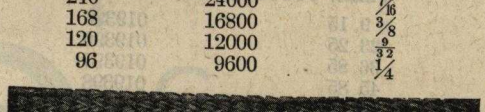
These cables are made of fine bare copper wire thoroughly annealed and braided into tubes. When furnished in tubular form the cables are generally required rolled flat. This flattening process as done by us causes the cables to retain a flat form like tape, but the pressure applied is not sufficient to crush the cables or affect their flexibility.

We have endeavored to standardize this material by listing a wide range of sizes carefully graded so as to cover all requirements. We believe the trade generally will appreciate our efforts in this direction and the great convenience of being able to order from a standard stock.

BRAIDED

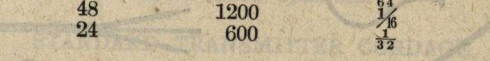


Trade No.	Size Wire	No. of Wires	Circular Mils	Diam. Round, In.	Width Flat, In.	Approx. Ft., per Lb
11873	30	768	76800	21/32	1 1/16	3.8
11874	30	480	48000	9/16	3/4	6.2
11875	30	360	36000	1/2	5/8	9.1
11884	30	240	24000	7/16	1/2	13.1
11885	30	168	16800	3/8	15/32	18.7
11886	30	120	12000	9/32	3/8	25
11887	30	96	9600	1/4	11/32	31.2



11888	36	384	9600	3/8	9/16	32.8
11889	36	312	7800	13/64	9/32	36.1
11890	36	240	6000	5/32	1/4	50.9
11891	36	168	4200	11/64	7/32	71.4
11892	36	120	3000	1/8	3/16	95
11893	36	96	2400	7/64	5/32	125
11894	36	72	1800	5/64	7/64	195
11895	36	48	1200	1/16	3/32	273
11896	36	24	600	1/32	3/64	600

STRANDED



Bare

Trade No.	Size Wire	No. of Wires	Circular Mils	Diam. Round, In.	Approx. Equiv. Size, B. & S.	Approx. Ft., per Lb
11897	36	1050	26250	13/64	6	12
11898	36	833	20800	3/16	7	15
11899	36	644	16100	5/32	8	19
11906	36	525	13125	9/64	9	24
11907	36	392	9800	1/8	10	32
11908	36	238	5950	3/32	12–13	53
11909	36	161	4025	5/64	14	80
11910	36	105	2625	1/16	16	122
11911	36	63	1575	3/64	18	207
11912	40	147	1454	3/64	18	226
11913	40	105	1038	1/32	20	316

Tinned

11914	28	7	1120	3/64	19–20	294
11915	32	7	441	1/32	24	744
11916	35	7	241	1/64	26	1482

Prices quoted upon application.

BELDEN CORDS



No. 019381



No. 019386

GREEN FINISH INSULATED TINSEL CORDAGE

PLAIN COTTON INNER BRAID

Mercerized Cotton Outer Braid			Spun Silk Outer Braid		
Trade No.	No. of Conds.	Price per 1000 ft.	Trade No.	No. of Conds.	Price per 1000 ft.
019380	1	$10.80	019390	1	$19.30
019381	2	27.65	019391	2	44.35
019382	3	43.50	019392	3	66.20
019383	4	54.70	019393	4	80.00
019384	5	65.80	019394	5	93.30

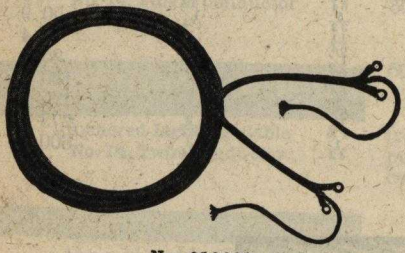
GREEN FINISH STRANDED COPPER CORDAGE

PLAIN COTTON INNER BRAID

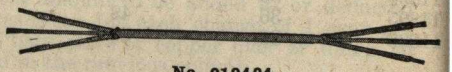
019385	1	9.15	019395	1	17.05
019386	2	23.25	019396	2	39.95
019387	3	36.85	019397	3	59.55
019388	4	45.85	019398	4	71.20
019389	5	54.80	019399	5	82.25

For desk push buttons, table push buttons, annunciators, telephones, electrical instruments, medical batteries and electrical apparatus of all kinds.

The above tinsel cordage is made with 16 strands of copper tinsel and the copper conductor cordage is made with 16 strands of No. 33 copper wires.



No. 019400



No. 019404

TABLE PUSH BUTTON CORDS

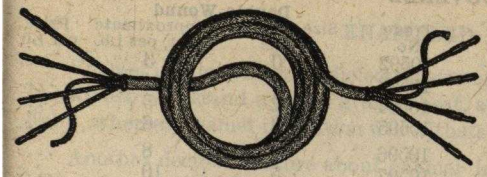
Mercerized Cotton Outer Braid			Spun Silk Outer Braid		
Trade No.	Length Feet	Price Each	Trade No.	Length Feet	Price Each
019400	6	$0.32	019402	6	$0.43
019401	9	.38	019403	9	.53

These cords are composed of 16 strands No. 33 copper wire, and insulated with two cotton braids. An outer braid of green mercerized cotton or green spun silk is placed over all.

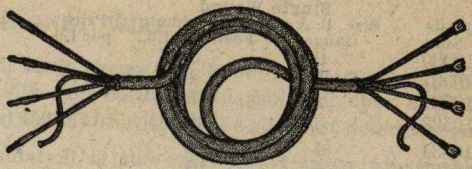
RECEIVER CORDS

Trade No.	Length Inches	Green Finish Braid Finish	Price Each
019404	36	Mercerized cotton	$0.268
019405	36	Spun silk	.362
		Maroon and Black	
019406	36	Mercerized cotton	.275
019407	36	Worsted	.315

BELDEN CORDS AND CORDAGE



No. 019408



No. 019412

DESK STAND CORDS

SOLID TIPS AND STAY CORDS ON BOTH ENDS

Green Finish, Mercerized Cotton

Trade No.	No. of Conds.	Length Feet	Price Each
019408	2	6	$0.308
019409	4	6	.577
	Green Finish, Spun Silk		
019410	2	6	.412
019411	4	6	.744

SOLID TIPS ON ONE END AND SPADE TIPS ON OTHER END

Green Finish, Mercerized Cotton

019412	2	6	.295
019413	4	6	.552
	Green Finish, Spun Silk		
019414	2	6	.400
019415	4	6	.720



No. 019416



No. 019418

OPERATOR'S RECEIVER CORDS

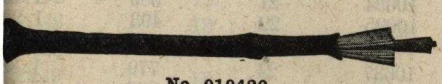
SOLID TIPS AND STAY CORD ON ONE END ONLY

Green Finish, Mercerized Cotton

019416	2	6	391
	Green Finish, Spun Silk		
019417	2	6	.526

STANDARD TRANSMITTER CORDAGE

Trade No.	Description	Price per 1000 ft.
019418	Mercerized cotton	$ 8.60
019419	Spun silk	14.50



No. 019420



No. 019424

STANDARD OPERATOR'S TRANSMITTER CORDAGE

019420	Mercerized cotton	16.60
019421	Spun silk	25.70

SOLID TIPS ON ONE END AND SPADE TIPS ON OTHER END

Trade No.	Length Feet	Description	Price Each
019422	6	Mercerized cotton	$0.140
019423	6	Spun silk	.198

STANDARD SWITCHBOARD CORDS

Trade No.	No. of Conds.	Length Feet	Price per 100	Trade No.	No. of Conds.	Length Feet	Price per 100
019424	2	5	$56.10	019428	3	5	$67.10
019425	2	6	62.50	019429	3	6	77.45
019426	2	7	69.10	019430	3	7	86.25
019427	2	8	75.50	019431	3	8	94.60

MAGNET WIRE

COTTON COVERED

Trade No.	Single Wound Size, B. & S. Gauge	Approximate Feet, per Lb.	Price per Lb.	Trade No.	Double Wound Size, B. & S. Gauge	Approximate Feet, per Lb.	Price per Lb.
10530	0	3	....	10592	0	3	....
10531	1	4	....	10593	1	4	....
10532	2	5	....	10594	2	5	....
10533	3	6	....	10595	3	6	....
10534	4	8	....	10596	4	8	....
10535	5	10	....	10597	5	10	....
10536	6	12	....	10598	6	12	....
10537	7	16	....	10599	7	15	....
10538	8	20	....	10600	8	19	....
10539	9	25	....	10601	9	24	....
10540	10	31	....	10602	10	30	....
10541	11	39	....	10603	11	38	....
10542	12	49	....	10604	12	47	....
10543	13	62	....	10605	13	59	....
10544	14	78	....	10606	14	75	....
10545	15	98	....	10607	15	95	....
10546	16	124	....	10608	16	119	....
10547	17	155	....	10609	17	150	....
10548	18	196	....	10610	18	188	....
10549	19	247	....	10611	19	237	....
10550	20	311	.58	10612	20	298	.64
10551	21	389	.60	10613	21	370	.70
10552	22	491	.62	10614	22	461	.74
10553	23	624	.65	10615	23	584	.78
10554	24	778	.68	10616	24	745	.84
10555	25	958	.73	10617	25	903	.92
10556	26	1188	.80	10618	26	1118	1.00
10557	27	1533	.86	10619	27	1422	1.10
10558	28	1903	.92	10620	28	1759	1.20
10559	29	2461	.98	10621	29	2207	1.30
10560	30	2893	1.08	10622	30	2534	1.42
10561	31	3483	1.19	10623	31	2768	1.54
10562	32	4414	1.27	10624	32	3137	1.64
10563	33	5688	1.44	10625	33	4697	1.88
10564	34	6400	1.73	10626	34	6168	2.20
10565	35	8393	1.86	10627	35	6737	2.67
10566	36	9846	2.12	10628	36	7877	3.00
10567	37	11636	2.70	10629	37	9309	4.30
10568	38	13848	3.60	10630	38	10666	5.70
10569	39	18286	4.70	10631	39	11907	7.20
10570	40	24381	6.00	10632	40	14222	9.00

SILK COVERED

10571	20	319	.88	10633	20	312	1.12
10572	21	398	.90	10634	21	389	1.15
10573	22	504	.92	10635	22	493	1.22
10574	23	645	.96	10636	23	631	1.28
10575	24	795	1.02	10637	24	779	1.38
10576	25	1004	1.10	10638	25	966	1.48
10577	26	1240	1.20	10639	26	1202	1.65
10578	27	1615	1.30	10640	27	1542	1.85
10579	28	2023	1.40	10641	28	1917	2.00
10580	29	2625	1.53	10642	29	2485	2.22
10581	30	3335	1.70	10643	30	2909	2.56
10582	31	3820	1.92	10644	31	3683	3.08
10583	32	4876	2.16	10645	32	4654	3.40
10584	33	6243	2.46	10646	33	5689	4.00
10585	34	7757	2.90	10647	34	7111	4.60
10586	35	9660	3.38	10648	35	8534	5.28
10587	36	11907	3.93	10649	36	10039	5.98
10588	37	13474	4.66	10650	37	10666	7.37
10589	38	16516	5.58	10651	38	14222	8.43
10590	39	22261	6.76	10652	39	16516	9.75
10591	40	26947	8.14	10653	40	21333	11.53

WIRE

ENAMELED MAGNET WIRE

Enamel insulation has a dielectric strength far in excess of silk or cotton covered wire It will also withstand a much greater heat, as silk and cotton insulation will char at 270° Fahr., whereas enamel insulation will withstand 450° Fahr. without the slightest deterioration.

Another decided feature about enamel insulation is the economy of space where this material is used for coil windings, and it takes up much less space than the single silk insulation. This feature is a very important one, especially to manufacturers of electrical instruments and apparatus where space economy is so essential.

Our enamel insulation will withstand moisture indefinitely and is not injured by temporary immersion in water or other liquids.

Our enamel adheres tenaciously and will withstand any reasonable amount of handling without injury.

Trade No.	Size B. & S.	Diam. Enam. Wire	Approx. Feet per Lb.	Approx. Turns per Sq. In.	Price per Lb.
34672	16	.....	126	359	$0.80
34673	17	.....	159	447	.82
34674	18	.....	201	567	.84
34675	19	.....	253	715	.86
34676	20	.0337	320	885	.88
34677	21	.0302	404	1126	.90
34678	22	.0269	509	1400	.92
34679	23	.0241	642	1736	.96
34680	24	.0215	810	2160	1.02
34681	25	.0192	1019	2770	1.10
34682	26	.0171	1286	3460	1.20
34683	27	.0153	1620	4270	1.30
34684	28	.0136	2042	5400	1.40
34685	29	.0122	2570	7900	$1.53
34686	30	.0109	3240	10000	1.70
34687	31	.0097	4082	12620	1.92
34688	32	.0087	5132	16020	2.16
34689	33	.0077	6445	20400	2.46
34690	34	.0069	8093	25200	2.90
34691	35	.0062	10197	31900	3.38
34692	36	.0055	12813	40000	3.93
34693	37	.0049	16110	51600	4.66
34694	38	.0044	20274	65700	5.58
34695	39	.0039	25519	81600	6.76
34696	40	.0035	32107	104000	8.14
....	..	.....	.....	.....	....

TINNED STEEL ARMATURE BINDING WIRE

This material is a high grade carbon steel having a tensile strength of 300,000 pounds per square inch, and is tinned to prevent corrosion.

Trade No.	Size B. & S.	Diam. Inches	Wt., Lbs. per 1000 Ft.	Tensile Strength Pounds	Price per Lb.
56131	10	.1019	31	2447	$0.24
56147	11	.0907	....	1938	.26
56132	12	.0808	20	1538	.28
56148	13	.0720	....	1221	.30
56133	14	.0641	12	968	.32
56149	15	.0571	....	768	.34
56134	16	.0508	8	608	.36
56135	17	.0453	6	484	.38
56136	18	.0403	5	383	.40
56137	19	.0359	4	304	.42
56138	20	.0320	3	241	.46
56139	21	.0285	2¼	191	.56
56140	22	.0253	2	151	.66
56141	23	.0226	1½	120	.80
56142	24	.0201	1	95.2	.90
56143	25	.0179	⅞	75.5	1.02
56144	26	.0159	¾	59.6	1.12

Intermediate sizes will take price of the next finer size.
Extra charge for spooling.

CLIMAX AND GERMAN SILVER RESISTANCE WIRE

CLIMAX RESISTANCE WIRE

Size B. & S.	Diam. In.	Area C. M.	Resis. per 1000 Ft. at 75° F.	Ohms per Lb.	Wt., Lbs. per 1000 Ft. Bare	Price per Lb. Bare	Size B. & S.	Diam. In.	Area C. M.	Resis. per 1000 Ft. at 75° F.	Ohms per Lb.	Wt., Lbs. per 1000 Ft. Bare	Price per Lb. Bare
1	.289	83521	5.9	.024	231	$1.10	13	.072	5184	96.6	6.55	14.3	$1.20
2	.258	66564	7.5	.039	184	1.10	14	.064	4096	122	10.4	11.3	1.20
3	.229	52441	9.5	.063	145	1.10	15	.057	3249	154	16.1	9.2	1.20
4	.204	41616	12	.100	115	1.10	16	.051	2601	193	25.8	7.2	1.25
5	.182	33124	15.1	.157	92	1.10	17	.045	2025	247	42.5	5.6	1.25
6	.162	26244	19.1	.251	73	1.10	18	.040	1600	314	68.2	4.42	1.30
7	.144	20736	24.2	.408	57	1.10	19	.036	1296	386	103	3.58	1.30
8	.128	16384	30.6	.655	45	1.10	20	.032	1024	488	166	2.83	1.30
9	.114	12996	38.6	1.03	36	1.10	21	.0285	812.3	618	271	2.24	1.35
10	.102	10404	48.2	1.57	29	1.15	22	.0253	640.1	785	436	1.77	1.35
11	.091	8281	60.6	2.58	23	1.15	23	.0226	510.8	983	689	1.41	1.35
12	.081	6561	76.5	4.08	18	1.15	24	.0201	404	1234	1092	1.12	1.40

Resistance per mil-foot, 500 ohms at 75° Fahr. (.24°C.)

Temperature coefficient, .0004 per degree Fahr.

Specific gravity, 8.137. Weight per cubic inch, .29 pound.

Can also be furnished in ribbon.

Climax resistance alloy has a specific resistance of 87 microhms per centimeter cube.

It is about 50 times the resistance of copper, while German silver is only 18 times, and ordidary steel wire about 8 times the resistance of a copper wire of the same diameter.

Its low temperature coefficient fits it for any use to which German silver can be applied and its high specific resistance renders it an economical substitute. Its mechanical properties make it available for rheostat work where German silver is useless, on account of its brittleness, caused by repeated heating and cooling.

18% GERMAN SILVER RESISTANCE WIRE

Size B. & S.	Diam. In.	Area C. M.	Resis. per 1000 Ft. at 75° F.	Ohms per Lb.	Wt., Lbs. per 1000 Ft. Bare	Price per Lb. Bare	Size B. & S.	Diam. In.	Area C. M.	Resis. per 1000 Ft. at 75° F.	Ohms per Lb.	Wt., Lbs. per 1000 Ft. Bare	Price per Lb. Bare
0	.325	105625	1.95	.00645	302	$0.96	21	.0285	812.3	270	109.45	2.32	$1.20
1	.289	83521	2.53	.01025	239	.96	22	.0253	640.1	340	174.03	1.83	1.25
2	.258	66564	3.22	.0163	190	.96	23	.0226	510.8	425	276.78	1.46	1.32
3	.229	52441	4.14	.0259	150	.96	24	.0201	404.0	540	439.95	1.15	1.40
4	.204	41616	5.18	.0412	119	.96	25	.0179	320.4	680	699.72	.91	1.50
5	.182	33124	6.55	.0656	95	.96	26	.0159	252.8	864	1112.4	.72	1.60
6	.162	26244	8.28	.1042	72	.96	27	.0142	201.6	1076	1768.8	.58	1.70
7	.144	20736	10.47	.1657	59	.96	28	.0126	158.8	1370	2811.9	.46	1.85
8	.128	16384	13.22	.2635	47	.99	29	.0113	127.7	1700	4473	.365	2.00
9	.114	12996	16.68	.4189	37.6	.99	30	.010	100.0	2180	7011	.286	2.20
10	.102	10404	20.8	.6663	29.2	.99	31	.0089	79.2	2750	11306	.226	2.40
11	.091	8281	26.2	1.059	23.7	1.01	32	.008	64.0	3400	17980	.183	2.50
12	.081	6561	33.2	1.684	18.8	1.01	33	.0071	50.4	4300	28581	.144	2.75
13	.072	5184	42	2.619	14.8	1.01	34	.0063	39.7	5480	45465	.113	3.00
14	.064	4096	53	4.258	11.7	1.01	35	.0056	31.4	6920	72261	.090	3.30
15	.057	3249	67	6.773	9.3	1.01	36	.005	25.0	8700	114933	.071	3.50
16	.051	2601	84	10.768	7.45	1.01	37	.0045	20.2	11000	182742	.058	6.00
17	.045	2025	107	17.121	5.73	1.04	38	.004	16.0	13850	291270	.046	9.00
18	.040	1600	136	27.216	4.57	1.04	39	.0035	12.2	17550	462000	.035	12.00
19	.036	1296	168	43.281	3.7	1.08	40	.003	9.0	22200	887250	.026	14.00
20	.032	1024	222	68.838	2.93	1.08	..	....	....	....	.....	....	....

Resistance per mil-foot, 218 Ohms at 75° F. (.24° C.)

Temperature coefficient, .00017 per degree F. Specific gravity 8.5. Weight per cubic inch .307 pound.

The composition commonly known as German Silver is that containing 18% of nickel. Its resistance varies somewhat in different lots, and according to temper, and is approximately 21 times that of copper.

30% German Silver Wire has a resistance approximately 28 times that of copper.

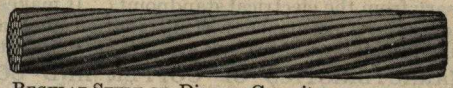
Prices on cotton or silk insulated German Silver wire furnished on application.

Prices on 30% alloy on application.

BARE COPPER WIRE

ANNEALED AND HARD DRAWN

STRANDED



Capacity Circular Mils	Weight per 1000 Ft	Weight per Mile	Regular Style of Stranding No. Wires	Regular Style of Stranding Diam. Each	Diam. Strand Mils
2000000	6180	32640	91	148	1630
1750000	5409	28560	91	139	1530
1500000	4635	24480	91	128	1410
1250000	3864	20400	91	117	1288
1000000	3090	16320	61	128	1151
950000	2936	15504	61	125	1125
900000	2780	14688	61	121	1089
850000	2627	13872	61	118	1061
800000	2472	13056	61	115	1034
750000	2318	12240	61	111	998
700000	2164	11424	61	107	963
650000	2010	10608	61	103	928
600000	1854	9792	61	99	891
550000	1700	8976	61	95	855
500000	1545	8160	37	116	812
450000	1390	7344	37	110	770
400000	1236	6528	37	104	729
350000	1082	5712	37	97	679
300000	927	4896	37	90	630
250000	772	4080	37	82	574

Capacity B. & S. Gauge	Weight per 1000 Ft.	Weight per Mile	Regular Style of Stranding No. Wires	Regular Style of Stranding Diam. Each	Diam. of Strand Mils
0000	652	3442	19	105	525
000	517	2730	19	94	470
00	410	2165	19	84	420
0	325	1717	19	75	375
1	258	1361	7	109	327
2	204	1079	7	98	294
3	162	855	7	87	261
4	128	680	7	77	231
5	102	538	7	69	207
6	80	427	7	61.2	183
8	51	268	7	48.4	145
10	32	169	7	38.6	116
12	20	106	7	30.6	91.8
14	13	67	7	24.2	72.6
16	8	42	7	19.3	57.9
18	5	26	7	15.1	45.3
..	.	..	.	....	....
..	.	..	.	....	....
..	.	..	.	....	....
..	.	..	.	....	....

SOLID

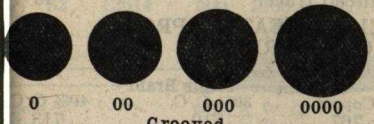


B. & S. Gauge	Diam. in Mils	Cap. C. M.	Weight per 1000 Ft.	Weight per Mile
000	460	211600	639	3376
000	410	167803	507	2677
00	365	133079	402	2123
0	325	105534	319	1684
1	289	83694	253	1335
2	258	66373	201	1059
3	229	52634	159	840
4	204	41743	126	666
5	182	33102	100	528
6	162	26251	79	419
7	144	20817	63	332
8	128	16510	50	263

B. & S. Gauge	Diam. in Mils	Cap. C. M.	Weight per 1000 Ft.	Weight per Mile
9	114	13094	40	209
10	102	10382	31	166
11	91	8234	25	131
12	81	6530	20	104
13	72	5178	16	83
14	64	4107	13	66
15	57	3257	10	52
16	51	2583	8	41
17	45	2048	6	33
18	40	1624	5	26
19	36	1288	4	21
20	32	1022	3	16

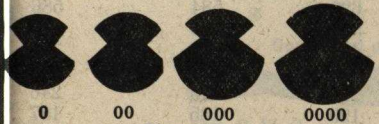
Owing to frequent change in market prices, quotations are made on application only.

Round



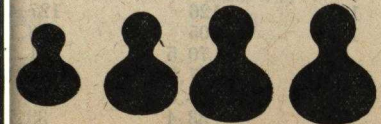
0 00 000 0000

Grooved



0 00 000 0000

Figure 8



0 00 000 0000

TROLLEY WIRE

Trade Number Round	Trade Number Grooved	Trade Number Figure 8	Size B. & S. Gauge	Capacity Circular Mils	Pounds per Mile
10178	10182	10186	0000	211600	3376
10179	10183	10187	000	167805	2677
10180	10184	10188	00	133079	2123
10181	10185	10189	0	105538	1684

Hard-drawn trolley wires are furnished in any of the standard styles, round, grooved, or figure eight. Sizes 0000 and 000 put up in one-half mile lengths; Nos. 00 and 0 are furnished in one-half or one-mile lengths. The cross sections of the various styles and sizes are shown herewith.

COPPER CLAD WIRE

Copper clad wire should be used in all cases where electrical conductivity is not the prime requisite, but where strength and durability are the determining factors, and where, therefore, when copper wire is used, it is necessary to install a larger wire in order to get the requisite mechanical strength that is necessary from the electrical standpoint. It makes line trouble the exception rather than the rule; conduces to a permanency of installation unobtainable in other materials, effects a considerable saving in first cost and a still greater one in maintenance.

COMPARATIVE CHARACTERISTICS OF COPPER AND COPPER CLAD WIRE

Size B. & S	Wt., Lbs., per 1000 Ft.			Approx. Breaking Weight, Lbs.			Average Resistance, Ohms per 1000 Ft. at 60° F.	
	30% C. C.	40% C. C.	Copper	30% C. C.	40% C. C.	Copper	30% C. C.	40% C. C.
0000	584	592	641	9805	9315	7914	.1603	.1203
000	463	470	508	8250	7838	6533	.2021	.1514
00	366	371	403	6830	6489	5365	.2549	.1910
0	291	295	320	5680	5396	4386	.3214	.2410
1	230	234	253	4800	4560	3565	.4052	.3048
2	184	187	201	3900	3705	2892	.5110	.3823
3	145	147	159	3200	3040	2338	.6443	.4853
4	114.5	116.2	126.4	2630	2499	1890	.8124	.6115
5	91	92.4	100.2	2160	2052	1520	1.025	.7685
6	72	73.1	79.7	1800	1682	1221	1.292	.9698
7	57.7	58.6	63	1450	1378	984	1.629	1.228
8	45.5	46.2	50	1200	1121	788	2.054	1.554
9	35.5	36	39.6	975	917	630	2.590	1.959
10	29	29.4	31.4	800	751	506	3.267	2.446
11	....	23.2	24.9	....	613	403	....	3.073
12	....	18.5	19.8	....	499	318	....	3.880
14	....	11.4	12.4	....	333	202	....	6.213

Owing to the difference in specific gravity there is a saving of about 8 per cent in the use of copper clad wire over copper wire.

COPPER CLAD TIE WIRES

Copper clad wire may be advantageously used for tie wires on copper lines and can be furnished in any required length. It is customary to use two sizes smaller than the conductor for the tie wires.

COPPER CLAD MECHANICAL STRAND

Size Inches	Size of Strand Mills	Approx. Wt., Lbs. per 1000 Ft.	Approx. Breaking Strength Lbs.
5/8	208	857	17200
9/16	187	689	14300
1/2	167	550	11740
7/16	146	422	9300
3/8	125	307	7120
5/16	104	213	5200
1/4	83	135	3500

COPPER CLAD TWISTED PAIR TELEPHONE WIRE

Copper clad rubber insulated, twisted pair drop wire has very largely replaced the use of No. 14 copper drop wire, having approximately the same breaking strength as the latter and having ample conductivity for telephone requirements. It costs less, is smaller, and weighs less than copper wire and its life is longer.

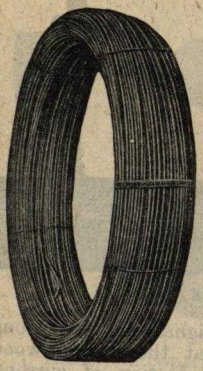
Size B. & S.	Diameter over Rubber, Inches	Description	Wt., Lbs. per 1000 Ft.
17	7/64	No raised thread tracer	40

COMPARATIVE WEIGHT OF COPPER CLAD WEATHERPROOF AND COPPER WEATHERPROOF WIRE

Size B. & S.	Weight, Pounds, per 1000 Feet — Double Braid			Triple Braid		
	Copper	30% C. C.	40% C. C.	Copper	30% C. C.	40% C. C.
0000	723	666	671	767	710	713
000	587	542	546	629	584	586
00	467	430	435	502	465	470
0	377	348	353	407	378	382
1	294	271	275	316	293	297
2	239	222	225	260	243	246
3	185	171	173	199	185	187
4	151	139.1	140.8	164	152.5	154.2
5	122	112.8	114.2	135	126	127.4
6	100	92.5	93.6	112	105	106.1
8	66	61.5	62.2	75	70.5	71.2
9	54	39.9	50.4	62	57.9	58.4
10	46	43.6	44	53	50.6	51
12	30	28.4	28.7	35	33.4	33.7
14	20	....	19	25	....	24

GALVANIZED WIRE AND STRAND

EXTRA GALVANIZED TELEPHONE AND TELEGRAPH WIRE



There are three standards of extra galvanized telephone and telegraph wire in general commercial use:

"Extra Best Best" (E. B. B.). Stands highest in conductivity of all telegraph wire, with a weight per mile ohm of from 4700 to 5000 pounds. Uniform in quality, pure, tough and pliable. It is largely used by telegraph companies and in railway telegraph service.

"Best Best" (B. B.). Superior to the E. B. B. in mechanical qualities and equal in galvanizing, but of somewhat lower electrical value. Weight, per mile ohm, 5600 to 6000 pounds. This grade is used very largely by telephone companies.

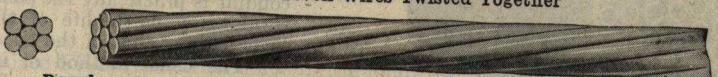
"Steel" (or homogeneous metal). More expressly designed for short line telephone service, where a measure of conductivity can be exchanged for high tensile strength in a light wire. Weight, per mile ohm, 6500 to 7000 pounds.

Size B. W. G.	Diam. In.	Area C. M.	Approx. Wt., Lbs. Per 1000 Ft.	Approx. Wt., Lbs. Per Mile	Extra B. B. Trade No.	Extra B. B. Approx. Breaking Strain, Lbs.	B. B. Trade No.	B. B. Approx. Breaking Strain, Lbs.	Steel Trade No.	Steel Approx. Breaking Strain, Lbs.
4	.238	56644	153	811	12281	2028	12291	2271	12301	2433
6	.203	41209	112	590	12283	1475	12293	1652	12303	1770
8	.165	27225	74	390	12285	975	12295	1092	12305	1170
9	.148	21904	60	314	12286	785	12296	879	12306	942
10	.134	17956	49	258	12287	645	12297	722	12307	774
12	.109	11881	32	170	12288	425	12298	476	12308	510
14	.083	6889	19	99	12289	247	12299	277	12309	297

Prices quoted upon application.

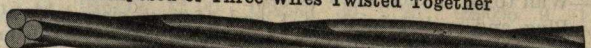
GALVANIZED STEEL STRAND GUY WIRE

Composed of Seven Wires Twisted Together



Diam. In.	Wt., Lbs. per 1000 Ft.	Regular Trade No.	Regular Approx. Strength in Lbs.	Regular Price per 100 Ft.	Siemen's Martin Trade No.	Siemen's Martin Approx. Strength in Lbs.	Siemen's Martin Price per 100 Ft.	High Strength Trade No.	High Strength Approx. Strength in Lbs.	High Strength Price per 100 Ft.	Ex. High Strength Trade No.	Ex. High Strength Approx. Strength in Lbs.	Ex. High Strength Price per 100 Ft.
5/8	800	87367	14000	$8.50	12311	19000	$8.25	12312	25000	$12.00	12313	42500	$14.60
1/2	510	052655	8500	5.50	052661	11000	5.25	12317	18000	7.25	12324	27000	8.80
7/16	415	052656	6500	4.50	052662	9000	4.30	12318	15000	6.00	12325	22500	7.20
3/8	295	052657	5000	3.50	052663	6800	3.25	12319	11500	4.40	12326	17250	5.25
5/16	210	052658	3800	2.50	052664	4860	2.50	12320	8100	3.20	12327	12100	4.25
1/4	125	052659	2300	1.75	052665	3060	1.70	12321	5100	2.25	12328	7600	2.85
3/16	75	052660	1400	1.25	12315	2000	1.35	12322	3300	1.80	12329	4900	2.40
1/8	32	12314	500	1.00	12316	900	.90	12323	1500	1.20	12330	2250	1.60

Composed of Three Wires Twisted Together



Trade No.	Size, B. W. G. Each Wire	Approx. Wt., Lbs. per 1000 Ft.	Tensile Strength Pounds	Price, per 100 Feet
12331	8	200	3000	$4.40

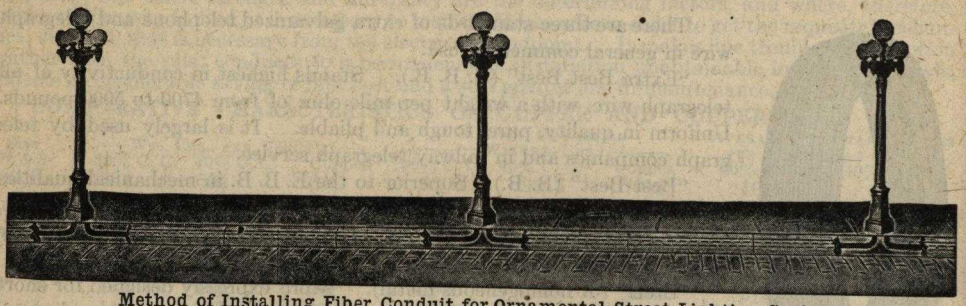
Composed of Two Wires Twisted Together



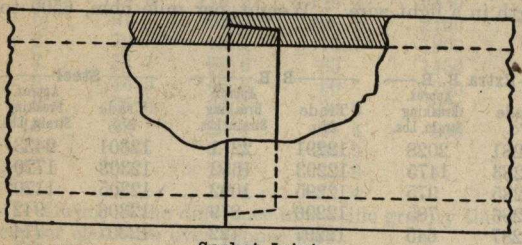
Trade No.	Size, B. W. G. Each, Wire	Approx. Wt., Lbs. per 1000 Ft.	Tensile Strength Pounds	Price, per 100 Ft.
12354	8	150	2150	$3.00
		Single Conductor		
12356	4	140	2360	Price, per lb. .07
12357	6	102	1715	Price, per lb. .07
12355	8	75	1130	Price, per lb. .07
12358	10	50	750	Price, per lb. .07

AMERICAN BITUMINIZED FIBER CONDUIT

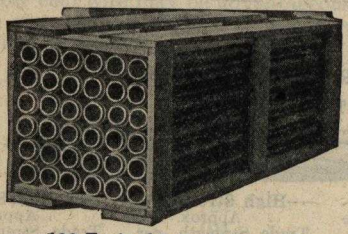
FOR UNDERGROUND CONDUIT CONSTRUCTION AND RAILWAY SIGNAL WORK



Method of Installing Fiber Conduit for Ornamental Street Lighting Systems



Socket Joint



180 Feet of 1-inch Conduit
Weight, 192 Pounds

In the railway signal field it has long been recognized that the use of wood trunking for the protection of current-carrying wires is not entirely satisfactory.

First. Its life is short and the cost comparatively high, resulting in an expensive method for protecting the wires.

Second. When wires are housed in this manner failures of apparatus due to grounds or crosses are of frequent occurrence.

Third. When the wires are placed above ground, which is the common practice, no protection is afforded them in case of derailment, and, furthermore, the surface construction does not add to the appearance of the track.

The initial cost of bituminized fiber conduit is practically the same as that of trunking, while the life of the former is several times that of the latter.

The usual method of installing the system is to cut a slot, 2 or 3 inches wide and deep, along the edge of the sidewalk and inside and next to the curb. In this slot lay bituminized fiber conduit, 1 or 1½-inch inside diameter, pulling in preferably a lead covered cable, one or two-conductor, cut in proper lengths; then make necessary connections in base of post. The posts should be set on concrete foundations.

Specifications

No. 1. APPROXIMATE LENGTH.—1 and 1½-inch sizes to be made in 5-foot lengths and 2 to 4-inch to be made in 7-foot lengths.

No. 2. WALL.—Wall to be ⅜ inch thick in sizes from 2 to 4-inch internal diameter, inclusive.

No. 3. JOINT.—Plug and socket joint on 1 and 1½-inch sizes to be ½ inch long and all other sizes ⅝ inch long turned to fit accurately when joined with sealing compound.

No. 4. ABSORPTION.—Conduit to be thoroughly saturated with insulating compound and when immersed in water with ends sealed for 100 hours at 70 degrees Fahr. shall not absorb more than ¾ or 1 per cent in weight of moisture.

No. 5. INSULATION.—In the 2-inch and larger sizes the conduit must stand a puncture test of 50000 volts for ⅜-inch wall.

No. 6. OBSTRUCTIONS.—The interior of the conduit shall be smooth and free from obstructions as gauged by ability to pass through the conduit a mandrel 40 inches long and ¼ inch less in diameter than the size of the conduit specified.

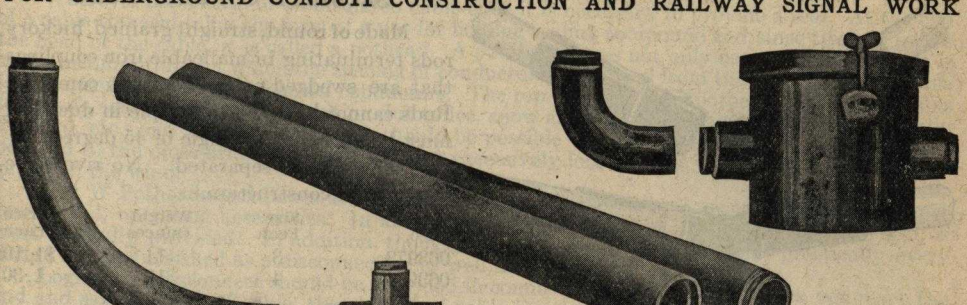
No. 7. COMPOSITION.—The conduit shall not be affected by acids or alkali in the soil and shall not in any way injure the covering of cables drawn into the duct.

No. 8. PACKING.—All conduit to be crated in a substantial manner and the weight of crates to be such as to be conveniently handled on the trench.

No. 9. COMPOUND.—Each shipment must include a sufficient amount of sealing compound for the joints.

AMERICAN BITUMINIZED FIBER CONDUIT

FOR UNDERGROUND CONDUIT CONSTRUCTION AND RAILWAY SIGNAL WORK



Electrical contractors will find Bituminized Fiber Conduit not only an ideal conduit for main line subway work, but for lateral and service line work it is much the cheapest in price, most easily and quickly installed, and at the same time the most efficient type of underground conduit in existence. It is about one third the cost of iron pipe; is a far better insulator and will last longer.

It will stand a puncture test of 60000 volts. There is no danger of a ground by reason of the lead covering of the cable coming in contact with the fiber.

The female end of each pipe should be dipped in the hot compound to a depth of ½ inch and joined to the pipe in the trench before the compound becomes hardened. This makes a tight joint and keeps the inside of the tube smooth, making it easy to pull the cable.

The pipe can be cut into odd lengths with a saw and the butt joints easily wrapped and sealed.

Particular attention is drawn to the thickness of the wall, ⅜ inch, of this conduit, and the length of the joint, ⅝ inch, on each end of the pipe.

SOCKET JOINT CONDUIT

Bituminized Fiber Conduit is made in the following standard sizes:

Size Inside Diam. Inches	Length of Pipe Feet	Thick. of Wall Inches	Wt., Lbs. per Foot Less than Carload Lots	Wt., Lbs. per Foot Carload Lots	Conduit Trade No.	Conduit Price, per 100 Ft.	Bends Only Trade No.	Bends Only Radii Inches	Bends Only Price Each	Elbows Trade No.	Elbows Radii Inches	Elbows Price Each	Tees Trade No.	Tees Price Each
1	5	¼	1.12	1.07	048142	$8.00	068573	8	$1.35	029089	4	$1.00	029079	$1.10
1½	5	5/16	1.6	1.5	048143	8.50	068574	10	1.40	029090	5	1.00	029080	1.20
2	7	⅜	1.9	1.8	048144	9.00	068575	12	1.50	029091	6	1.05	029081	1.30
2½	7	⅜	2.3	2.24	048145	9.00	068576	14	1.50	029092	7	1.10	029082	1.40
3	7	⅜	2.4	2.3	048146	9.50	068577	18	1.75	029093	8	1.15	029083	1.50
3¼	7	⅜	2.9	2.8	029096	10.00	029097	20	1.85	029098	8	1.20	83061	1.60
3½	7	⅜	3.3	3.2	048148	10.50	068579	24	2.00	029094	9	1.25	029084	1.70
4	7	⅜	3.45	3.35	048149	12.00	068580	30	2.25	029095	9	1.40	029085	1.80

JUNCTION BOXES

Trade No.	No. of Outlets	Inside Diam., Inches	Depth Inches	Price Each
029086	2	10	10	$6.00
029087	3	10	10	6.00
029088	4	10	10	6.00

Sealing compound for sealing the joints, furnished free with all orders.

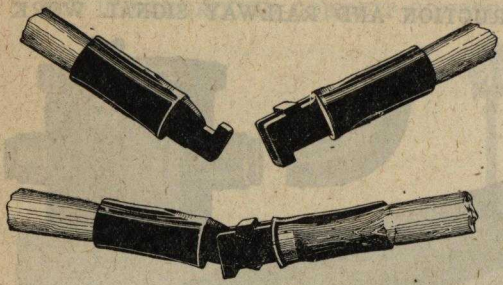
The conduit is made in 5 and 7-foot lengths; it is packed and shipped in crates, entailing little or no loss from breakage.

Standard bends are 45 and 90 degrees. Special sizes and radii made to order at short notice.

We can also furnish 6, 8 and 10-inch inside diameters, on special order, and can make any of these sizes with any thickness of wall that may be specified.

Send for booklet, "Underground Conduit Construction," and bulletins giving valuable information on various phases of underground work.

CONDUIT RODS



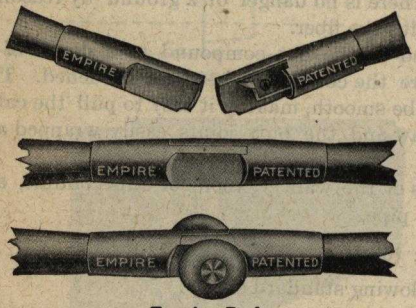


Security Rod

SECURITY CONDUIT RODS

Made of round, straight grained, hickory rods terminating in malleable iron couplings that are swedged on and cannot come off. Rods cannot buckle or uncouple in duct and must be placed at an angle of 45 degrees before they can be separated. No rivets are used in rod construction.

Trade No.	Size Feet	Weight Ounces	Price Each
063973	3	14	$1.10
063974	4	19	1.30

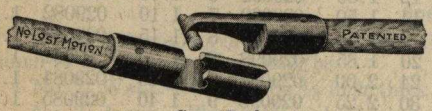


Empire Rod

EMPIRE CONDUIT RODS

No rivets are used to fasten rods into the coupling. A slot is sawed into the end of the rod for 1 inch to receive a corrugated solid steel wedge. The wedges are visible at the end of the rod and can be easily driven to tighten up rods. The interior of the coupling is cored to a taper, the larger diameter being on the inside and having four ribs cast on two laterals and two transverse.

Trade No.	Length Feet	Price Each
	With Wheels	
063969	3	$1.00
063970	4	1.08
	Without Wheels	
063971	3	.80
063972	4	.88

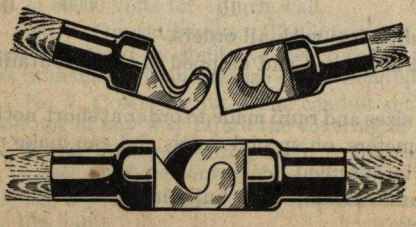


Cope Rod

COPE QUICK COUPLING CONDUIT RODS

Couplings are of steel and cannot come uncoupled in the duct. Rods have no lost motion, can be coupled instantly, are strong, durable, and are made of carefully selected hickory.

Trade No.	Length, Ft. per Section	Price Each
128482	3	$1.00
128483	4	1.08



Chicago Rod

CHICAGO CONDUIT RODS

The tongue which enters the groove in the other portion of the joint, fits tightly against the butt of the other casting, absolutely preventing end play. The coupling is so designed that the 4-foot rods may be connected and disconnected in the smaller manholes. Double rivet holes are provided, giving twice the strength on a pulling and also on a twisting strain, and the tongue is pierced, permitting the attachment of a pulling cable.

Trade No.	Length Feet	Price Each
10670	3	$0.90
063968	4	1.00

G & W POTHEADS

Wherever the sheath of an insulated cable ends it is necessary to provide a seal. At the end of a cable this seal takes the form of a pot for holding sealing compound and, since this pot is also the head of the cable, it is called a pothead. A pothead serves not only as a cable seal, but it is also a medium through which the spacing of conductors is changed from that used in a lead cable to the spacing necessary for aerial conductors. The top of an outdoor pothead should be such as to be safe against any short circuiting due to ice, snow and water or linemen's tools accidentally dropped, etc., and at the same time it should be possible to train the conductors away from the pothead to the cross-arm neatly and without excessively loose wiring which might be blown together in the wind.

G & W Potheads and Boxes are specially designed to make these necessary fittings 100 per cent useful, operating accessories. In all potheads and boxes the prime object, a cable seal, is most carefully provided. In addition, though, to giving merely a cable seal, practically every design can be furnished as a disconnective as well as a cable seal.

Logically, a disconnect should be provided in connection with the seal. When you reach the end and seal a length of cable, that length of cable is a unit and having a means of handling it as a unit is the best operating practice.

Where disconnecting potheads are used on any system, provision for emergency feeds, temporary or permanent cut-overs, in fact any form of circuit change or revision, becomes largely a matter of opening and closing potheads. In a case where two or more circuits come together on one pole or pass through the same manhole, emergency connection between the two is accomplished by interconnections of the potheads.

In manhole work the G & W Switching Box gives the same simple flexibility of the disconnecting pothead. All switching is done from the top of the box by simply pulling off or plugging on porcelain covered jumpers. No bolts to unscrew, no heavy lids to lift.

In some classes of installations near switchboards or switches and such inside work, the disconnecting feature is not needed and for these non-disconnecting types are supplied. Quite frequently it becomes necessary to install inside potheads in cramped spaces, such as in corners, behind switchboards, on bus structures, etc. In order to train the cables away from the pothead to best advantage, special shapes of potheads should be used. G & W Potheads are furnished in a wide range of shapes which will lend themselves to installation in practically any position that is ever found necessary.

In addition to a selection of shapes G & W Potheads for inside work are offered in a variety of types, including a small porcelain bell, cast iron bells with porcelain outlets, brass bells with porcelain lids, etc. The choice of any pothead for any special work is governed largely by the place which it is to occupy. In some cases appearance is the main point of consideration, in other cases compactness is desired and again utility is all that is sought. A full selection covering all these points is found in the G & W line of Potheads for inside use.

At splices, taps or sectionalizing points waterproof boxes of various designs are used. The G & W line of Subway Boxes for this work is very complete; practically any style of box from the plain split cast iron splice box up to the most completely equipped distribution box can be furnished from stock patterns.

The selection of boxes is governed largely by the nature of the locality in which they are to be installed. In older, slowly changing sections of the city, underground work can usually be installed in such a way as to require very little changing in a great many years. In new territory, with possible but not certain expansion, it is often inadvisable to install expensive subway construction for the full capacity of possible expansion. Again, boxes feeding manufacturing loads must be more adaptable to flexible operation than a box which would be installed for residence lighting or store lighting with comparatively small motor load. Practically every system has its own individual combination of circumstances which enter into the type of box which is most useful. It is not necessary, of course, to have very many different types of boxes on any one system; two or three standard types ordinarily suffice even on a system in a large city.

Blue prints and prices will be furnished promptly upon receipt of specifications giving the voltage, sizes of conductor and combination of cables which it is desired to handle.

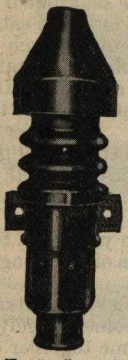
INSTRUCTIONS FOR ORDERING

When ordering potheads or subway junction boxes, be sure to specify:
Outside diameter of cable over lead.
Number of conductors in cable.
If two-conductor, whether circular or oblong in cross section.
If oblong, give both dimensions.
Voltages upon which the device is to operate.
Size of conductors.
Whether device will be exposed to the weather; that is, whether for outside or inside use.
If compound is wanted.
If potheads wanted are detachable or non-detachable.
If subway junction boxes are wanted for fuses or switch blades.

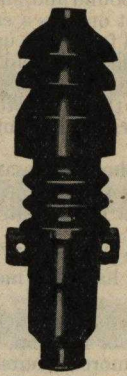
G & W PORCELAIN POTHEADS

TYPES S AND O, FOR SINGLE-CONDUCTOR CABLES

For Connecting High Voltage Overhead or Underground Lines



Type S or O Plain Top

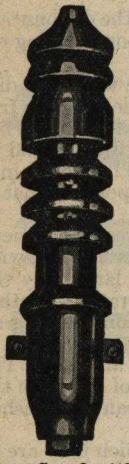


Type S or O Nos. 12, 15 or 32 With 4-inch Double Petticoat

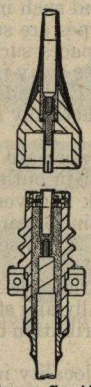
The Type S detachable porcelain pothead consists of a lower porcelain tube approximately 8 inches long and a porcelain cap. The porcelain cap acts as a watershed and insulator and covers the upper end of the tube. Inside the tube is a copper connector attached to the end of the cable, into the upper end of which a spring plug is fitted. This spring connection is carried by a porcelain cap into which the overhead line wire is connected.

For potentials above 6600 volts for single-conductor cable exposed to the weather, a pothead with a 4-inch petticoat is recommended. For 10000 to 15000 volts a double petticoat cap and tube are recommended.

When the disconnecting feature is not required and a cheaper pothead is desired, the G & W Pothead is supplied with metal splicing sleeve. The cap and tube are equipped with holes large enough to allow them to be slipped over the weatherproof or rubber covered wire and the lead cable respectively.



Type S or O with Stuffing Box 15000 Volts



Cross Section of Type S Disconnecting

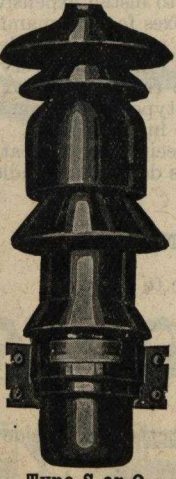
TYPE S, DISCONNECTING

For Inside or Outside Work

Trade No.	Mfrs. No.	Capacity Volts	Capacity Amps.	Style Cap	Price Each
067906	10	6600	100	Plain	$5.80
067908	12	10000	100	4-inch double petticoat	7.00
067909	13	6600	175	Plain	9.90
067910	14	10000	175	6-inch petticoat	10.90
067911	15	10000	175	4-inch double petticoat	11.10
067912	16	15000	100	4-inch petticoat cap and tube	9.40
067913	17	15000	175	4-inch petticoat cap and tube	12.40
76101	120	30000	175	6-inch petticoat and tube	16.00



Type O 6600 Volts 1200 Amperes



Type S or O 30000 Volts

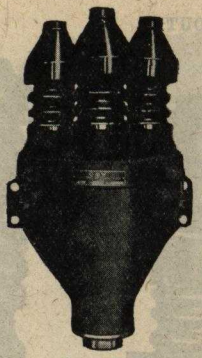
TYPE O, NOT DISCONNECTING

For Inside or Outside Work, Amperes Unlimited

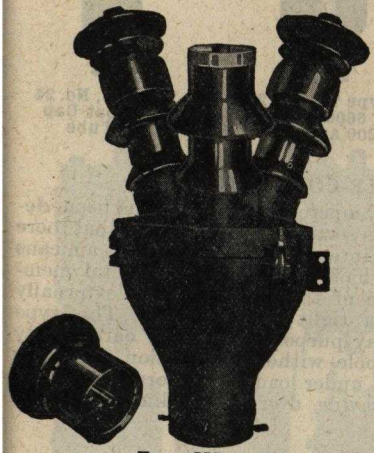
067914	30	6600	...	Plain	4.40
067916	32	10000	...	Double petticoat	5.60
067917	33	15000	...	Double petticoat and tube	7.60
76102	34	6600	...	1000000 C. M. size	6.40
76103	121	30000	...	6-inch petticoat and tube	12.00

All of the above are provided with supporting brackets. Wiping sleeve or stuffing box can be furnished for $3.00 each extra list. On Nos. 34, 120 and 121 wiping sleeve or stuffing box is $6.00 extra list.

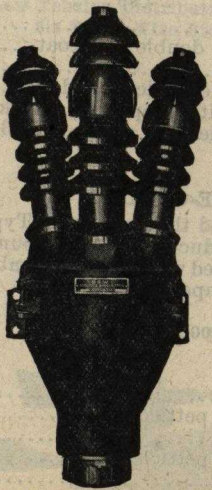
G & W PORCELAIN POTHEADS



Type MS or MO, Nos. 42 or 62
Three-Conductor, Plain Cap



Type MS or MO
30000 Volts



Type MS or MO, Nos. 493 or 693
Three-Conductor
Double Petticoat Cap
and Tubes

TYPE MS, DISCONNECTING

The multiple-conductor detachable pothead is made up by mounting the required number of Type S single-conductor potheads in a cast iron lid completely sealed in. No boxing in from the weather is necessary.

The iron lid is so formed as to fit over the top of an iron pot or hopper approximately 10 inches high. It is drawn down upon a rubber gasket inside the lid by machine bolts. The cable entrance for this pothead may be either plain plug, wiping sleeve, or combination stuffing box and clamping ring form, as desired.

For Sizes up to 00, Multiple-Conductor

Trade No.	Mfrs. No.	Voltage up to	No. of Conds.	Style Cap	Price Each
067918	40	6600	2	Plain	$21.00
067919	41	10000	2	Dbl. petticoat	23.40
067920	42	6600	3	Plain	24.00
067921	43	10000	3	Dbl. petticoat	27.60
067922	44	6600	4	Plain	27.00
067923	45	10000	4	Dbl. petticoat	32.00
067924	46	10000	6	Dbl. petticoat	44.00
067925	47	10000	8	Dbl. petticoat	56.00
067926	48	10000	10	Dbl. petticoat	68.00
067927	49	10000	12	Dbl. petticoat	78.00
067928	492	15000	2	Petticoat cap and tube	27.00
067929	493	15000	3	Petticoat cap and tube	32.00
067930	494	15000	4	Petticoat cap and tube	36.00
76076	130	30000	2	Prtticoat cap and tube	39.00
76077	131	30000	3	Petticoat cap and tube	56.00
76078	132	30000	4	Petticoat cap and tube	74.00

Conduit coupling for any of above, $2.00.

TYPE MO, NOT DISCONNECTING

Type MO consists of Type O tubes assembled in cast iron fittings over cast iron base. Its construction is the same as Type MS, with the exception that it has no metal disconnectors inside the tubes. No boxing in from the weather is necessary. Amount of compound necessary to fill pothead, three-conductor type, is approximately 1¼ gallons, depending on the size of the cable. Two and four conductors in proportion.

Any form of pothead wanted can be supplied for six, eight, ten or any number of conductor cables. Potheads with conductor outlets in straight line instead of circular arrangement. We recommend the circular arrangement.

These forms not shown or listed, will be supplied without any additional cost.

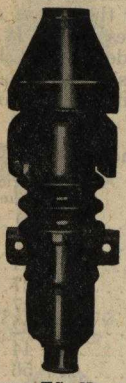
For Sizes up to 500000 C. M., Multiple-Conductor

067931	60	6600	2	Plain	19.00
067932	61	10000	2	Dbl. petticoat	21.40
067933	62	6600	3	Plain	22.00
067934	63	10000	3	Dbl. petticoat	25.00
067935	64	6600	4	Plain	25.00
067936	65	10000	4	Dbl. petticoat	29.00
067937	66	10000	6	Dbl. petticoat	35.00
067938	67	10000	8	Dbl. petticoat	44.00
067939	68	10000	10	Dbl. petticoat	54.00
067940	69	10000	12	Dbl. petticoat	64.00
067941	692	15000	2	Dbl petticoat and tube	25.00
067942	693	15000	3	Dbl. petticoat and tube	28.00
067943	694	15000	4	Dbl. petticoat and tube	31.00
76079	140	30000	2	Petticoat cap and tube	31.00
76080	141	30000	3	Petticoat cap and tube	44.00
76081	142	30000	4	Petticoat cap and tube	58.00

Conduit coupling for any of above, $2.00.
Specify outside diameter of cable when ordering.

G & W PORCELAIN POTHEADS

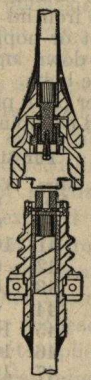
DISCONNECTING, FOR HEAVY CURRENT DUTY



Type TS, No. 20
Plain Cap



Type TS, No. 22
Dbl. Petticoat Cap



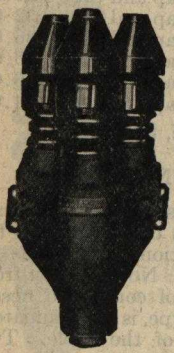
Cross Section
Type TS, No. 20
Plain Cap



Type TS, No. 23
6600 Volts
1200 Amperes



Type TS, No. 24
Petticoat Cap
and Tube



Type MTS, No. 52
Plain Cap

TYPE TS, SINGLE-CONDUCTOR

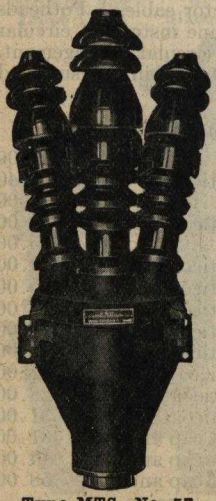
For currents higher than 175 amperes the TS type has been developed. By referring to the cross section, it will be noted that there are three porcelain members; the intermediate one provides a means of turning a threaded collar which draws the two metal members together through the medium of the plug and the externally threaded socket, thus insuring a tight fitting joint. This type is well adapted for street railway purposes, as it will carry heavy currents, can be mounted on a pole without protection from the weather, and can be disconnected under load. This form of disconnecting device makes a great saving over the ordinary 500-volt switch in box.

For Sizes up to 1000000 C. M.

Trade No.	Mfrs. No.	Voltage up to	Cap. Amps.	Style Cap	Price Each
067944	20	6600	600	Plain	$13.00
067946	22	10000	600	4-inch double petticoat	13.50
067947	23	6600	1200	Plain	20.00
067948	24	15000	600	Double petticoat and tube	16.00

All of the above are provided with supporting brackets.

Wiping sleeves or stuffing box, if desired, add to list, $3.00 except on No. 23, for which add $5.00.



Type MTS, No. 57
Dbl. Petticoat Cap
and Tube

TYPE MTS, MULTIPLE-CONDUCTOR

This type of pothead is constructed the same as the Type MS, excepting that it has Type TS single-conductor pothead mounted in the cast iron lid. This type is recommended when the detachable feature is required for loads from 150 to 650 amperes.

For Sizes up to 600000 C. M.

Trade No.	Mfrs. No.	Voltage up to	No. of Conds.	Style Cap	Price Each
067949	50	6600	2	Plain	$32.00
067950	51	10000	2	Double petticoat	34.00
067951	52	6600	3	Plain	38.00
067952	53	10000	3	Double petticoat	41.00
067953	54	6600	4	Plain	43.00
067954	55	10000	4	Double petticoat	44.00
067955	56	15000	2	Double petticoat and tube	38.00
067956	57	15000	3	Double petticoat and tube	44.00
067957	58	15000	4	Double petticoat and tube	50.00

G & W DISTRIBUTION BOXES



Low Tension Tap Box

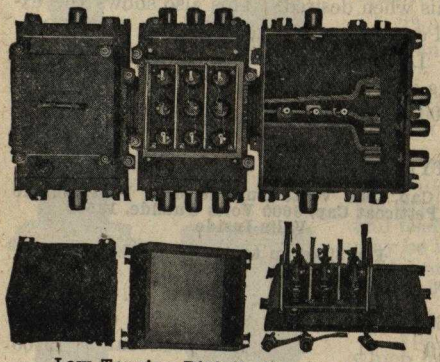
SMALL LOW TENSION TAP BOXES

For 250 Volts, 60 Amperes

The low tension tap box is a split cast iron box, which is intended to clamp over lead cable, in order that taps may be brought out through fuses or terminals carried on slate strips inside the box. The cable is below these posts and can be submerged in compound. This gives adequate protection to the opened cable, and at the same time leaves the tap connection accessible to the workman who may have occasion to put in new fuses, or open the tap circuit at this point. This is a very rugged compact box for tapping or fusing small low tension service taps, for street lighting, signs, etc.

Trade No.	Mfrs. No.	No. of Conds.	Description	Price Each
56169	600	2	For single-condr. cable.	$14.00
56170	601	3	For single-condr. cable.	15.00
56171	602	2	For multiple-condr. cable	13.00
56172	603	3	For multiple-condr. cable	14.00
56173	604	..	Plain box and lid without fuse block	10.00

Combinations not listed will be quoted on application.



Low Tension Distribution Box for Six Three-Wire Branches

LOW TENSION DISTRIBUTION BOXES

This is a box made up of sectional units so that any number of branch circuits may be taken from one set of mains by adding the proper number of sections. It is made for mounting either horizontally or vertically upon the walls of manholes, and takes single or multiple-conductor cables in any combination. The cable space is entirely separated from the distribution chamber which contains the fuses, so that when once the box is installed there is no occasion to expose the cable work at any time. Renewing fuses or changing connections is accomplished by simply removing a small lid which covers the distribution chamber on each unit of the box. The portion of the box containing the cables may be entirely filled with compound, as a positive guard against breakdown at the end of any of the cables that are brought into the box.

Prices for any combination of mains and branches furnished upon receipt of specifications.

G & W SAFETY LINE DISCONNECTORS

This is a simple device for disconnecting high tension wires at the cross-arms at crossings when the line breaks.

One device is installed at each end of the span at crossings, the span ends of the wire being connected to the hooks. In case the wire breaks between the two hooks, the natural reaction of the wire will cause the hooks to disengage themselves from the pin in the yoke members and the wire will drop to the ground.

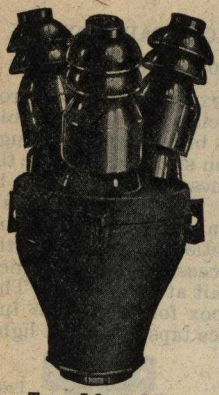


Safety Line Disconnector

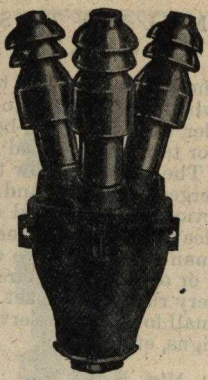
Transmission Type

Trade No.	Mfrs. No.	For Size Wire	Price Each
068004	170	8 to 2	$3.80
068005	171	1 to 0000	7.50

G & W PORCELAIN POTHEADS



Type LO or LS
For Station Use



Type LO or LS
Three-conductor

The bowl and lid of Form L potheads are cast iron, and the tubes and cap are porcelain. The bowl is 6 inches in diameter.

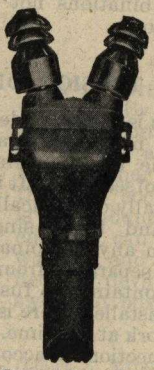
The first illustration shows the external appearance of the Type LO or Type LS for station use. In this pothead the tubes are shorter, thus reducing the amount of headroom necessary. Satisfactory when installed inside on circuits as high as 13500 volts.

The second illustration shows the external appearance of three-conductor Form L pothead with double petticoat caps. This is the appearance of the Type LO and Type LS. Type LO does not contain any internal metal disconnector, the conductor runs straight through the central hole in the cap.

The fourth illustration shows the application of a conduit connection. The clamping ring form is used. Where the cable is not installed in conduit, wiping sleeves are substituted for this when desired. This also shows the external appearance of two-conductor Type LO or Type LS for outside use, which require no boxing in from the weather on circuits as high as 6600 volts.



Form N Outlet
In Form L Pot



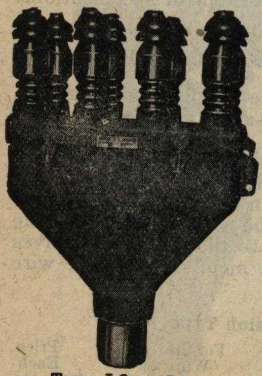
Type LO or LS
Two-conductor

TYPE LO, NOT DISCONNECTING

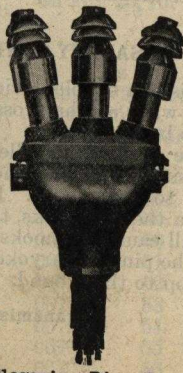
Plain Cap, 3000 Volts Outside, 6600 Volts Inside
Petticoat Cap, 6600 Volts Outside, 13500 Volts Inside

For Sizes up to 400000 C. M.

Trade No.	Mfrs. No.	No. of Conds.	Style Cap	Price Each
067969	70	2	Plain	$18.00
067970	71	2	Dbl. petticoat	19.00
067971	72	3	Plain	20.00
067972	73	3	Dbl. petticoat	22.00
067973	74	4	Plain	23.50
067974	75	4	Dbl. petticoat	25.00



Type LO or LS
6600 Volts



Clamping Ring End
Cable not in Conduit

TYPE LS, DISCONNECTING

Plain Cap, 3000 Volts Outside, 6600 Volts Inside
Petticoat Cap, 6600 Volts Outside, 13500 Volts Inside

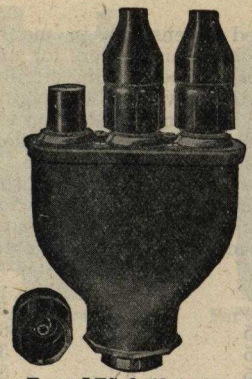
For Sizes up to 00

067975	80	2	Plain	19.00
067976	81	2	Dbl. petticoat	21.00
067977	82	3	Plain	22.50
067978	83	3	Dbl. petticoat	24.00
067979	84	4	Plain	25.50
067980	85	4	Dbl. petticoat	27.00

In ordering, give exact outside diameter of cable and state whether pothead is for outside or inside use.

Any of the above types can be furnished for either right-hand or left-hand entrance at $2.00 extra list. For conduit coupling, add $2.00.

G & W PORCELAIN POTHEADS



Type LTS Outlets in Form N Pot, Inside Use

TYPE LTS, DISCONNECTING

Plain Cap, 3000 Volts Outside, 6600 Volts Inside

Petticoat Cap, 6600 Volts Outside, 13500 Volts Inside

For Sizes 00 to 300000 C. M.

Trade No.	Mfrs. No.	No. of Conds.	Style Cap	Price Each
067981	90	2	Plain	$26.00
067982	91	2	Double petticoat	27.00
067983	92	3	Plain	32.00
067984	93	3	Double petticoat	33.50
067985	94	4	Plain	40.00
067986	95	4	Double petticoat	42.00

In ordering, give exact outside diameter of cable and state whether pothead is for outside or inside use.

Any of the above types can be furnished for either right-hand or left-hand entrance at $2.00 extra list.

Conduit couplings are furnished for any of the above types at 2.00 extra list.

The first illustration shows the Type LTS pothead for three-conductor, for inside use, with one cap or line-end removed, the male portion remaining in the cap.

The Form L pothead is furnished when desired in flat form, and is made for two to fourteen conductors.



Clamping Ring End Piece



Plug Form Cable Entrance



Wiping Sleeve Form of Cable Entrance

DESCRIPTION OF CABLE ENTRANCES FOR G & W POTHEADS

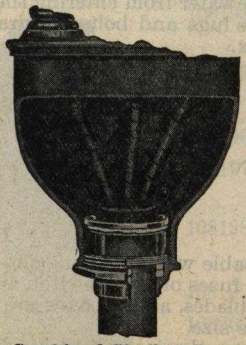
It has been endeavored to design this line of specialties to eliminate all refinements which might add to the cost of the device without an equivalent return in adaptability and usefulness. However, in some instances, refinements may be warranted, therefore three forms of end pieces for cable entrances for multiple conductor potheads are available.

Plug Type of End Piece

The illustrations show the type of cable entrances which have been provided. The simplest form, as may be seen, consists of a plain cast iron plug drilled to fit the cable over lead. This is screwed into the base of the pothead.

Wiping Sleeve Cable Entrance

From the illustrations it is also seen that the wiping sleeve, which screws into the bottom of the pothead, can be provided. This is a plain brass sleeve of approximately the diameter of the cable, which is screwed into the bottom of any pothead upon which it may be desired.



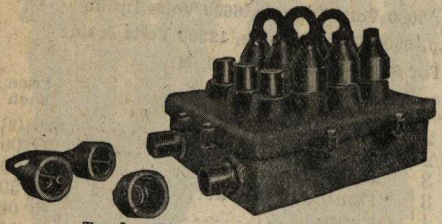
Combined Stuffing Box and Clamping Ring Form of Cable Entrance Assembled

Clamping Ring End Piece

The illustration shows a more elaborate form of cable entrance. It is made of brass and is a combination of an end-clamping ring and stuffing box with a special metallic packing. The lower end is the usual form of stuffing box, the compression member of which supports three brass standards, which in turn carry a ring. This ring has three tapped holes for a like number of screws. Above this ring is another slightly smaller ring. This upper ring has three holes through which the screws pass. By belling over the lead and clamping it between the two rings it is supported securely without pressure around the cable sheath, tending to crush it. Also, since the ring is held by the three standards, 1½ inches in height, compound can flow all around the cable 1½ inches below the point where the lead is removed. This gives a most efficient seal.

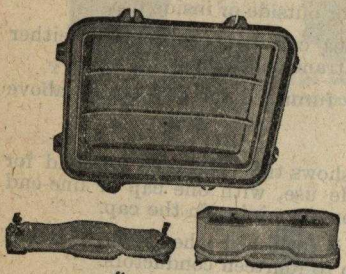
G & W SUBWAY BOXES

UNDERGROUND SWITCHING BOXES, 6600 VOLTS

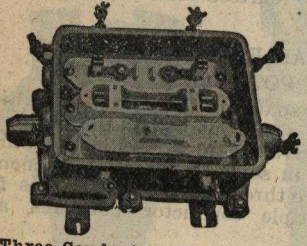


Twelve-Tube Switching Box
Three Caps Removed

This box is used extensively in manholes where it is desired to maintain centers for underground feeders, or for interconnecting circuits so as not to interrupt the service on the mains in case of breakdowns. The first illustration shows that the two caps from the main and feeder are interconnected. This is the normal position. The other row of tubes are covered with caps with the top hole closed. In case of trouble upon the feeder of the circuit the blank caps can be interchanged, thereby switching the mains over to the emergency feed.



Trade No.	Mfrs. No.	Cap. Amps.	Number of Tubes	Price Each
067987	300	125	12	$60.00
76001	305	125	9	56.00
067988	301	125	8	52.00
067989	302	125	6	40.00
067990	303	125	4	28.00
067991	304	125	2	24.00
76002	310	300	12	150.00
76003	311	300	9	120.00
76004	312	300	8	112.00
76005	313	300	6	90.00
76006	314	300	4	60.00
76007	315	300	2	32.00



Three-Conductor Junction Box
Interior View

COMBINATION SUBWAY JUNCTION BOXES AND POTHEADS

Fusible up to 30 Amperes at 2300 Volts. Over 30 Amperes Equipped with Knife Blades

Appreciating the fact that where it is necessary to open a lead covered cable, the open ends should be sealed against moisture, and that any device into which cable is to enter should be provided with means for sealing the ends, we have developed a subway junction box which not only is provided with facilities for carrying an enclosed fuse or a switch blade, but also with means for sealing in the cables entering the box.

This junction box has an entirely new form of lid, which will prevent any leakage of water into the box in case it becomes submerged. This is accomplished by constructing the lid so that it laps over the sides of the box in such a manner as to form an inverted bell; thus, the air being caught under the lid as the water rises over the box, cannot escape, and prevents the water from entering the box. Means are also provided by the lugs and bolts for drawing the lid down tightly on the box.



Three-Conductor Junction Box
Exterior View

Trade No.	Mfrs. No.	No. of Conds.	Style of Tap	Price Each
067992	1031	1	Straight	$24.00
067993	1032	2	Straight	60.00
067994	1033	3	Straight	88.00
067995	1034	4	Straight	96.00
067996	1038	2	Half	66.00
067997	1039	3	Half	94.00
067998	1040	4	Half	102.00

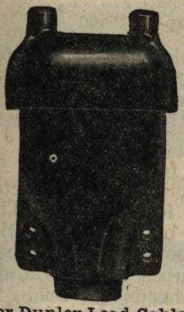
Give outside diameter of cable when ordering and state whether it is to be used with fuses or with switch blades. When equipped with switch blades, above boxes are $2.00 extra per blade for 100-ampere size.

The boxes are made for two, three and four-conductor cables, for straight tap and half tap work. Knife blades are furnished for 100 or 200-ampere service; the 200-ampere blades are $5.00 extra per blade.



Single-Conductor Junction Box
Exterior View

G & W SERIES SWITCHES



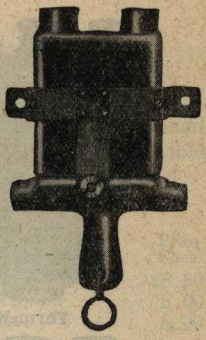
For Duplex Lead Cable



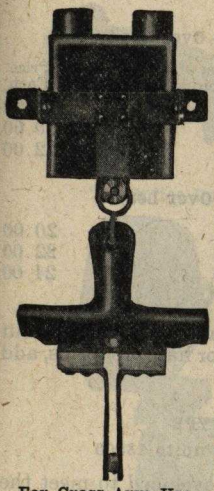
For Single-Conductor Lead Cable



With Wiping Sleeve Entrance



For Cross-Arm Use



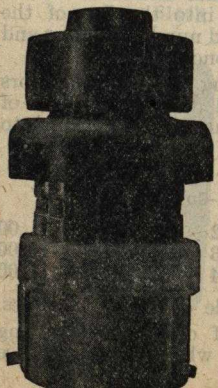
For Cross-Arm Use with Plug Removed

COMBINATION POTHEADS AND SWITCHES FOR LEAD CABLES

The G & W Series Switch mechanism consists of a pair of heavy copper strips for a male member and a pair of heavy two-leaf phosphor-bronze springs for a female member. Short-circuiting of the female springs as the plug is withdrawn, is from a combined cantilever and full elliptical spring action. A double break is provided on the female springs, so that the main springs are completely short-circuited before the male contacts have passed the second break.

The disconnection of the device is absolute; the male plug or cap pulls entirely away from the main body of the device, so that there is no chance for confusion as to the position of the connections. All live parts are carried inside of porcelain.

Switches for use on lead covered cables are a switch and pothead combined. A pothead space is carried in the main body of the switch, so that the ends of the lead cables can be properly protected by sealing them with compound. These combination potheads and switches can be furnished with metal stuffing boxes or wiping sleeves for the lead cable, where desired.



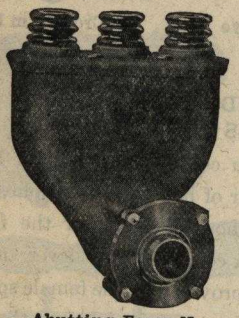
For Top of Iron Poles

Trade No.	Mfrs. No.	Description	Price Each
		Series Switches for Lead Cables	
108194	150	Combination switch and pothead for duplex lead cable	$9.00
108195	151	Combination switch and pothead for single-conductor lead cable	9.00
108196	150A	Duplex type fitted with film cut-out	10.00
108197	151A	Single-conductor type fitted with film cut-out	10.00
108198	150C	Metal cable entrance for any of the above.	6.00
		Series Switches for Aerial Circuits	
108199	156	For cross-arm use	9.00
108200	156A	Same as above, with film cut-out	10.00
		Pole Top Series Switches	
108201	192	For top of iron poles	14.00
108202	193	Above with double film cut-out	16.00

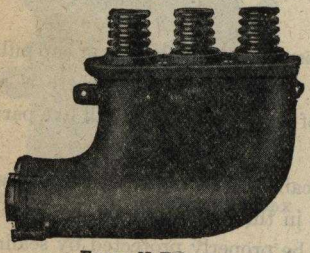
G & W POTHEADS



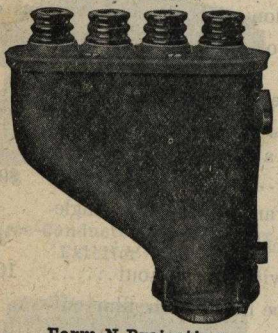
Form N



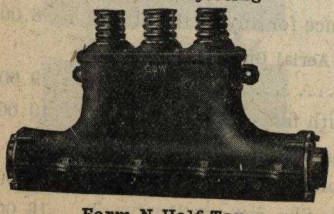
Abutting Form N



Form N Elbow



Form N Projecting



Form N Half Tap

FORM N POTHEADS

For Inside Use on Any Voltage up to 15000

The G & W line of potheads for inside work is complete. The Form N line of metal potheads contains all the various shapes often necessary for neat training of the outgoing cables. The porcelain station type pothead is low priced but thoroughly efficient in this work.

The Form N pothead is designed for inside use. It consists of corrugated porcelain tubes, mounted in a metal lid, held upon a metal pot by means of four screws. The lid has an overlap and a rubber gasket between it and the pot, so that it is possible to fill the potheads with compound completely to the top of the tubes which contain the separated conductors. These potheads are made in various shapes for any number of conductors. Some of the more common shapes of castings are illustrated. The line includes flat, projecting elbow, abutting, and half-tap shapes. The cable entrance can be a plain plug, a combination stuffing box and clamping ring, or a wiping sleeve, as desired.

For Cables Less than 2 Inches Over Lead

Trade No.	Mfrs. No.	Number of Conductors	Price Each
56166	400	2	$18.00
56167	401	3	20.00
56168	402	4	22.00

For Cables 2 Inches or More Over Lead

56174	400 A	2	20.00
56175	401 A	3	22.00
56176	402 A	4	24.00

For conduit connection, add $2.00 to the list.

The above prices apply to any shape with or without brackets, excepting half-tap forms. For half-tap forms, add $8.00 to the list.

PORCELAIN STATION TYPE

For Inside Use on Any Voltage up to 13500

This type of cable head has been developed to meet the demands for a station bell that is easy to install, low in first cost and reliable.

This head consists of a porcelain bowl and cover. This bowl is approximately 7 inches in diameter at the top and 4 inches at the bottom. The bottom of the bowl is fitted with a metal plate provided with a collar drilled to size to clamp upon the cable. The lid fits into the top of the bowl and is provided with the required number of holes and short tubes through which pass the conductors.

The porcelain lid keeps the spacing of the conductors the same at all times, keeps dust and dirt from inside of bell, and if sealed keeps out all moisture and gives finish to the installation.

Not Disconnecting, Multiple-Conductor

067958	500	2	11.00
067959	501	3	11.00
067960	502	4	11.00

In ordering, always specify outside diameter of cables.

Wiping sleeve will be supplied if desired. Clamping rings will be supplied on all orders where not otherwise specified.

For conduit connections, add $2.00 to list.

G & W SPECIALTIES



Plain Junction Box
for Any Number of Cables



Straight Splice Box



Tee Splice Box



S & H High Capacity
Fuse Block



Grounding Cap

PLAIN JUNCTION OR SPLICE BOXES

This box is a split cast iron box of two halves which when clamped together, make a moisture-tight compound retainer. It displaces the wiped joint as a protection for cable splices where a more simply installed protection is desired.

Made for any combination of cables.

Trade No.	Mfrs. No.	Description	Price Each
76401	700	Plain junction box	$8.00
76412	704	Straight splice box	8.00
76413	712	Tee splice box	8.00

For conduit connection, add 2.00 per connection.

For armored cable, add $1.50 per cable.

S & H HIGH CAPACITY FUSE BLOCKS

Through the use of an interior compression block, under which a link of special composition is threaded, the S & H Porcelain Pole Type Cut-Out takes care of much heavier currents than can be handled with the ordinary porcelain transformer cut-outs. It is heavily built throughout, with ample contact parts, handhold and shield.

Fitted with horn gap when desired.

Trade No.	Description	Price Each
76402	Block complete	$18.00
76411	Horn gap	5.00

Link fuses up to 50 amperes, 20 cents.

Link fuses 60 to 150 amperes, 24 cents.

G & W GROUNDING CAPS

This malleable iron cap acts as a driving head for the ground rod or pipe. In the one operation of driving the pipe the ground wire is wedged into very positive close contact with it. The joints are fully efficient electrically and are permanent.

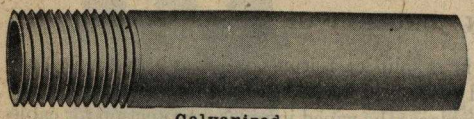
Sawing off battered ends, soldering and other operations are entirely eliminated.

Trade No.	Mfrs. No.	Size of Pipe Inches	Diameter of Rod Inches	Price Each
76403	180	½	¾	$0.54
76404	181	¾	1	.68
76405	182	1	1¼	.78
76406	183	1¼	1½	.90

G & W GROUNDING POINTS

76407	185	½	For Pipe only	.22
76408	186	¾		.28
76409	187	1		.36
76410	188	1¼		.46

RIGID IRON CONDUIT



Galvanized



Enameled

GALVANIZED CONDUIT

Galvanized conduit is manufactured from mild steel tubing of the best quality. The ends are carefully reamed to facilitate the fishing of wires. All tubes are thoroughly cleaned both inside and outside by special processes before being heavily coated with zinc. Only pure zinc is deposited, the resulting coat being bright, firmly adherent and non-corrosive.

ENAMELED CONDUIT

Enameled conduit is manufactured from mild, drawn steel tubing. Before enameling, the tubing is thoroughly cleaned and freed from dirt, grease, scale, silicates and burrs. This process leaves an absolutely clean surface for the application of the compound. This enamel forms a homogeneous coating, adhering closely to the surface pores of the metal, and retains its flexibility under all changes of temperature. The enamel used is acid, alkali, rust, and waterproof.

CONDUIT

Galvanized or Enameled

Trade No.	Stand. Pipe Size, Inches	Diameter, Inches Inside	Diameter, Inches Outside	Threads per Inch	Wt., Lbs. per 100 Ft.	Price per 100 Ft.
6441	½	.622	.840	14	85.2	$8.50
6442	¾	.824	1.050	14	113.4	11.50
6443	1	1.049	1.315	11½	168.4	17.00
6444	1¼	1.380	1.660	11½	228.1	23.00
6445	1½	1.610	1.900	11½	273.1	27.50
6446	2	2.067	2.375	11½	367.8	37.00
6447	2½	2.469	2.875	8	581.9	58.50
6448	3	3.068	3.500	8	761.6	76.50
6449	3½	3.548	4	8	920.2	92.00
6450	4	4.026	4.500	8	1088.9	109.00

ELBOWS

Trade No.	Stand. Pipe Size, Inches	Radius Inches	Offset Inches	Threads per Inch	Wt., Lbs. per 100	Price per 100
06441	½	4.250	7.375	14	75	$19.00
06442	¾	5.375	8.375	14	120	25.00
06443	1	5.750	9.500	11½	200	37.00
06444	1¼	7.250	10.875	11½	300	45.00
06445	1½	8.250	12.625	11½	427	60.00
06446	2	9.500	15.250	11½	700	110.00
06447	2½	10.500	17.375	8	1300	180.00
06448	3	13	19.500	8	1700	480.00
06449	3½	15	21.250	8	2300	1060.00
06450	4	16	22.500	8	2700	1225.00

COUPLINGS

Trade No.	Stand. Pipe Size, Inches	Wt. Lbs. per 100	Price per 100	Trade No.	Stand. Pipe Size, Inches	Wt., Lbs. per 100	Price per 100
06451	½	11.6	$7.00	06456	2	120.8	$28.00
06452	¾	20.9	10.00	06457	2½	172	40.00
06453	1	34.3	13.00	06458	3	249.8	60.00
06454	1¼	53.5	17.00	06459	3½	424.1	80.00
06455	1½	74.3	21.00	06460	4	474.1	100.00

In ordering, specify whether galvanized or enameled conduit is desired.

STANDARD SIZES OF CONDUITS

FOR THE INSTALLATION OF WIRES AND CABLES

As adopted and recommended by The National Electrical Contractors' Association of the United States.

Conduit sizes based on the use of not more than three 90° elbows in runs taking up to and including No. 10 wires; and two elbows for wires larger than No. 10. Wires No. 8 and larger are stranded.

NUMBER OF WIRES IN SYSTEM

Size B. & S.	Cap. Amps.	Size of Conduit, Inches — One Wire in a Conduit Internal	One Wire in a Conduit External	Two Wires in a Conduit Internal	Two Wires in a Conduit External	Three Wires in a Conduit Internal	Three Wires in a Conduit External	Four Wires in a Conduit Internal	Four Wires in a Conduit External
14	15	½	.84	½	.84	½	.84	¾	1.05
12	20	½	.84	¾	1.05	¾	1.05	¾	1.05
10	25	½	.84	¾	1.05	¾	1.05	1	1.31
8	35	½	.84	1	1.31	1	1.31	1	1.31
6	50	½	.84	1	1.31	1¼	1.66	1¼	1.66
5	55	¾	1.05	1¼	1.66	1¼	1.66	1¼	1.66
4	70	¾	1.05	1¼	1.66	1¼	1.66	1½	1.9
3	80	¾	1.05	1¼	1.66	1¼	1.66	1½	1.9
2	90	¾	1.05	1¼	1.66	1½	1.9	1½	1.9
1	100	¾	1.05	1½	1.9	1½	1.9	2	2.37
0	125	1	1.31	1½	1.9	2	2.37	2	2.37
00	150	1	1.31	2	2.37	2	2.37	2½	2.87
000	175	1	1.31	2	2.37	2	2.37	2½	2.87
0000	225	1¼	1.66	2	2.37	2½	2.87	2½	2.87
C. M.									
250000	237	1¼	1.66	2½	2.87	2½	2.87	3	3.5
300000	275	1¼	1.66	2½	2.87	2½	2.87	3	3.5
400000	325	1¼	1.66	3	3.5	3	3.5	3½	4
500000	400	1½	1.9	3	3.5	3	3.5	3½	4
600000	450	1½	1.9	3	3.5	3½	4	....	....
700000	500	2	2.37	3½	4	3½	4	....	....
800000	550	2	2.37	3½	4	4	4.5	....	....
900000	600	2	2.37	3½	4	4	4.5	....	....
1000000	650	2	2.37	4	4.5	4	4.5	....	....
1250000	750	2½	2.87	4½	4.5	4½	5	....	....
1500000	850	2½	2.87	4½	5	5	5.56	....	....
1750000	950	3	3.5	5	5.56	5	5.56	....	....
2000000	1050	3	3.5	5	5.56	6	6.62	....	....
DUPLEX WIRE									
14	15	½	.84	¾	1.05	1	1.31	1	1.31
12	20	½	.84	¾	1.05	1	1.31	1¼	1.66
10	25	¾	1.05	1	1.31	1¼	1.66	1¼	1.66

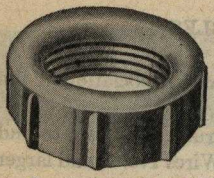
Example: To ascertain the size of conduit for three No. 0000 wire, follow down the wire column to No. 0000 and then across to the section headed "Three Wires in a Conduit," and it will be seen that 2½-inch conduit is the size to use and that the external diameter is 2.87 inches.

THREE-WIRE CONVERTIBLE SYSTEM

Size of Wires Two-Wire Size B. & S.	One-Wire Size B. & S.	Size of Conduit, Inches Internal	External
14	10	¾	1.05
12	8	¾	1.05
10	6	1	1.31
8	4	1	1.31
6	2	1¼	1.66
5	1	1¼	1.66
4	0	1½	1.9
3	00	1½	1.9
2	000	1½	1.9
1	0000	2	2.37
0	250000	2	2.37

Size of Wires Two-Wire Size B. & S.	One-Wire Size B. & S.	Size of Conduit, Inches Internal	External
00	350000	2½	2.87
000	400000	2½	2.87
0000	550000	3	3.5
250000	600000	3	3.5
300000	800000	3	3.5
400000	1000000	3½	4
500000	1250000	4	4
600000	1500000	4	4.5
700000	1750000	4½	5
800000	2000000	4½	5
.....	.....	....	...

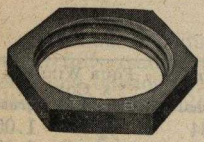
CONDUIT FITTINGS



Conduit Bushing

MALLEABLE IRON CONDUIT BUSHINGS, GALVANIZED

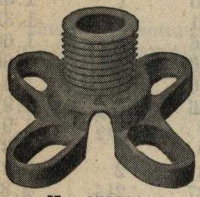
Trade No.	Size Inches	Std. Pkg.	Price per 100	Trade No.	Size Inches	Std. Pkg.	Price Each
052175	3/8	1000	$6.00	052182	2 1/2	25	$60.00
052176	1/2	1000	6.00	052183	3	25	90.00
052177	3/4	100	8.00	052184	3 1/2	25	200.00
052178	1	100	15.00	052185	4	25	300.00
052179	1 1/4	100	20.00	052186	4 1/2	20	400.00
052180	1 1/2	50	25.00	052187	5	20	500.00
052181	2	50	40.00	052188	6	15	600.00



Locknut

MALLEABLE IRON AND STEEL LOCKNUTS, GALVANIZED

052217	3/8	1000	2.50	052224	2 1/2	25	30.00
052218	1/2	1000	2.50	052225	3	25	50.00
052219	3/4	100	3.50	052226	3 1/2	25	70.00
052220	1	100	6.00	052227	4	25	100.00
052221	1 1/4	100	10.00	052228	4 1/2	20	140.00
052222	1 1/2	50	15.00	052229	5	20	160.00
052223	2	50	20.00	052230	6	15	200.00



No. 052231

HICKEY FIXTURE STUDS

Trade No.	Size, Stud Inches	Std. Pkg.	Price per 100
052231	3/8	100	$5.00
052232	1/2	100	6.50

Price includes two stove bolts with each stud.

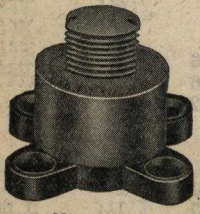


No. 052233

FOUR-PRONG FIXTURE STUDS

052233	3/8	500	5.00
052234	1/2	100	6.50

Price includes two stove bolts with each stud.



No. 052235

INSULATED STUDS, FOR STRAIGHT ELECTRIC WORK

Height of stud is but 1 3/8 inches, so may be used with any style of canopy or with fixtures with flat backs.

The insulation stud takes the place of both the standard fixture stud and the old style insulating joint in one half the space.

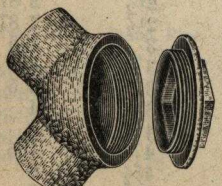
Trade No.		Std. Pkg.	Price per 100
052235	3/8-inch insulated stud	100	$50.00
052236	1/4x3/8-inch hickeys	100	10.00
052237	3/8x3/8-inch hickeys	100	10.00



Chase Nipple

CHASE NIPPLES

Trade No.	Size Inches	Std. Pkg.	Price per 100	Trade No.	Size Inches	Std. Pkg.	Price per 100
052420	3/8	1000	$5.00	052425	1 1/2	50	$50.00
052421	1/2	1000	5.00	052426	2	50	30.00
052422	3/4	100	8.00	052427	2 1/2	25	50.00
052423	1	100	15.00	052428	3	25	80.00
052424	1 1/4	100	18.00	052429	3 1/2	20	250.00

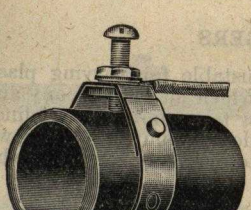


Type L Bendhicks

TYPE L BENDHICKS

Trade No.	Mfrs. No.	Size, Conduit Inches	Unit Pkg.	Std. Pkg.	Price Each
018935	L-1/2	1/2	20	100	$0.60
018936	L-3/4	3/4	10	100	.70
018937	L-1	1	10	50	.90
018938	L-1 1/4	1 1/4	6	24	2.50
018939	L-1 1/2	1 1/2	4	20	3.00
018940	L-2	2	2	10	6.00

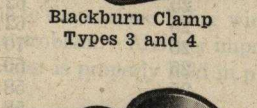
GROUND CLAMPS



Blackburn Clamp
Type A-1



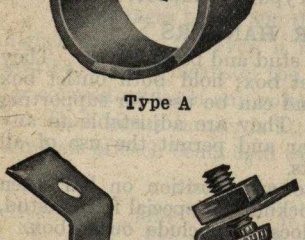
Blackburn Clamp
Types 3 and 4



Shawmut



Type A



Type S

BLACKBURN GROUND CLAMPS

Simple in construction, being composed of a flexible perforated copper band to encircle the pipe, and a removable copper lug, with a boss raised on the flat end that fits into perforations in the band, and through which is threaded the tightening screw with locknut.

The lug is drilled for a No. 4 ground wire, ready for soldering, while the flat end with boss is milled to give a clean, smooth contact surface on which to clamp the band.

For Telephone and Similar Circuits

Trade No.	Type No.	Price per 100	Trade No.	Type No.	Price per 100
07795	0	$11.00	07798	2	$12.50
07797	A-1	12.00	.....	..	.....

No. 0 fits ½-inch ground rods. For rural exchanges.

No. A-1 fits ⅜, ½, ¾, 1 and 1¼-inch pipe. Improved style. Standard size.

No. 2 fits 1½, 2, 2½ and 3-inch pipe. Special size.

For Power and Lighting Circuits

Trade No.	Type No.	Std. Pkg.	Wt., Lbs. per 100	Price per 100
58116	3	50	12	$20.00
58117	4	50	16	24.00

No. 3 fits ⅜, ½, ¾, 1 and 1¼-inch pipe, BX cable and flexible conduit.

No. 4 fits 1½, 2, 2½ and 3-inch pipe.

SHAWMUT GROUND CLAMPS

For grounding secondary distributing systems, conduit installations, and metal cable sheaths. It is made of stamped copper formed to fit the pipe tightly, thus ensuring maximum contact, and can be applied quickly by either screwdriver or pliers. Lug takes No. 4 wire.

Trade No.	Mfrs. No.	Size Inches	Std. Pkg.	Price Each
58118	3660	⅜	100	$0.24
036217	3661	½	100	.24
036218	3662	¾	100	.28
036219	3663	1	50	.34
036220	3664	1¼	50	.40
036221	3665	1½	50	.46
036222	3666	2	25	.52
036223	3667	2½	25	.58
036224	3668	3	15	.64

G. V. GROUND CLAMPS

Type A, for Electric Light and Power Circuits

Made for No. 4 wire and smaller. The band is made of copper, the bolt of bronze and the whole is thoroughly tinned to prevent corrosion.

Trade No.	For Pipe Size, In.	Std. Pkg.	Price Each	Trade No.	For Pipe Size, In.	Std. Pkg.	Price Each
58127	*	100	$0.24	07785	2½	25	$0.58
07789	⅜	100	.24	07786	3	25	.64
07779	½	100	.24	07787	3½	10	.80
07780	¾	100	.28	07788	4	10	.88
07781	1	75	.34	089534	4½	5	1.00
07782	1¼	75	.40	089535	5	5	1.10
07773	1½	50	.46	089536	6	5	1.20
07784	2	50	.52	.....	...	..	....

Type S, Galvanized, For Electric Light and Power Circuits

Type S is made of stamped steel and includes bolt and nut. No soldering is necessary with this clamp, which means a material saving in labor. Will hold No. 6 or No. 4 wire.

58128	*	100	.12	58133	1¼	75	.18
58129	⅜	100	.12	58134	1½	50	.24
58130	½	100	.12	58135	2	50	.30
58131	¾	100	.14	58136	2½	25	.38
58132	1	75	.16	58137	3	25	.46

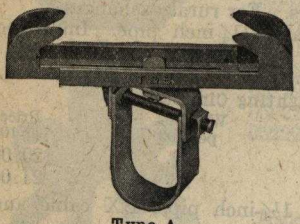
*For No. 14 duplex steel armored conductors.

CONDUIT AND BOX HANGERS

T & B ADJUSTABLE CONDUIT HANGERS

Will fit any flange from 2¾ to 11⅜ inches. They are adjustable for varying plaster lines and will support any number of conduits from one to eight, which may run at any angle with the beams and close against the beam, or far enough below to permit a second line of conduits to be run above. Additional runs of conduit can be added without interfering with lines already in position. It is not neccessary to loosen clamp to meet any condition which may arise.

Type A hangers are made of stamped steel.
Type A fit beams 2¾ to 7⅜ inches.
Type A clamp used with extension will fit flange from 8½ to 11⅜ inches.



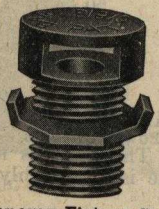
Type A



Beam Clamp Extension

Type A—Complete

Trade No.	Capacity of Hanger, Inches	Std. Pkg.	Price per 100
053001	1— ½	100	$34.00
053002	1— ¾	100	38.00
053003	1—1	50	44.00
053004	1—1¼	50	48.00
053005	1—1½	25	52.00
104536	1—2	25	60.00
104537	1—2½	25	68.00
104538	1—3	25	78.00
053006	2— ½	100	38.00
053007	2— ¾	100	42.00
053008	4— ½	50	46.00
053009	4— ¾	50	50.00
053010	6— ½	25	54.00
053011	6— ¾	25	62.00
053012	8— ½	25	62.00
053013	8— ¾	25	70.00
053014	2—½ and 2—¾	25	50.00
053015	2—½ and 4—¾	25	58.00
053016	4—½ and 2—¾	25	58.00
053017	4—½ and 4—¾	25	66.00
053018	2—1	25	48.00
053019	2—1¼	25	52.00
053020	2—1½	25	56.00



Economy Fixture Stud

SUPPORTS ONLY

Trade No.	No. and Size Conduit	Std. Pkg.	Price per 100	Trade No.	No. and Size Conduit	Std. Pkg.	Price per 100
053038	1— ½	100	$8.00	053044	2— ½	100	$12.00
053039	1— ¾	100	10.00	053045	4— ½	100	18.00
053040	1—1	50	16.00	053046	2— ¾	50	14.00
053041	1—1¼	50	20.00	053047	4— ¾	50	22.00
053042	1—1½	25	24.00	053048	2—1	25	20.00
053043	1—2	25	32.00	053049	2—1¼	25	24.00
104547	1—2½	25	40.00	053050	2—1½	25	28.00
104548	1—3	25	50.00	053051	Special Bolts	100	5.00
104549	Extension for use with Type A clamp					100	15.00

ECONOMY BAR HANGERS

Bar hangers consist of fixture stud and box support. They can be used for any style outlet box; hold both outlet box and fixture; and can be used for supporting switch boxes. They are adjustable to any position on bar and permit the use of all four knock-outs.



Economy Bar Hanger

The box can be adjusted to any position on bar, then locked in place by means of a locknut on special fixture stud, as shown in illustration. Price does not include outlet box.

Trade No.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
56913	500	300	$0.25



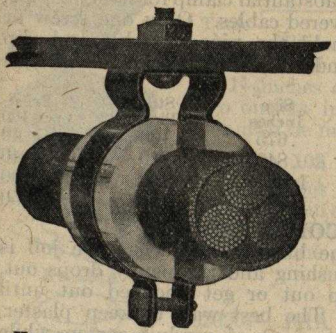
Economy Cleat

ECONOMY CLEATS

Trade No.	Description	Price per 100
56914	For all outlet and switch boxes	$20.00

MINERALLAC HANGERS

FOR CABLE AND CONDUIT



Hanger with Porcelain Bushing



Hanger without Porcelain Bushing

These hangers are made of the very best quality of spring steel and are finished in either japan or galvanized, making them absolutely rustproof. They are intended especially for open wiring, and for running cable and conduit in exposed positions where appearance is an important factor.

By their use an installation may be made very much more neatly, and may be more compactly arranged, than with any other form of hanger, since it is possible to install the cables or conduit with only ⅛-inch clearance. Thus, in installations which present unusual difficulties, due to the surface being wired over or to restricted space, the Minerallac Hanger will easily solve the problem. Another important advantage is the greatly reduced time of installation, since the hanger is properly held in place by means of only one screw or bolt.

Mfrs. No.	Diam., Inches of Opening Min.	Max.	Size of 250-volt Lead Covered Cable	Size, In. of Cond.	Approx. Wt. Lbs. Std. Pkg.		Japanned Trade No.	Japanned Price per 100	Galvanized Trade No.	Galvanized Price per 100
					Std. Pkg.					
0	5/8	27/32	3 to 7 cond. No. 14	3/8	100	4½	050656	$3.45	091111	$4.45
1	7/8	1 3/16	Nos. 1 to 0000	½ and ¾	100	7½	050657	3.80	091112	4.80
2	1¼	1 15/32	Nos. 0000 to 300000	1	100	10	050659	5.45	091113	6.45
3	1½	1 23/32	500000 to 750000	1¼	100	10	050660	5.45	091114	6.45
4	1¾	1 31/32	800000 to 1125000	1½	100	14	050661	6.75	091115	7.75
5	2	2 15/32	1500000	2	50	11	050662	7.25	091116	8.25
6	2¼	3	2000000 or 3 cond. 0000	2½	50	12½	050663	8.10	091117	9.10

Above prices do not include stove bolts or bushings.

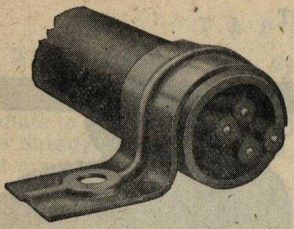
PORCELAIN AND IMPREGNATED BUSHINGS

For voltages below 500 the hanger may be used directly upon the cable or conduit. With higher voltages, however, it is necessary to insulate them properly from grounds. This may best be done by means of the procelain bushing. It is designed to furnish the proper insulation for covered cables of any voltage, and is strong enough to resist mechanical shock.

Each size of hanger is fitted with a bushing as shown in the table below, the corresponding numbers of each being used together.

Trade No.	Mfrs. No.	Diam., Inches of Opening Min.	Max.	Size of 250-volt Rubber Covered Cable	Approximate Wt., Lbs. per 100	Price per 100
050664	1	5/16	19/32	8 to 00	8	$5.25
050665	2	5/8	27/32	000 to 0000	12½	6.00
050666	3	7/8	1 3/32	250000 to 450000	13	6.60
050667	4	1 1/8	1 9/32	500000 to 700000	21½	7.65
050668	5	1 5/16	1½	750000 to 1000000	28	8.50
050669	6	1 17/32	2	1125000 to 2500000	32	9.25

CONDUIT FITTINGS

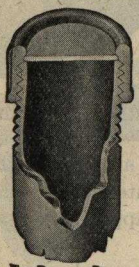


Jiffy Clip

JIFFY CLIPS

A low-priced but substantial clamp for hanging pipe, conduit, and lead covered cables. Only one screw or bolt is required to hold the pipe or cable and clip firmly in place. Standard finish, black japan or galvanized.

Trade No.	Conduit Size, Inches	Size Inches	Std. Pkg.	Price per 100
56915	3/8	.675	100	$1.40
56916	1/2	.840	110	1.40
56917	3/4	1.050	100	2.00
56918	1	1.315	100	3.50



THE PENNY IN PLACE



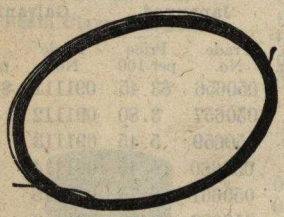
THE PENNY

Steel Conduit Penny

STEEL CONDUIT PENNIES

Slip them inside the bushing and when the job is done, unscrew the bushing and the penny drops out, but they do not drop out or get knocked out until you want them to. The best way to keep plaster, cement, nails, dirt, etc., out of conduit system while job is in construction.

Trade No.	For Size Conduit Inches	Unit Pkg.	Price per 1000	Trade No.	For Size Conduit Inches	Unit Pkg.	Price per 1000
55045	1/2	100	$ 4.00	55065	1 1/2	50	$16.00
55046	3/4	100	6.00	55066	2	50	20.00
55047	1	100	8.00	55067	2 1/2	..	30.00
55048	1 1/4	50	12.00	55068	3	..	40.00



Steel Fish Tape

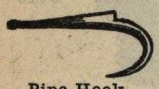
TEMPERED STEEL FISH TAPES

These tapes are regularly furnished in 50, 75, 100, 125, 150 and 200-foot lengths, but can be furnished in any desired length.

Trade No.	Width Inches	Size B. & S.	Price, per 100 Ft.
55049	1/8	19	$2.00
55050	3/16	19	3.00
55051	1/4	19	4.00

WROUGHT IRON PIPE HOOKS

Trade No.	Size Inches	Price per 100	Trade No.	Size Inches	Price per 100
07845	1/4	$0.30	07849	1	$0.65
07846	3/8	.35	07850	1 1/4	.85
07847	1/2	.40	07851	1 1/2	1.00
07848	3/4	.50	07852	2	1.10



Pipe Hook



Pipe Strap

TINNED PIPE STRAPS

Trade No.	Size Inches	Approx. No. per Lb.	Price per Lb.	Trade No.	Size Inches	Approx. No. per Lb.	Price per Lb.
07854	3/8	30	$0.18	07859	1 1/2	10	$0.18
07855	1/2	25	.18	07860	2	8	.18
07856	3/4	20	.18	07861	2 1/2	6	.18
07857	1	18	.18	07862	3	5	.18
07858	1 1/4	16	.18	.....	...	..	...

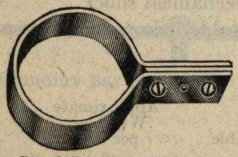


Suspension Bar

STEEL SUSPENSION BARS

Bars are made in 10-foot lengths. Made of first quality soft steel and can be easily cut with cold chisel.

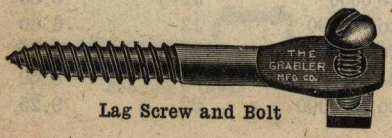
Trade No.	Mfrs. No.	For Size Pipe, In.	Price per Ft.	Trade No.	Mfrs. No.	For Size Pipe, In.	Price per Ft.
55052	1	1/2 to 1 1/2	$0.08	55072	3	3 1/2 to 6	$0.10
55053	2	2 to 3	.09	55073	4	7 to 8	.20



Steel Ring with Bolt

STEEL RINGS WITH BOLTS

Trade No.	For Size Pipe, In.	Price Each	Trade No.	For Size Pipe, In.	Price Each
55054	1/2	$0.14	55074	2	$0.22
55055	3/4	.14	55075	2 1/2	.24
55056	1	.16	55076	3	.26
55057	1 1/4	.18	55077	3 1/2	.30
55058	1 1/2	.20	55078	4	.32



Lag Screw and Bolt

LAG SCREWS AND BOLTS

55059	1/2 to 1 1/2	.10	55079	3 1/2 to 8	.14
55060	2 to 3	.12	.....	.....	....


No. 101

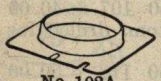

No. 102


No. 101A


No. 101B


No. 101J

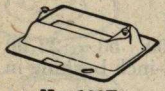

No. 101JT


No. 102A


No. 102B

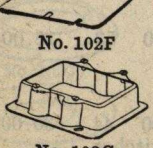

No. 102C


No. 102D


No. 102E


No. 102ES


No. 102F


No. 102G


No. 102GS

OUTLET BOXES AND COVERS

4-INCH SQUARE BOXES

Trade No.	Mfrs. No. Union	Pratt Bossert	Pratt Chuck	Sprague	T. & B.	Steel City	Appleton	Std. Pkg.	Wt. Lbs. per 100	Price per 100
020306	101	1900	A	6200	320	A1½	4SC	100	85	$30.00

1⅝ inches deep, for ½ or ¾-inch conduit. Regularly furnished with two outlets in each side, five in bottom. Two fixture holes tapped $\frac{10}{24}$. Can also be made with three outlets in two opposite sides at same price.

020310	102	15	BA	6200SE	300	AX1½	4S	100	85½	30.00

1⅝ inches deep, for ½ or ¾-inch conduit. Regularly furnished with two outlets in each side, five in bottom, fixture holes not tapped. Can also be furnished with three outlets in two opposite sides or three outlets in all four sides at same price.

COVERS FOR 4-INCH SQUARE BOXES

020307	101A	22	B	6201	323	ACX	8476	200	37	20.00

Steel cover, raised open center, opening 2$\frac{15}{16}$ inches diameter, ¾ inch high.

020308	101B	23	C	6209	324	ABX	8475	200	52	20.00

Steel cover, closed, raised center, crown, ⅝ inch high.

020309	101J	22L	D	6206½	320C	.....	....	200	36	20.00

Steel cover, raised open center, with lugs not tapped.

49091	101JT	22L D&T	..	6206	326	AKX	8477	200	36	22.00

Steel cover, raised open center with lugs drilled and tapped, giving 2¾ and 2⅝-inch centers, screw holes tapped $\frac{8}{32}$. This cover will take any standard cover for 3¼-inch box, providing a combination whereby receptacles can be accommodated in the 4-inch box which are made for the 3¼-inch cover and box.

020311	102A	35	BB	6207	303	AC	8460	200	34	14.00

Steel cover, raised open center, crown ¾ inch high, opening 2$\frac{15}{16}$ inches diameter.

020312	102B	35A	BC	6203	304	AB	8462	200	47¾	14.00

Steel cover, raised closed center, crown ⅝ inch high; used where box is required as a junction box; raised crown gives more space in box for splicing.

020313	102C	52	BI	6204	307	AD	8463	200	46	20.00

Steel cover, raised center ⅝ inch high, with ⅜-inch insulating bushing for use where drop cord is required.

49092	102CC	..	...	....	...	AF	8464-2	200	46	25.00

Steel cover, raised center ⅝ inch high, with two ⅜-inch insulating bushings in same for use where drop cords are required. Similar to No. 102C.

49093	102CCC	..	...	....	...	AFF	8464-3	200	46	30.00

Steel cover, raised center ⅝ inch high, with three ⅜-inch insulating bushings in same, used where drop cords are required. Similar to No. 102C.

020314	102D	37	BF	6202	301	AE1¼	8466	100	46	20.00

Steel cover, raised 1¼ inches high; takes all standard push button switches or rectangular base flush plug receptacles. This cover allows box to be set 1¼ inches back of plaster line. Mounting screw centers 3$\frac{9}{32}$ inches

020315	102E	37A	BG	6210	311	AE¾	8468	200	38	20.00

Steel cover, raised ¾ inch high; takes same switches and receptacles as No. 102D.

49090	102ES	....	...	....	...	AE⅜	....	200	31	20.00

Steel cover, raised ⅜ inch high; takes same switches and receptacles as No. 102D.

020316	102F	78	BK	6211	305	AA	8465	200	39	14.00

Steel cover, flat. This cover can be punched to take any standard receptacle at 10 cents each net extra.

020317	102G	38	...	6205	302	AG1¼	8469	100	50½	25.00

Steel cover, raised 1¼ inches high, for 2 push button switches, mounting screw centers 3$\frac{9}{32}$ inches one way, 1$\frac{13}{16}$ inches the other.

020318	102GS	38A	BH	6205½	302	AG¾	8470	100	33	25.00

Steel cover, raised ¾ inch high, for two push button switches. Screw centers same as 102G.

OUTLET BOXES AND COVERS

COVERS FOR 4-INCH SQUARE BOXES



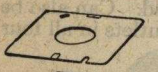
Trade No.	Union	Mfrs. No. Bossert	Pratt Chuck	Sprague	T. & B.	Steel City	Appleton	Std. Pkg.	Wt., Lbs. per 100	Price per 100
020319	102J	35L	....	6208½	320C	....	8461	200	36	$12.00

Steel cover, raised center 5/8 inch high with lugs drilled but not tapped.



49094	102JT	35L D&T	....	6208	306	AK	8461 D&T	200	36	14.00

Steel cover, raised open center with lugs drilled and tapped, screws on 2 5/8-inch and 2¾-inch centers for wall and outlet box receptacles and Bryant No. 393. Screw holes tapped 8/32. This cover will take any standard 3¼-inch box cover providing a combination whereby receptacles can be accommodated in the 4-inch box.



49095	102K	....	....	....	....	AAH	8471	200	38	14.00

Steel cover, flat, 1½-inch hole in center for ring receptacles.



49096	102KR	....	....	....	....	AH	8472	200	45	16.00

Steel cover, raised center 5/8 inch high, with 1½-inch hole in center for ring receptacles.



49097	102L	....	....	....	303	AT	8473	200	38	14.00

Steel cover, flat, with opening for Federal Receptacle; diameter of opening, 1 41/64 inches.



49098	102M	....	....	....	....	AGG	8474	200	39	14.00

Steel cover, flat, with ½-inch knock-out in center; can be furnished with two or more knock-outs, if desired.



49102	102MR	....	....	....	....	HHH	8474A	200	47	14.00

Steel cover, raised center, with ½-inch knock-out in center.

4 11/16-INCH SQUARE BOXES

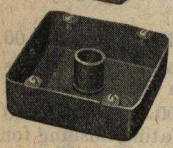


020320	110	11B	MA	6225	2	D1½	4SJ	50	107	40.00

1 5/8 inches deep; two outlets in each side, five in bottom, drilled for fixture stem, for ½ and ¾-inch conduit only.

020321	111	11B deep	NA	6225 deep	22	D2⅛	1	50	118	50.00

2¼ inches deep; two outlets in each side, five in bottom, drilled for fixture stem, for ½, ¾ and 1-inch conduits.



49100	140	1200	SA	6231	23	DT1½	....	50	122	50.00

1 5/8 inches deep; two outlets in each side, four in bottom, for ½ and ¾-inch conduits; when ¾-inch pipe is used outlets in bottom are omitted.

49101	150	1200A	TA	6231 deep	24	DT2⅛	....	50	147	62.00

2¼ inches deep; two outlets in each side, four in bottom for ½ and ¾-inch conduits; when ¾-inch pipe is used outlets in bottom are omitted.

Nos. 110A and 110D covers are used with Nos. 140 and 150 boxes.

COVERS FOR 4 11/16-INCH SQUARE BOXES



020322	110A	34	MC	6226	27	DC	8481	200	42	20.00

Steel cover, raised open center, crown ¾ inch high, opening 2 15/16 inches.



020323	110B	33	MB	6227	28	DB	8480	200	55	20.00

Steel cover, closed raised center, crown 5/8 inch high.



020324	110C	77	MD	6229	31	DD	....	200	53	22.00

Steel cover, raised center, crown 5/8 inch high, with one 3/8-inch bushing in center.



020325	110D	43	ND	....	2D	....	....	200	50	20.00

Steel cover, raised open center, 5/8 inch high, lapped edge fitting over box.



020326	110E	44	NE	....	2E	....	....	200	64	20.00

Steel cover, raised closed center, 5/8 inch high, lapped edge fitting over box.



020327	110F	....	....	....	....	....	....	200	53	18.00

Steel cover, flat.



49103	110G	38B	....	....	....	DG¾	8486	200	44	30.00

Steel cover, raised 1¼ inches high, for two push button switches.



49104	110H	....	....	....	....	....	....	200	46	22.00

Steel cover, raised 1¼ inches high, for one push button switch.


No. 103


No. 103O

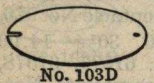

No. 104


No. 103A


No. 103B


Nos. 103C-103CB


No. 103CC


No. 103D

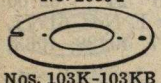

No. 103E

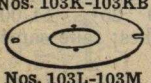

No. 103F


No. 103H


No. 103J


No. 103JT


Nos. 103K-103KB


Nos. 103L-103M

OUTLET BOXES AND COVERS

4-INCH ROUND AND OCTAGON BOXES

Trade No.		Mfrs. No. Union	Bossert	Pratt Chuck	Sprague	T. & B.	Steel City	Appleton	Std. Pkg.	Wt., Lbs. per 100	Price per 100
020372	103 Round	8B	CA	....	9	B1½	4R		100	70	$25.00

Round, 1⅝ inches deep, for ½ and ¾-inch conduit. Four outlets in side, five in bottom. Drilled for fixture stems, two holes tapped 10–24.

49011	103 Octagon	8BO	CAO	6350	400	O1½	4O		100	70	25.00

Octagon, 1⅝ inches deep, for ½ and ¾-inch conduit. Four outlets in side, five in bottom. Drilled for fixture stems, two holes tapped 10–24.

020373	104 Round	8B Deep	DA	....	499	B2⅛	4RD		100	78	32.00

Round, 2¼ inches deep, for ½, ¾ and 1-inch conduit. Four outlets in side and five in bottom; but no outlets in bottom when 1-inch knock-outs are supplied in sides. Drilled for fixture stems, not tapped.

49012	104 Octagon	8BDO	....	6350D	401	O2⅛	4OD		100	78	32.00

Octagon, 2¼ inches deep, for ½, ¾ and 1-inch conduit. Four outlets in side, five in bottom; no outlets in bottom when 1-inch knock-outs are supplied in sides. Drilled for fixture stems, not tapped.

COVERS FOR 4-INCH ROUND AND OCTAGON BOXES

020374	103A	31	CB	6383	434	BC	8400	200	24½	14.00

Steel, open raised cover; opening 2 5/16 inches, crown ¾ inch high.

020375	103B	40	CC	6386	438	BB	8401	200	36½	14.00

Steel, closed raised cover, crown ⅝ inch high.

020376	103C	41	CD	6387	439	BD	8402	200	36½	18.00

Steel, closed raised cover, crown ⅝ inch high, with ⅜-inch insulating bushing in center for drop cord.

49013	103CB	....	CK	....	9N	BDC	....	200	36½	66.00

Brass, closed raised cover, with outlet same as 103C, only made from brass.

49014	103CC	42	....	....	....	BF	8412	200	36½	20.00

Steel, raised cover, ⅝ inch high, with two ⅜-inch insulating bushings for use where drop cords are required from outlet.

49015	103CCC	....	....	....	....	....	8412A	200	36½	25.00

Steel, raised cover, ⅝ inch high, with three ⅜-inch insulating bushings for use where drop cords are required from outlet.

020377	103D	76	CE	6376	429	BA	8403	200	29½	12.00

Steel, flat cover. This cover can be drilled and tapped to take any standard receptacle at 10 cents each net.

020378	103E	80	CF	6363	418	BJ	8404	200	24½	16.00

Steel, flat cover, for 5 and 10-ampere snap switches and wall receptacles, which are attached to cover by machine screw and nut. Slots in cover give a range of centers from 7/8 to 1 7/8 inches.

020379	103F	62	CG	....	9Q	BTZ	8404	200	24	62.00

Brass, raised cover, ⅜ inch high; polished; for Federal Receptacles Nos. 303 and 304; diameter of hole, 1 41/64 inches.

020381	103H	62S	CI	6355	413	BT	8407	200	25	12.00

Steel, raised cover, ⅜ inch high; for Federal Receptacles; diameter of hole, 1 41/64 inches.

020383	103J	31L	....	6385½	437	BK	8409	200	23½	12.00

Steel, raised cover, ⅝ inch high, with lugs drilled but not tapped.

49022	103JT	31LD&T	....	6385	436	BK	8409D&T	200	23½	14.00

Steel, raised cover, ⅝ inch high, with lugs drilled and tapped, giving 2⅝ and 2¾-inch centers for wall and outlet box receptacles and Bryant No. 393. Screw holes tapped 8/32. This cover will take any standard 3¼-inch box cover providing a combination whereby receptacles can be accommodated in the 4-inch box.

020384	103K	....	....	6358	9K	BCC	8410	200	23½	12.00

Steel, flat cover, for shade holder receptacle; screw centers 2⅛ inches; hole 1¾ inches diameter; takes Arrow E and Bryant 59107, GE071 and GE072.

49023	103KB	....	....	....	....	....	....	200	23½	62.00

Brass, flat cover; same as 103K, only made from brass.

020385	103L	....	....	6359	415	BDD	8411	200	24½	12.00

Steel, flat cover, for Benjamin Receptacles Nos. 6, 6B, 6C, 6D, 6T; diameter of hole, 1½ inches.

49018	103M	....	....	6378	430	BGG	8413	200	29½	12.00

Steel, flat cover, with ½-inch knock-out in center.

Ear centers are 3½ inches, tapped 10–24. Nos. 103 and 105 Covers are interchangeable.


No. 103MR


No. 103N


No. 103O


No. 103P


No. 103Q


Nos. 103W-103WB

OUTLET BOXES AND COVERS

COVER FOR 4-INCH ROUND AND OCTAGON BOXES

Trade No.	Union	Mfrs. No. Bossert	Chuck	Sprague	T. & B.	Steel City	Appleton	Std. Pkg.	Wt., Lbs. per 100	Price per 100
49019	103MR	....	....	6374	....	BHH	8414	200	36½	$14.00
	Steel, raised cover, 5/8 inch high, with ½-inch knock-out in center.									
49020	103N	....	....	6364	419	BM	8415	200	32	18.00
	Steel, flat cover, with ⅛-inch brass male nipple.									
49021	103O	....	....	6366	421	BN	8416	200	32	20.00
	Steel, flat cover, with ⅛-inch female nipple.									
49024	103P	....	....	6368	423	BO	8417	200	34	20.00
	Steel, flat cover, with ⅜-inch male nipple.									
49025	103Q	....	....	6370	425	BP	8418	200	34	20.00
	Steel, flat cover, with ⅜-inch female nipple.									
130696	103W	....	....	....	....	....	....	200	25	14.00
	Steel raised cover for outlet box receptacle P & S New No. 372; screw centers, $2\frac{5}{32}$ inches; hole, 1 13/16 inches.									
130697	103WB	....	....	....	....	....	....	200	25	62.00
	Brass cover raised for outlet box receptacle P & S New No. 372; screw centers, $2\frac{5}{32}$ inches; hole, 1 13/16 inches.									



No. 105


No. 105A


No. 105B


No. 105C


No. 105D


No. 105E


No. 105F


No. 105G


No. 105GS


No. 105H


No. 105I

4-INCH ROUND AND OCTAGON RECEPTACLE BOXES

060594 105Round 8N GA 99 BR1½ 4RR 100 68 25.00
1⅝ inches deep, for ½ or ¾-inch conduit. Four outlets in sides only; no provision for fixture stems; holes in bottom tapped for 8–32 screws on 1-inch, 1⅜-inch and 1 15/16-inch centers.

060596 105Octagon 8NO GAO 6350N 403 OR1½ 100 68 25.00
1⅝ inches deep, for ½ or ¾-inch conduit. Four outlets in sides only; no provision for fixture stems; holes in bottom tapped for 8–32 screws on 1-inch, 1⅜-inch and 1 15/16-inch centers.

COVERS FOR 4-INCH ROUND AND OCTAGON RECEPTACLE BOXES

060599 105A 53 GB 6395 445 BAA 8420 200 29 14.00
Steel cover, raised center, hole 3/16 inch for Norbitt Rosettes C332 and C338.

060600 105B 57 GF 6394 444 BBB 200 26 14.00
Steel cover, raised center, hole 1 9/16 inches, for Trumbull Receptacle No. 976.

060601 105C 54 GC 6357 414 BH 8424 200 30½ 14.00
Steel cover, raised center, 1½-inch hole for P & S Nos. 61577, 61578, 61988, 61877, 102703, 102704, 436, 427, 437, 439; G. E. Receptacles Nos. GE001, GE079, GE060, GE118, GE153, GE267, GE269; Bryant Nos. 61988, 4035, 4036, 4023, 4003, 59108; Paiste Nos. 61988, 47566, 59439; Arrow E Nos. 427, 439, 4003, 59108, 61577, 61877, 61988.

020365 105D 55 GD 6395PB 9S BAAZ 8121 200 29 62.00
Brass cover, raised center, 3/16-inch hole for Norbitt Rosettes Nos. C332 and C338.

020366 105E 56 GE 6357PB 9P BHZ 8425 200 29 62.00
Brass cover, raised center, 1½-inch hole; takes all receptacles listed under 105C.

020367 105F 71 GG 6394PB 9T BBBZ 8423 200 29 62.00
Brass cover, raised center, 1 9/16-inch hole, for Trumbull Receptacle No. 976.

020368 105G 75 GK 6351PB 9O BVZ 8428 200 23½ 62.00
Brass cover, depressed, 1 5/16-inch opening for G. E., Bryant and Paiste Receptacles No. 9397.

020369 105GS 75S .... 6351 410 BV 8429 200 28 14.00
Steel cover, depressed, 1 5/16-inch opening for G. E., Bryant and Paiste Receptacles No. 9397.

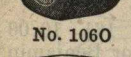
020370 105H 83B GM 6361PB 9U BYZ 8426 200 24 62.00
Brass cover, flat, opening 1⅜ inches, for P & S and Arrow E Nos. 61777, 61977, 54; G. E. Nos. GE000 and 60931; Bryant Nos. 61777, 40488, 4063; Paiste Nos. 46749, 61777. Screw centers 1 13/16 inches.

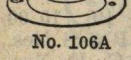
020371 105I 83 GL 6361 416 BY 8427 200 25¼ 14.00
Steel cover, flat, opening 1⅜ inches; screw centers 1 13/16 inches; take same receptacles as listed under 105H.

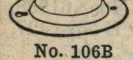
Nos. 103 and 105 Covers are interchangeable.


No. 106


No. 106O


No. 106A


No. 106B


No. 106C

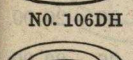

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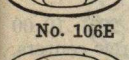

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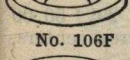

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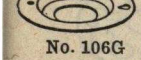

NO. 106DH


No. 106E


No. 106F


No. 106G


No. 106H


Nos. 106I and 106J


Nos. 106K and 106L


No. 106M

OUTLET BOXES AND COVERS

3¼-INCH ROUND AND OCTAGON BOXES

Trade No.	Mfrs. No. Union	Bossert	Pratt Chuck	Sprague	T. & B.	Steel City	Appleton	Std. Pkg.	Wt.,Lbs. per 100	Price per 100
020330	106 Round	17A	FA	....	7	CS1½	3R	100	49	$20.00

1⅝ inches deep, for ½-inch conduit only. Four outlets in sides, one in bottom. Can also be furnished with two outlets in bottom. Two holes tapped 10–24 for fixture stems.

49351	106 Octagon	17AO	FAO	6250	501	YS1½	....	100	49	20.00

1⅝ inches deep, for ½-inch conduit only. Four outlets in sides, one in bottom. Can also be furnished with two outlets in bottom. Drilled but not tapped for fixture stems.

COVERS FOR 3¼-INCH ROUND AND OCTAGON BOXES

020340	106A	82	FK	6261	506	CY	8309	200	20	10.00

Steel cover, raised open center, ⅜ inch high, 1½-inch hole; takes Bryant receptacle No. 59108.

020341	106B	50	FG	6286	530	CB	8301	200	23	9.00

Steel cover, closed, raised center crown ⅜ inch high.

020342	106C	50B	FI	6274	529	CD	8202	200	22	15.00

Steel cover, raised center, ⅜ inch high, with ⅜-inch insulating bushing for drop cord.

131864	106CB	....	....	....	....	CDZ	....	200	22	50.00

Brass cover, raised center, ⅜ inch high, with insulating bushing, etc., same as 106C.

49352	106CC	....	....	....	440	CF	8319	200	22	20.00

Steel cover, raised center, ⅜ inch high, with two ⅜-inch insulating bushings for drop cords.

020343	106D	74	FB	6293	534	CLL	8303	200	21	10.00

Steel cover, raised center, with opening 1 1/16 inches, screws on 1½-inch centers; 6–32 screws; takes Bryant receptacle No. 1508; G. E. receptacles Nos. 50748, 50747, 60018, 60019, 65964, 65965, GE009, 66722; P & S No. 290; Paiste Nos. 60018, 60019; Bryant snap switches Nos. 2170, 2254, 2175.

020344	106DH	74A	....	....	7H	CFF	8304	200	20	10.00

Steel cover, raised center, 1½-inch opening, screws on 1⅞-inch centers, tapped 6–32 for Hubbell flush receptacles Nos. 5506, 5507 and 5508.

020345	106E	48B	FC	6252PB	7R	CVZ	8305	200	20	50.00

Brass cover, depressed, 1 5/16-inch opening, for G. E., Bryant and Paiste receptacles No. 9397.

020346	106F	49B	FD	....	7S	CVWZ	8306	200	26	54.00

Brass cover, lapped, depressed, 1 5/16-inch opening for G. E., Bryant and Paiste receptacles No. 9397.

020347	106G	48BS	FE	6251	510	CV	8307	200	20	10.00

Steel cover, depressed, 1 5/16-inch opening for G. E., Bryant and Paiste receptacles No. 9397.

020348	106H	49BS	FF	....	....	CVW	8308	200	26	10.00

Steel cover, lapped, depressed, 1 5/16-inch opening, for G.E., Bryant and Paiste receptacles No. 9397.

020349	106I	82	FK	6261	7L	CY	8309	200	17	10.00

Steel cover, flat, 1⅜-inch opening, screw holes on 1 13/16-inch centers, tapped 6–32; takes P & S and Arrow E receptacles Nos. 61777, 61977, 54; G. E. Nos. GE000, 60931; Bryant Nos. 61777, 40488, 4063; Paiste Nos. 46749, 61777.

020350	106J	82B	FL	6262PB	517	CYZ	8310	200	16½	50.00

Brass cover, flat, 1⅜-inch opening; takes same receptacles as 106I.

020351	106K	58	FN	6255PB	7N	CTZ	8315	200	17½	50.00

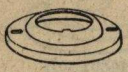
Brass cover, raised center, ⅜ inch high, 1 41/64-inch opening for Federal receptacles.

020352	106L	58S	FP	6255	513	CT	8316	200	22	10.00

Steel cover, raised center, ⅜ inch high, 1 41/64-inch opening for Federal receptacles.

020353	106M	79	FQ	6263	518	CJ	8317	200	16	12.00

Steel cover, flat, for 5 and 10-ampere snap switches and wall receptacles fastened to cover by two machine screws and nuts; slots in cover give range of centers from ⅞ to 1⅞ inches.

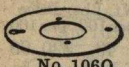


Nos. 106N and 106NS

OUTLET BOXES AND COVERS

COVERS FOR 3¼-INCH ROUND AND OCTAGON RECEPTACLE BOXES

Trade No.	Mfrs. No. Union	Bossert	Pratt Chuck	Sprague	T. & B.	Steel City	Appleton	Std. Pkg.	Wt., Lbs. per 100	Price per 100
020354	106N	59	F0	....	7O	CTWZ	....	200	24	$54.00



No. 106O

Brass cover, raised center, ⅜ inch high, lapped, 1 41/64-inch opening for Federal receptacles.

020355 106NS 59S .... CTW 8314 200 24 10.00



No. 106P

Steel cover, raised center, ⅜ inch high, lapped, 1 41/64-inch opening for Federal receptacles.

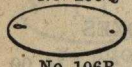
020356 106O .... 6259 515 CDD 8318 200 16½ 10.00



No. 106Q

Steel cover, flat, 1½-inch opening, screws on 1¾-inch centers for Benjamin receptacles Nos. 6, 6B, 6C, 6D and 6T.

020357 106P 51 FH 6257 514 CH 8311 200 19 10.00



No. 106R

Steel cover, raised center, 1½-inch opening, ⅜ inch high, for P & S Nos. 61577, 61578, 61988, 61877, 102703, 102704, 436, 427, 437, 439; G. E. Nos. GE267, GE269, GE118, GE153, GE001, GE079, GE060; Bryant Nos. 61988, 4035, 4036, 4023, 4003, 59108; Paiste Nos. 61988, 47566, 59439; Arrow E Nos. 427, 439, 4003, 59108, 61577, 61877 and 61988.

020358 106Q .... 7Q CHZ 8312 200 20½ 50.00



No. 106RK

Brass cover, raised center, 1½-inch opening, ⅜ inch high; takes same receptacles as 106P.

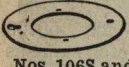
49371 106R .... 6276 531 CA 8301A 200 20 9.00



No. 106RL

Steel cover, flat, closed.

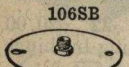
49372 106RK .... 6278 532 CGG 8320 200 20 10.00



Nos. 106S and 106SB

Steel cover, flat, with ½-inch knock-out in center.

49373 106RL .... CHH 8321 200 23 10.00



No. 106TM

Steel cover, raised center, ⅜ inch high, with ½-inch knock-out in center.

49374 106S .... 6258 .... 8318 200 15 10.00



No. 106TF

Steel cover, flat, 1¾-inch opening, screw holes tapped $\frac{6}{32}$ on 2⅛-inch centers; for Bryant and Arrow E No. 59107; G. E. Nos. GE071, GE072.

49375 106SB 200 15 50.00



No. 106UM

Brass cover, flat, 1¾-inch opening, screw holes tapped $\frac{6}{32}$ on 2⅛-inch centers; for Bryant and Arrow E No. 59107; G. E. Nos. GE071, GE072.

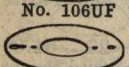
49376 106TM .... 6254 519 CM 8322 200 25 16.00



No. 106UF

Steel cover, flat, with ⅛-inch brass male nipple.

49377 106TF .... 6266 521 CN 8323 200 25 16.00



Nos. 106W and 106WB

Steel cover, flat, with ⅛-inch brass female nipple.

49378 106UM .... 6268 523 CO 8324 200 26 20.00

Steel cover, flat, with ¾-inch brass male nipple.

49379 106UF .... 6270 526 CP 8325 200 26 20.00

Steel cover, flat, with ¾-inch brass female nipple.

49381 106W 200 29½ 10.00

Steel cover, flat, for outlet box receptacles P & S New No. 372; screw centers, $2\frac{5}{32}$ inches; hole, 1⅜ inches.

49382 106WB 200 29½ 50.00

Brass cover, flat, for outlet box receptacles P & S New No. 372; screw centers, $2\frac{5}{32}$ inches; hole, 1⅜ inches.



No. 107

3¼-INCH ROUND AND OCTAGON BOXES

020331 107 Round 17 EA .... 77 CRI½ 3RB 100 59½ 30.00

1⅝ inches deep, for ½-inch conduit. Four outlets in sides only; provided with bridge for G. E. and Bryant receptacles Nos. 50746 and 5050.



No. 107A

49380 107 Octagon 17O .... 6249 500 YR1½ 100 59½ 30.00

1⅝ inches deep, for ½-inch conduit. Four outlets in sides only; provided with bridge for G. E. and Bryant receptacles Nos. 50746 and 5050.



No. 107B

COVERS FOR 3¼-INCH ROUND AND OCTAGON BOXES

020359 107A 49S EE .... 7T CUW 8328 200 24 10.00



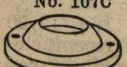
No. 107C

Steel cover, lapped, cone-shaped, 1¼-inch opening.

020360 107B 48S ED 6292 533 CU 8326 200 22 10.00

Steel cover, flush, cone-shaped, 1¼-inch opening.

020361 107C 48 EB 6292PB 7P CUZ 8325 200 23 50.00



No. 107D

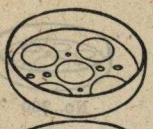
Brass cover, flush, cone-shaped, 1¼-inch opening.

020362 107D 49 EC .... 7Q CUWZ 8327 200 25 54.00

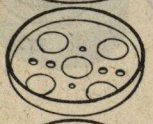
Brass cover, lapped, cone-shaped, 1¼-inch opening.

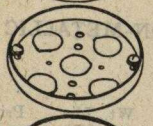
OUTLET BOXES AND COVERS

SHALLOW CEILING CONDUIT BOXES AND PLATES



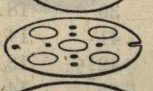


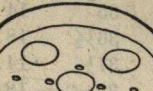


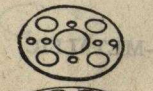


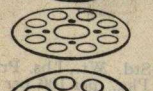








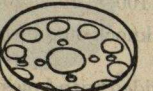












3¼, 4 and 5½ Inches

Trade No.	Mfrs. No. Union	Bossert	Pratt Chuck	Sprague	T & B	Steel City	Appleton	Std. Pkg.	Wt., Lbs. per 100	Price per 100
020332	108 Round	18	HA	6221	4	B¾	4CD	200	46½	$16.00

4 inches in diameter; ¾ inch deep; five knock-outs in bottom for ½ and ¾-inch conduit only.

020333 108L Round 18E ... 6222 5 BU¾ 4CL 200 48 18.00
4 inches in diameter, ¾ inch deep, with lugs; five knock-outs in bottom for ½ and ¾-inch conduit only.

020334 109 Round 18A IA 6220 44 B½ 4C 200 40 15.00
4 inches in diameter, ½ inch deep; five knock-outs in bottom for ½ and ¾-inch conduit only.

020335 109L Round ... ... 6219 55 BU½ 4CL 200 41½ 18.00
4 inches in diameter, ½ inch deep, with lugs; five knock-outs in bottom for ½ and ¾-inch conduit only.

020336 113 ... ... 3 ..... 3C 200 37½ 14.00
3¼ inches in diameter, ¾ inch deep; three knock-outs in bottom for ½-inch conduit only.

020337 113L 17S FM 6246 777 C¾ 3CL 200 39 18.00
3¼ inches in diameter, ¾ inch deep, with lugs; three knock-outs in bottom for ½-inch conduit only.

020339 114 ... ... 6377 52 B⅛ 4P 200 29½ 12.00
4 inches in diameter, plate only; five knock-outs in bottom for ½ and ¾-inch conduit only.

020338 115 18L KA 6223 888 P¾ 5C 100 85 30.00
5½ inches in diameter, ¾ inch deep; five knock-outs in bottom for ½ and ¾-inch conduit only.

SHALLOW CEILING BOXES AND PLATES FOR NON-METALLIC FLEXIBLE CONDUIT

3¼-inch Plate

Trade No.	Mfrs. No.	No. of Knock-outs in Bottom Loom	Conduit	Std. Pkg.	Wt., Lbs. per 100	Price per 100
49041	212	4	..	200	20	$12.00

3½-inch Plate

49042	215	8	..	200	22½	12.00

4-inch Plate

49043	220	6	2	200	29⅛	12.00

4-inch Plate

49044	222	10	..	200	29½	12.00

4-inch Box, ½ inch Deep, without Ears

49045	225	6	2	200	40	15.00

4-inch Box, ½ inch Deep, without Ears

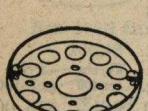
49046	227	10	..	200	40	15.00

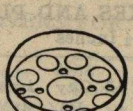
4-inch Box, ½ inch Deep, with Ears

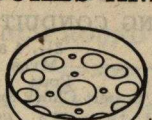
49047	228	6	2	200	41½	18.00

No. 212 furnished with eight knock-outs instead of four when specified.
Center holes in all the above boxes will pass ⅜-inch gas pipe cap.

OUTLET BOXES AND COVERS

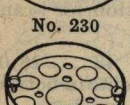

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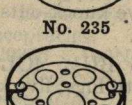

No. 235


No. 237


No. 238


No. 260

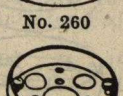

No. 261


No. 263


No. 270


No. 271

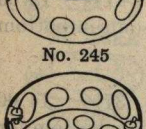

No. 272


No. 273

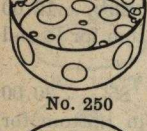

No. 245

SHALLOW CEILING BOXES AND PLATES FOR NON-METALLIC FLEXIBLE CONDUIT

Trade No.	Mfrs. No.	Diam. Inches	Depth Inches	Ears for Cover	No. of Knock-outs in Bottom Loom	Conduit	Std. Pkg.	Wt., Lbs. per 100	Price per 100
49048	230	4	½	With	10	..	200	41½	$18.00
49049	235	4	¾	Without	6	2	200	46½	16.00
49050	237	4	¾	Without	10	..	200	46½	16.00
49051	238	4	¾	With	6	2	200	48	18.00
49052	240	4	¾	With	10	..	200	48	18.00
49059	260	3½	½	Without	8	..	200	37½	14.00
49060	261	3½	½	With	8	..	200	39	18.00
49061	262	3½	¾	Without	8	..	200	41	14.00
49062	263	3½	¾	With	8	..	200	42½	18.00
49063	270	3¼	½	Without	4	..	200	35	14.00
49064	271	3¼	½	With	4	..	200	36½	18.00
49065	272	3¼	¾	Without	4	..	200	37½	14.00
49066	273	3¼	¾	With	4	..	200	39	18.00

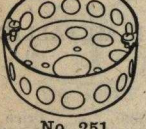

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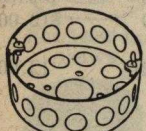

No. 250


No. 251

DEEP CEILING BOXES AND PLATES FOR NON-METALLIC FLEXIBLE CONDUIT

Trade No.	Mfrs. No.	Diam. Inches	Depth Inches	Ears for Cover	No. of Knock-outs In Bottom Loom	Conduit	No. of Knock-outs in Side Loom	Conduit	Std. Pkg.	Wt., Lbs. per 100	Price per 100
49053	245	4	1⅝	With	6	2	4	8	100	70	$25.00
49054	247	4	1⅝	With	10	..	4	8	100	70	25.00
49055	248	4	1⅝	With	6	2	4	4	100	70	25.00
49056	250	4	1⅝	With	10	..	4	4	100	70	25.00
49057	251	4	1⅝	With	6	2	..	16	100	70	25.00
49058	253	4	1⅝	With	10	..	..	16	100	70	25.00
49067	274	3¼	1⅝	With	4	..	4	8	100	49	20.00
49068	275	3¼	1⅝	With	4	..	4	4	100	49	20.00
49069	276	3¼	1⅝	With	4	..	..	12	100	49	20.00


No. 253


No. 274


No. 275


No. 276

Nos. 270, 271, 272 and 273 can be furnished with eight knock-outs instead of four when so specified.

All outlet boxes for non-metallic flexible conduit are provided with holes for supporting fixture studs. Have ample room for making splices and joints. Boxes fitted with ears will take all standard outlet box covers of same diameter as listed on previous pages. Center holes in all the above boxes will pass ⅜-inch gas pipe cap.

OUTLET BOXES AND COVERS

4-INCH ROUND BOXES

Trade No.	Mfrs. No. Union	Bossert	Pratt Chuck	Sprague	T. & B.	Steel City	Appleton	Std. Pkg.	Wt., Lbs. per 100	Price per 100
020386	120	600	QA	6399	404	BT1½	4RN	100	88	$40.00



1⅝ inches deep, for ½ and ¾-inch conduit; four outlets in sides and four in bottom, except when ¾-inch conduit is used, when bottom outlets are omitted.

020387	130	600A	RA	6399 deep	405	BT2⅛	4RND	100	50	52.00

2¼ inches deep, for ½ and ¾-inch conduit; four outlets in sides and four in bottom, except when ¾-inch conduit is used, when bottom outlets are omitted.

No. 103A cover listed on a previous page is used with Nos. 120 and 130 boxes.

4-INCH BRACKET BOXES



Trade No.	Mfrs. No.	Description	Wt., Lbs. per 100	Price per 100
062640	112	3 5/16-inch diameter, 2 inches deep; 4 outlets in bottom, one on round edge, two in flat side, drilled for fixture stems, for ½ and ¾-inch conduits.....	63½	$25.00

Box No. 112 is particularly suitable for bracket work where it is desirable to have one feed and two tap pipes.

COVERS FOR 4-INCH BRACKET BOXES



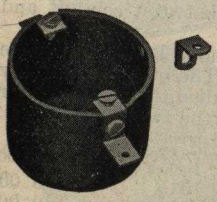


062641	112A	Steel, open cover, flat, size of opening 1¾ inches.....	18¼	12.00
062642	112B	Steel cover, closed, flat.....	24	12.00

MIDGET RECEPTACLE BOXES

For Hubbell and Bryant Flush Receptacles

Trade No.	Mfrs. No.	Diameter Inches	Depth Inches	Wt., Lbs. per 100	Price Each
062643	200	2¼	2	39	$0.28



These boxes have four knock-outs in sides, two in bottom; size of knock-outs, ⅝ inch diameter for ¼ and ⅜-inch flexible non-metallic conduit, or when specified, will be furnished with one ½-inch knock-out in bottom for connecting bushing for flexible metallic conduit.

Designed particularly for old work, and when above receptacles are used for new work box No. 106 with special covers, listed on another page, is recommended.

No. 200 box has the ears normally set to take Hubbell receptacles and by reversing ears may be made to take Bryant's Jr. Floor Receptacle No. 1508 and Flush Receptacle, also Hubbell Receptacles Nos. 5506, 5507, 5508.

When specified, this box will be equipped with M ear, so that any ring receptacle under 2 inches diameter may be attached to a brass or ornamental cover.



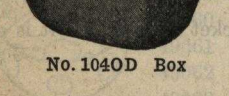
No. 103X Ring

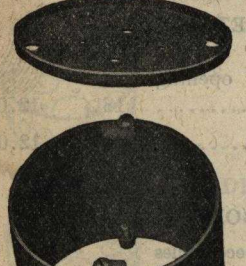


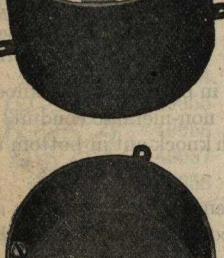
No. 105X Ring with Plate and Cover



No. 104OD Box







Showing Box before being Assembled

OUTLET BOXES AND COVERS

4-INCH EXTENSION RINGS FOR CONCRETE WORK

Originally designed as an extension to any 4-inch round box where it is desirable or necessary to have a deeper box and is also suitable for bracket work, in partitions where wall fixtures are located at similar points on either side of wall.

These rings may be extended indefinitely by building one on top of the other, will take all the standard covers which will enable the use of any ordinary conduit receptacle and switch.

The construction of this ring is similar to No. 105 Box with bottom taken out and lugs provided for fastening them to other outlet boxes. This ring is particularly convenient in connection with tile or concrete work, where extra deep boxes are necessary. Provided with four knock-outs in side for ½ or ¾-inch conduit and can be furnished enameled or sherardized.

No. 105X ring is used principally in re-enforced concrete construction, being arranged so that the standard covers or flat ceiling plates may be mounted on either side. It is similar to the No. 103X ring except that one side is provided with an additional pair of ears, tapped and fitted with screws. By this arrangement conduit may be run into the box after it is fastened to the form, by means of nails through the lower ears. After the bushings are put on the conduit, the top plate or cover is mounted as on an ordinary outlet box. If a future stud or receptacle is to be mounted in the box it may be assembled with the plate before the latter is attached to the ring.

When the No. 105OX ring is used the cover or plate protrudes beyond the edge of the ring, thus furnishing additional anchorage for the box.

The prices given below are for rings only and do not include cover or plate. For standard 4-inch covers and No. 114 flat plate.

Trade No.	Mfrs. No.	Style	Diam. Inches	Depth Inches	No. of ½ or ¾ in. Knockouts	Price per 100
49026	103X	Round	4	1⅝	4	$25.00
49028	103OX	Octagon	4	1⅝	4	25.00
49029	105X	Round	4	1⅝	4	30.00
49030	105OX	Octagon	4	1⅝	4	30.00
49031	105X Deep	Round	4	2¼	4	42.00
49032	105OX Deep	Octagon	4	2¼	4	42.00
49033	Extension plate for above rings					12.00

OCTAGON BOXES FOR CONCRETE WORK

The No. 104OD box is a solid drawn box 3½ inches deep and was designed for use in concrete work where the extension rings listed are not suitable. The conduit knock-outs are located near the bottom, thus giving ample clearance between conduit and finished surface. Takes all standard 4-inch covers and may be extended to a greater depth by using the 103OX ring. Made for ½ or ¾-inch conduit, in octagon form only.

Trade No.	Mfrs. No.	Description	Price per 100
49034	104OD	Octagon, 4-inch diameter, 3½ inches deep; four ½ or ¾-inch knock-outs in sides, one in bottom.....	$60.00

4-INCH RINGS AND BACK PLATES FOR CONCRETE WORK

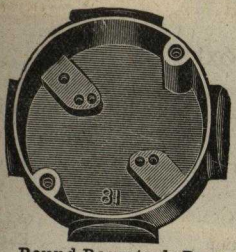
Stamped steel outlet boxes with removable back with specially designed ears through which nails may be driven into wood form to hold box securely in place. The conduit knock-outs are located near the bottom, thus giving ample clearance between conduit and finished surface.

The Union way to install the box is to remove knock-outs, take off back or bottom cover and nail box to form. The box is then ready for the conduit. After the conduit has been installed the back or cover is then put on and locked securely by tightening the two screws.

Trade No.	Mfrs. No.	Depth Inches	Diam. Inches	Supporting Screws Centered Inches	Price per 100
49035	202	2	4	3½	$30.00
49036	203	3	4	3½	40.00
49037	203½	3½	4	3½	45.00
49038	204	4	4	3½	50.00
49039	205	5	4	3½	60.00
49040	206	6	4	3½	70.00

Any standard 4-inch round box cover will fit above boxes.

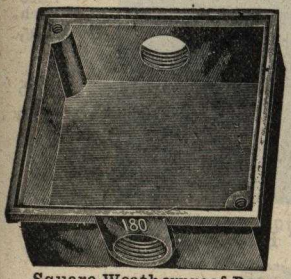
T & B CAST IRON BOXES



Round Receptacle Box



Round Weatherproof Box



Square Weatherproof Box


Cast Iron Junction and Pull Box

ROUND RECEPTACLE BOXES

Trade No.	Mfrs. No.	Description	Wt., Lbs. per 100	Price per 100
81081	81	Diam., 3 inches; depth, 1¼ inches...	79	$28.00
81082	82	Diam., 3 inches; depth, 1¾ inches...	156	34.00
81083	83	Diam., 3 inches; depth, 1¼ in. outside lugs	80	30.00
		Covers for Round Receptacle Boxes		
81085	84	Plain	30	12.00
81086	85	1¼-inch lipped hole.....	21	12.00
81087	86	1¼-inch plain hole	21	12.00
81084	87	Drilled and tapped, 1½ or 1¾-in. centers	25	16.00
81089	88	1⅝-inch plain hole	15	12.00
81088	89	⅝-inch lipped hole, with boss	31	12.00

ROUND WEATHERPROOF BOXES

81061	170	Diam., 3½ inches; depth, 1¼ inches.	135	35.00
81062	171	Diam., 3½ inches; depth, 1½ inches.	129	45.00
81063	172	Diam., 3½ inches; depth, 3 inches...	190	62.00
		Covers for Round Weatherproof Boxes		
81067	173	Plain	40	14.00
81068	174	Plain, drilled and tapped, ⅜, ½ or ¾-inch	31	16.00

SQUARE WEATHERPROOF BOXES

81064	180	3½x3½ inches; depth, 1¼ inches....	130	35.00
81065	190	3½x3½ inches; depth, 1½ inches....	190	45.00
81066	191	3½x3½ inches; depth, 2½ inches....	350	60.00
		Covers for Square Weatherproof Boxes		
81069	181	Plain	43	14.00
81070	182	Plain, drilled and tapped, ⅜ inch ...	36	16.00
81072	184	Plain, drilled and tapped, ½ or ¾ in.	78	16.00
81073	187	1⅝-inch plain hole in center	30	14.00
81075	188	Rotary switch cover.....	61	20.00
81077	189	Plug receptacle cover.....	60	24.00
109701	192	Flat switch cover	53	12.00
109702	193	Bracket outlet cover.....	33	12.00

Drilling and tapping ½ or ¾-inch holes in above boxes, net, 6 cents each. Drilling only, net, 3 cents each.

CAST IRON JUNCTION AND PULL BOXES

Flanged Boxes with Covers

Dimensions Inches	Trade No.	Price Each	Dimensions Inches	Trade No.	Price Each
4 x 4 x3	067643	$1.05	8x 8x 4	067651	$3.40
6 x 5 x3	067644	1.75	12x 6x 4	067652	4.00
8 x 4 x3	067645	1.80	12x12x 4	067653	6.75
6 x 6 x3	069006	1.90	8x 8x 6	067654	3.80
8 x 6 x3	067646	2.50	12x 6x 6	067655	5.75
8 x 8 x3	067647	2.80	12x12x 6	067656	8.50
12 x 6 x3	067648	3.40	18x14x 6	067685	16.30
12 x12 x3	067649	5.65	10x10x 8	067686	8.00
6 x 6 x4	069005	2.00	24x 9x 8	109703	17.00
8 x 6 x4	067650	2.80	.....	.....	....

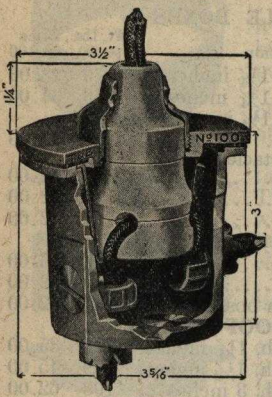
Unflanged Boxes with Covers

6 x 4 x1½	067688	.75	18x 6x 3½	067676	4.45
10¼x 2¾x1¾	067689	1.50	28x24x 3½	067677	23.00
9⅝x 3½x1 11/16	067690	1.50	6x 6x 4	81080	1.65
3½x 3½x2	067691	.50	8x 6x 4	067678	2.30
4 x 4 x2	067692	.65	9x 6x 4	067679	3.20
6 x 3 x2	067693	.70	10x 6x 4	067680	3.25
6 x 4 x2	067694	.75	8x 8x 4	067681	3.10
10 x 5 x2½	067695	2.50	12x12x 4	067682	6.50
4 x 4 x3	067696	.75	15x 7x 4½	067683	5.40
5 x 5 x3	067697	1.00	18x12x 5	067684	13.80
6 x 5 x3	067698	1.20	8x 6x 6	069001	3.50
8 x 6 x3	067671	2.25	12x 6x 6	069002	5.10
7 x 5 x3	067672	1.65	24x16x 8	069003	24.00
7 x 7 x3	067673	2.25	14x14x10	109704	18.00
12 x 6 x3	067674	3.00	.....	.....	....

Drilling and tapping charged extra.

All the above boxes and covers are furnished japanned, but can be galvanized at slightly increased cost, if desired.

T & B FLOOR BOXES



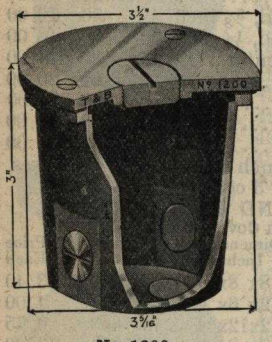
No. 100

No. 100, FLOOR BOXES

Approved by National Board. Just the right size for private house work. Hot galvanized; no rubber bushings to break; no hard taps required for wiring; no screws to hold strap in place; absolutely watertight.

Trade No.	Mfrs. No.	Description	Price Each
135518	101	Iron box with three plugs	$0.85
135519	102	Brass cover	1.50
135520	103	Brass disc for cover	.75
053793	104	Brass nozzle	1.25
053794	105	Receptacle and supporting strap	.90
135521	107	Large rubber gasket	.20
135522	108	Small rubber gasket	.10
053795	100	Box complete, as illustrated	4.00

Weight of complete box, 2½ pounds.



No. 1200

No. 1200, FLOOR BOXES

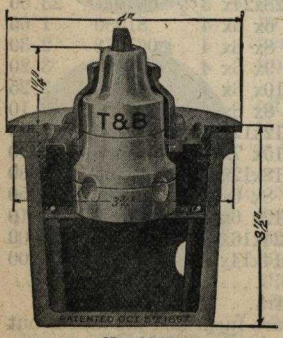
For telephone and electric light outlets. Hot galvanized. Absolutely watertight.

Trade No.	Mfrs. No.	Description	Price Each
135523	1201	Iron box with three plugs	$0.85
135524	1202	Brass cover with ½-inch removable plug	2.25
135525	1200	Box complete, as illustrated	3.00

Weight of complete box, 1¾ pounds.

No. 1100, WATERTIGHT FLOOR BOXES

Takes from ½-inch to 1-inch conduit with receptacle in place. Receptacle can be taken out without removing any screws. No hard taps required; no rubber bushings to break. Specify number, size and location of holes.



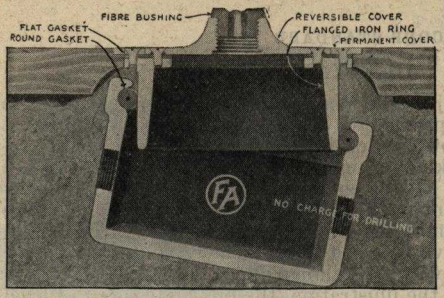
No. 1100

Trade No.	Mfrs. No.	Description	Price Each
135526	1101	Iron box	$1.10
135527	1102	Brass cover	1.75
135528	1103	Brass disc for cover	.75
053787	1104	Brass nozzle	1.50
053788	1105	Receptacle and supporting strap	.90
135529	1107	Large rubber gasket	.20
135530	1108	Small rubber gasket	.10
053790	1106	Brass cover with ½-inch removable plug	2.50
053789	1100	Box complete, as illustrated	5.00

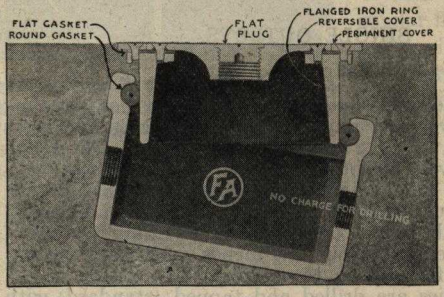
Weight of complete box, 3¾ pounds.

The above are packed in a neat, strong box, clearly marked to show contents.

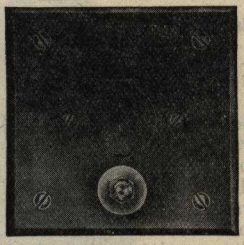
F. A. FLOOR BOXES AND FAN OUTLETS



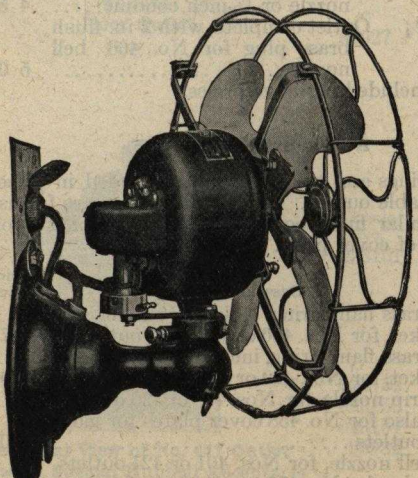
Floor Box Showing Reversible Cover



Floor Box Showing Reversible Cover



Fan Hanger Outlet



Fan Attached to Fan Hanger Outlet

FLOOR BOXES

Outside measurements of box, 4¾ inches square and 3¼ inches deep, having wall ¼ inch thick. Box will accommodate 3–¾ or 2–1 inch conduits in one side.

Adjustable top is readily adjustable for a variation of ¾ inch; also, made special for greater variation.

The adjustable top is made a permanent part of the box and floor construction by means of a fine cement mortar grouting.

The reversible cover, when removed, leaves a clear opening of 3 inches to connect wires or install receptacle.

Standard flush receptacles can be installed by means of special steel hangers furnished with box.

Trade No.	Mfrs. No.	Size Inches	Price, Each without Receptacle
47294	FB-453	4¾x4¾x3¼	$6.00

FAN HANGER OUTLETS

F. A. Fan Hanger Outlets are a combination of a special 4x4x1½-inch outlet box, with substantial supports in each corner to which the cover is fastened with screws, and a cover of ⅛-inch brass 5 inches square with beveled edges, furnished with four brass screws 1 inch long to take up the variation in the thickness of plaster. The cover has a round opening in the center, of the proper size for a standard Edison Screw Plug. This opening has a hinged cover, which when closed, fits flush into the surface of the plate. The plate is furnished with a special Edison Screw Plug Receptacle.

Attached to the center of the plate at the lower side is a ¼-inch steel machine threaded bolt, with nut and washer for attaching the fan.

Fan hanger outlets are furnished with cover finished brush-brass or black and a special outlet box with special receptacle.

Trade No.	Mfrs. No.	Size of Box Inches	Size of Cover Inches	Price Each
47292	4455	4x4x1½	5x5	$3.50

Fan hanger outlet covers can be had in any special finish, except gold, at an additional charge of 10 per cent.

Adapter Plate

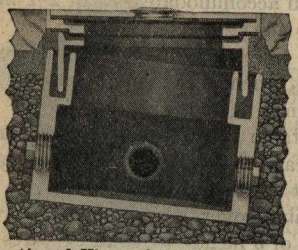
For attaching such fans to fan hanger outlets that are not provided with proper screw holes in base of fan. Japanned steel.

Trade No.	Mfrs. No.	Size of Plate Inches	Price Each
47293	88	8x8	$0.80

FULLMAN FLOOR OUTLETS

Patented

NATIONAL ELECTRICAL CODE STANDARD

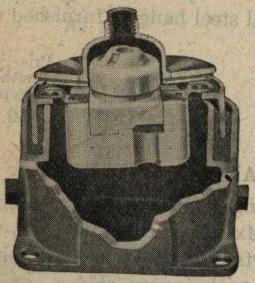


Sectional View of No. 400 Outlet and No. 413 Brass Flange Ring

ADJUSTABLE TYPES

Fullman Adjustable Water-tight Floor Outlets are the only make that provide for automatic universal adjustment of covers with low cost of installation and permanent protection from leaking or imperfect connection between box body and cover. These outlets provide for vertical, horizontal, rotary and angular tilting adjustment of covers. There are no known conditions of construction work that Fullman Floor Outlets have failed to fulfill. The "ring in the groove" feature is exclusive with Fullman Floor Outlets.

As shown in the illustration, the box body is out of level but cover aligns perfectly with finished floor.



Sectional View of No. 401 Outlet and No. 466 Nozzle with Standard Receptacle Mounted on Lugs of Adjusting Ring

SINGLE OUTLETS

With Round Cover Plates

The complete single outlet consists of box body, sealing cement for groove, iron adjusting ring, rubber gasket, brass cover plate with ½ or 2-inch flush brass plug. The 2-inch plug is necessary if receptacle or bell nozzle is used. Receptacles are not included in list prices of adjustable outlets.

The iron adjusting rings are furnished in 1¼-inch (standard), 1⅞, 2½ and 3⅛-inch depths, thus providing a range of vertical adjustment of about 2½ inches. All rings are furnished with lugs for holding receptacles.

The box bodies are drilled and tapped (standard) with four ½-inch conduit holes, three of which are closed with steel screw plugs.

When special drilling is required, a sketch should accompany the order.

Trade No.	Mfrs. No.	Diam. of Cover Plate Inches	Description	Price Each
035128	400	4¼	Outlet complete, with ½-in. flush brass plug for No. 465 drip nozzle or ½-inch conduit.....	$4.00
035129	401	4¼	Outlet complete, with 2-in. flush brass plug for No. 466 bell nozzle.....	4.50
035130	420	4¾	Outlet complete, with ½-in. flush brass plug for No. 465 drip nozzle or ½-inch conduit.....	4.50
035131	421	4¾	Outlet complete, with 2-in. flush brass plug for No. 466 bell nozzle.....	5.00

Nozzles not included in above prices.



No. 421 Box and No. 466



No. 440 Brass Flange Ring



No. 465



No. 466

ACCESSORIES

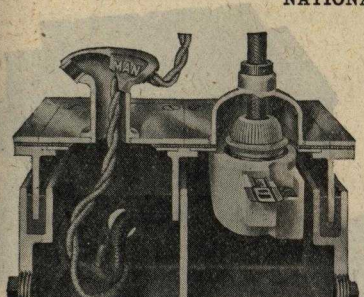
Brass flange rings and nozzles are not included in prices of complete adjustable outlets. Brass flange rings are for use in marble and similar fine floors to prevent chipping upon repeated removal of cover plate.

Trade No.	Mfrs. No.	Description	Price Each
023146	413	Brass flange ring, including rubber gasket, for Nos. 400 or 401 floor outlets..	$0.75
023147	440	Brass flange ring, including rubber gasket, for Nos. 420 or 421 floor outlets..	1.00
023148	465	Drip nozzle, for Nos. 400 or 420 outlets, also for No. 458 cover plates for gang outlets.....	1.00
023149	466	Bell nozzle, for Nos. 401 or 421 outlets, also for No. 459 cover plates for gang outlets.....	1.00

FULLMAN FLOOR OUTLETS

PATENTED

NATIONAL ELECTRICAL CODE STANDARD



Sectional View of No. 442 Floor Outlet with No. 465 and No. 466 Nozzles. The left section shows permanent connection and the right section is fitted with Freeman Receptacle No. 4354 and Benjamin Plug No. 903

GANG FLOOR OUTLETS

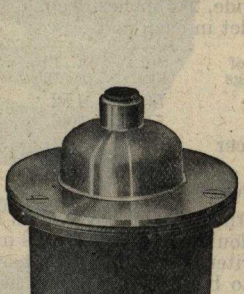
Fullman Gang Adjustable Floor Outlets are for supplying a variety of electric service from one point. They are neater in appearance and can be installed quicker than separate outlets placed near each other. Cover plates are interchangeable and are adapted for No. 465 or No. 466 nozzles, as desired. Brass edge frame extends around all the cover plates to protect marble or similar flooring. Each section of adjusting frame is provided with lugs for receptacles.

NOTE.—Cover plates of gang floor outlets are provided with ½-inch or 2-inch flush brass plugs, as desired.

Mfrs. No.	No. of Gangs	Size of Cover, Inches Width	Length
442	2	5½	7
443	3	5½	10
444	4	5½	13
445	5	5½	16
446	6	5½	19

List Prices of Gang Outlets

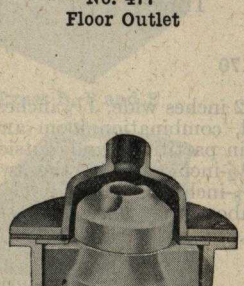
With ½-inch flush brass plug in cover plate, per section	$5.00
With 2-inch flush brass plug in cover plate, per section	5.50



No. 477
Floor Outlet

BRASS COVER PLATES

Trade No.	Mfrs. No.	Description	Price Each
95926	458	Brass cover plate, with ½-inch flush brass plug for No. 465 nozzle or ½-inch conduit. For only one section of gang outlet	$0.96
95927	459	Brass cover plate, with 2-inch flush brass plug for No. 466 nozzle. For only one section of gang outlet	1.46



Sectional View of No. 477 Outlet Showing Special Hubbell Receptacle which eliminates use of strap and screws

NON-ADJUSTABLE FLOOR OUTLETS

Trade No.	Mfrs. No.	Description	Price Each
023151	477	Complete floor outlet, 3½ inches round, consisting of box body, porcelain plug and receptacle, flat steel ring, rubber gasket, brass cover plate, flush brass plug and bell nozzle	$4.00
023152	478	Porcelain plug and receptacle only	1.00
023153	479	Brass bell nozzle only	1.00
023154	480	Brass flush plug only	.35
95932	490	Floor or wall junction outlet box consisting of box body, rubber gasket and brass cover plate with ½-inch flush plug	3.00

UNION SECTIONAL SWITCH BOXES

FOR ALL MAKES OF PUSH BUTTON AND RECTANGULAR BASE SWITCHES AND RECEPTACLES



Type X

GEM SECTIONAL SWITCH BOXES

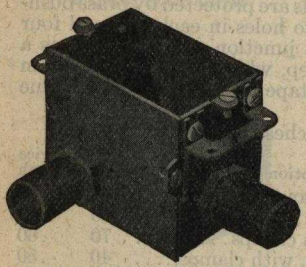
For Old and New Work

The Gem Box has been designed to meet the demand for single section box, which can be converted into any number of gangs by removing the sides.

The Gem Box is regularly furnished with Type C ear, reversible, having an adjustment from $\frac{1}{32}$ to $\frac{3}{4}$ inch. Suitable for old and new work. Ear extends $\frac{1}{2}$ inch from body of box and affords ample room for setting screws firmly into lath or mounting board.

FOR RIGID OR FLEXIBLE METALLIC CONDUIT

Type X knock-outs are $\frac{11}{16}$ inch in diameter, being amply large enough to accommodate BX Nos. 10, 12 or 14 B. & S. Twin Conductors, and BX 3 Nos. 12 and 14 B. & S. Triple conductors, also $\frac{5}{16}$ and $\frac{3}{8}$-inch Greenfield Flexible Steel Conduit when ends are protected by brass bushing caps.

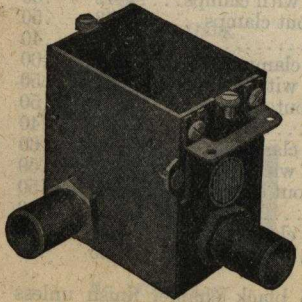


Type B

Types B and BD are designed for switch and receptacle casings in concealed conduit or armored cable work; take $\frac{1}{2}$-inch and $\frac{3}{4}$-inch conduit and may be used where a larger flexible tubing than $\frac{1}{2}$ inch is desired. Can be used with Standard BX conductors by using Sprague Box Connectors Nos. 6119–6124 adapted to old as well as new work.

All boxes are 3 inches long, 2 inches wide.

Trade No.	Type	Depth Inches	Description	Wt., Lbs. per 100	Price Each
80304	X	2½	Box complete, without clamps...	80	$0.50
80305	X	2½	Unit, without sides.....	44	.40
130592	X	2½	Box complete, with clamps.....	84	.60
130593	X	2½	Unit, without sides, with clamps.	48	.50
80302	B	2¾	Box complete, without clamps...	84	.50
80303	B	2¾	Unit, without sides.....	44	.40
130594	B	2¾	Box complete, with clamps.....	88	.60
130595	B	2¾	Unit, without sides, with clamps.	48	.50
130596	BD	3½	Box complete, without clamps...	102	.50
130597	BD	3½	Unit, without sides.....	50	.40
130598	BD	3½	Box complete, with clamps.....	106	.60
130599	BD	3½	Unit, without sides, with clamps.	54	.50



Type BD

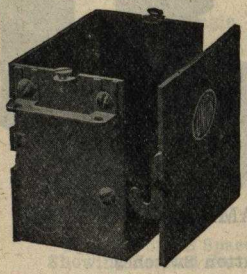
Standard package, 100.

Switch boxes always furnished black enamel finish unless otherwise specified.

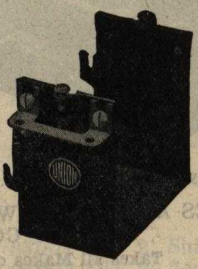
UNION SECTIONAL SWITCH BOXES

TAKE ALL MAKES OF SWITCHES AND RECEPTACLES

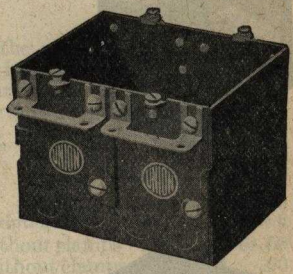
For Old and New Work



Single Box—Showing One Side Removable by Loosening Screws at Hooks

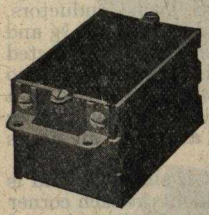


Spacer



2-gang Box made from a Single Box and Spacer

SECTIONAL BOXES FOR FLEXIBLE CONDUIT



Type CCS

Sectional switch boxes may be built up from the single unit by the use of spacer sections by loosening the two binding screws and slipping the spacers in position and tightening up the screws. No dividing walls between switch units. No binding straps or screws to be lost. No working apart after being installed. No open space between the different sections; a perfect gang switch box.

Equipped with reversible and sliding Type C ears so as to be adapted to plastered or unplastered walls.

All boxes are 3 inches long, 2 inches wide. Outlet holes, 5/8 inch.



Type CC



Type AB

Trade No.	Type	Depth In.	Description	Std. Pkg.	Wt., Lbs. per 100	Price Each
057886	CCS	2	Single box, without clamps	100	66	$0.50
057887	CCS	2	2-gang box, without clamps	50	101	.90
057888	CCS	2	Spacer, without clamps	100	36	.40
130610	CCS	2	Single box, with clamps	100	70	.60
130611	CCS	2	2-gang box, with clamps	50	109	1.10
130612	CCS	2	Spacer, with clamps	100	40	.50
057901	CC	2½	Single box, without clamps	100	79	.50
057902	CC	2½	2-gang box, without clamps	50	116	.90
057903	CC	2½	Spacer, without clamps	100	42	.40
130613	CC	2½	Single box, with clamps	100	83	.60
130614	CC	2½	2-gang box, with clamps	50	124	1.10
130615	CC	2½	Spacer, with clamps	100	46	.50
057898	AB	2¾	Single box, without clamps	100	84	.50
057899	AB	2¾	2-gang box, without clamps	50	125	.90
057900	AB	2¾	Spacer, without clamps	100	44	.40
130616	AB	2¾	Single box, with clamps	100	88	.60
130617	AB	2¾	2-gang box, with clamps	50	133	1.10
130618	AB	2¾	Spacer, with clamps	100	48	.50
057895	AA	3	Single box, without clamps	100	91	.50
057896	AA	3	2-gang box, without clamps	50	133	.90
057897	AA	3	Spacer, without clamps	100	47	.40
130619	AA	3	Single box, with clamps	100	95	.60
130620	AA	3	2-gang box, with clamps	50	141	1.10
130621	AA	3	Spacer, with clamps	100	51	.50

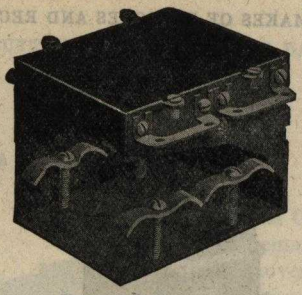
All single boxes furnished with one side removable, unless otherwise specified, obviating the necessity of carrying 2-gang boxes, already assembled, in stock.

All above are finished in a heavy black insulating enamel, but can also be furnished sherardized, which is absolutely rust-proof, at a slight advance in price.

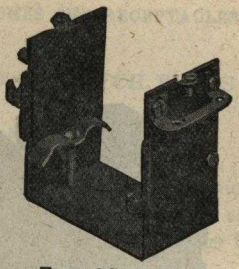
UNION SECTIONAL SWITCH BOXES



Type AC, Single



Type AC, 2-gang



Type AC, Spacer

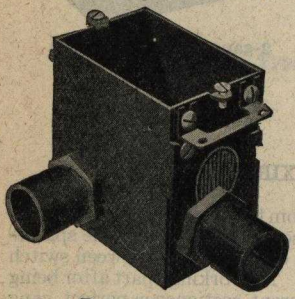
TYPES AC AND DC, WITH CLAMP FOR FLEXIBLE CONDUIT

Takes all Makes of Push Button Switches

Types AC and DC boxes are designed particularly for use with flexible metallic conduit and armored cable. The construction is similar to Types AA and DD, the single box being constructed with removable side and may be built up into any number of gangs by removing side and inserting spacers.

Knock-outs are 11/16 inch in diameter, being amply large enough to accommodate BX Nos. 10, 12 and 14 B. & S. Twin Conductors, and BX3 Nos. 12 and 14 B. & S. Triple Conductors; also 5/8 and 3/8-inch Greenfield Flexible Steel Conduit when ends are protected by brass bushing caps. The Type AC box is provided with two holes in each end and four in back, so that it can be used as a junction center as well as a switch box. 3 1/4-inch depth allows ample room in the back of switch to make and tape all joints without undue crowding.

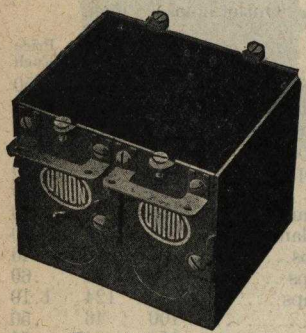
Type DC box is similar to Type AC but is shallower and is made with beveled corners and has two knock-outs at each corner which allows wires to be inserted from either the back or the end of the box.



Type BB, Single

All boxes are 3 inches long, 2 inches wide. Holes, 11/16 inch.

Trade No.	Type	Depth Inches	Description	Std. Pkg.	Wt., Lbs. per 100	Price Each
057877	DC	2 1/2	Single box, with clamps.....	100	80	$0.60
057878	DC	2 1/2	2-gang box, with clamps.....	50	112	1.10
057879	DC	2 1/2	Spacer, with clamps.....	100	44	.50
057874	AC	3 1/4	Single box, with clamps.....	100	98	.60
057875	AC	3 1/4	2-gang box, with clamps.....	50	154	1.10
057876	AC	3 1/4	Spacer, with clamps.....	100	56	.50



Type BB, 2-gang

TYPES BB AND BE, FOR RIGID OR FLEXIBLE METALLIC CONDUIT

Takes all Makes of Push Buttons and Rectangular Base Switches and Receptacles

These boxes, are particularly adapted to old work, because of the small openings necessary in the finished walls or partitions. When equipped with Type C or F ears, adjustment may be made so that the box will sit flush with the plastered surface or the ears may be reversed without removing the screws for new work. The entire box, and opening in the wall for same, will be completely covered by any standard switch plate.

The knock-outs are for standard 1/2 or 3/4-inch conduit, but may be used with metallic conduit by means of connectors such as Sprague Nos. 6119 and 6124.

057904	BB	3 1/2	Single box, without clamps...	100	102	$0.50
057905	BB	3 1/2	2-gang box, without clamps..	50	152	.90
057906	BB	3 1/2	Spacer, without clamps.....	100	50	.40
057868	BE	2 3/4	Single box, without clamps...	100	84	.50
057869	BE	2 3/4	2-gang box, without clamps..	50	125	.90
057870	BE	2 3/4	Spacer, without clamps.....	100	44	.40

Finished in black enamel; can also be furnished sherardized finish at a slight advance in price.

Type C ears regularly furnished.

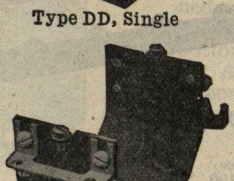


Type BB, Spacer

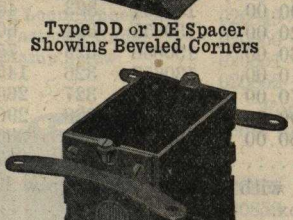
UNION SECTIONAL SWITCH BOXES



Type DD, Single



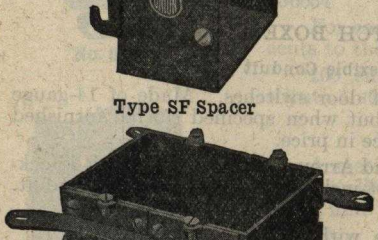
Type DD or DE Spacer
Showing Beveled Corners



Showing SF Style of Ear
on Single Box



Type SF Spacer



Type SF 2-gang Box
Made from Single and Spacer



Type SS, Single

SECTIONAL BOXES FOR NON-METALLIC FLEXIBLE CONDUIT

Take All Makes of Push Button Switches

WITH BEVELED CORNERS

Designed particularly for the rewiring of old buildings; the beveled corners permit of its insertion into the smallest practical opening in the walls and make the fishing of the ends of flexible conduit into the box very easy.

All boxes are 3 inches long, 2 inches wide. Outlet holes, 5/8-inch.

Trade No.	Type	Depth In.	Description	Std. Pkg.	Wt.,Lbs. per 100	Price Each
057871	DD	2	Single box, without clamps	100	70	$0.50
057872	DD	2	2-gang box, without clamps	50	96	.90
057873	DD	2	Spacer, without clamps....	100	34	.40
094436	DD	2	Single box, with clamps....	100	74	.60
094437	DD	2	2-gang box, with clamps....	50	104	1.10
094438	DD	2	Spacer, with clamps.....	100	38	.50
057892	DE	2½	Single box, without clamps.	100	73	.50
057893	DE	2½	2-gang box, without clamps	50	110	.90
057894	DE	2½	Spacer, without clamps ...	100	40	.40
094439	DE	2½	Single box, with clamps....	100	77	.60
094440	DE	2½	2-gang box, with clamps...	50	118	1.10
094441	DE	2½	Spacer, with clamps.....	100	44	.50

TYPE SF, FOR NON-METALLIC FLEXIBLE CONDUIT

Takes All Makes of Push Button and Rectangular Base Switches and Receptacles

Type SF boxes can be furnished in depths ranging from 2 inches to 3½ inches, but unless otherwise specified will be furnished in 3-inch depth. Specially adapted for new work.

The new SF ear, as illustrated, is a one-piece ear having a wide reach similar to the old style cast iron switch frame.

All boxes are 3 inches long, 2 inches wide, 5/8-inch holes.

Trade No.	Type	Depth In.	Description	Std. Pkg.	Wt.,Lbs. per 100	Price Each
094426	SF	3	Single box, without clamps.	100	95	$0.50
094427	SF	3	2-gang box, without clamps	50	138	.90
094428	SF	3	Spacer, without clamps....	100	51	.40
094442	SF	3	Single box, with clamps....	100	100	.60
094443	SF	3	2-gang box, with clamps...	50	146	1.10
094444	SF	3	Spacer, with clamps.....	100	55	.50

SOLID DRAWN SWITCH BOXES

For Flexible Non-metallic Conduit

Designed for the contractor who may prefer a solid unit box for single and 2-gang installation. Single box has two knock-outs in each side, two in each beveled end. Equipped with reversible and sliding ears, and is adaptable for old and new work. Has rounded corners, drawn from 14 gauge steel.

Trade No.	Type	Dimensions, Inches Depth	Width	Length	No. of Gangs	Std. Pkg.	Wt.,Lbs. per 100	Price Each
094445	SR	2¼	2	3	1	100	68	$0.30
094446	SR	2¼	3¾	3	2	50	101	.50
094435	SS	2½	2	3	1	100	70	.30
094447	SS	2½	3¾	3	2	50	105	.50
094448	SS	2½	5½	3	3	50	140	.70

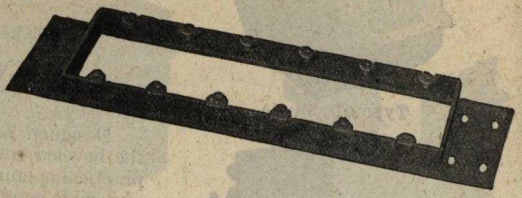
UNION SWITCH BOXES

SOLID ONE-PIECE BOXES

Made from Pressed Steel with One-piece Steel Covers

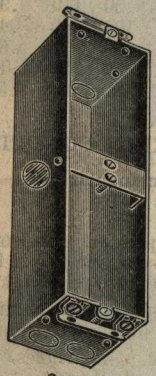


Box No. 304



Cover No. 326

Trade No.	Mfrs. No.	No. of Gangs	½-inch Knock-outs Each Side	½-inch Knock-outs Each End	½-inch Knock-outs In Bottom	¾-inch Knock-outs Each Side	¾-inch Knock-outs Each End	¾-inch Knock-outs In Bottom	Price per 100	Covers Trade No.	Covers Mfrs. No.	Covers Price per 100
57189	302	2	5	2	5	4	2	4	$60.00	57197	322	$30.00
57190	303	3	6	2	10	6	2	8	90.00	130654	323	45.00
57191	304	4	8	2	10	7	2	8	120.00	130655	324	60.00
57192	305	5	8	2	10	8	2	8	160.00	130656	325	75.00
57193	306	6	10	2	10	8	2	8	310.00	130657	326	145.00
57194	307	7	10	2	10	10	2	8	470.00	130658	327	260.00
57195	308	8	12	2	10	12	2	8	500.00	130659	328	290.00
57196	309	9	14	2	10	12	2	8	550.00	130660	329	330.00
.....	...	10	..	..	..	..	..	..	.....	130661	330	360.00



2-gang Tandem Box

Covers listed above are furnished with extra slotted screw holes plugged, so as to fit next smaller size box.

TANDEM SWITCH BOXES

For Rigid or Flexible Conduit

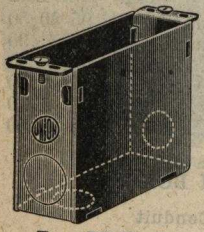
For old and new work to fit standard plates. Takes all makes of push button switches. Made in depths ranging from 1⅞ to 3½ inches. All boxes in 2 to 5 gangs made with solid sides, no partition between switches. Multiple tandems made to meet any requirements.

Trade No.	No. of Gangs	Price Each	Trade No.	No. of Gangs	Price Each
130651	2	$1.20	130662	5	$3.50
130652	3	1.70	130663	6	4.25
130653	4	2.60	130650	7	5.00

DOOR SWITCH BOXES

For Rigid or Flexible Conduit

A box for all standard makes of door switches. Made of 14-gauge steel and finished in black enamel, but when specified can be furnished sherardized coating at a small advance in price.



Type DS No. 1 Switch Box

Type DS No. 1.—For Perkins and Arrow E. Has two 11/16-inch knock-outs for flexible conduit and one ½-inch knock-out for rigid conduit. Switch centers 3¾ inches.

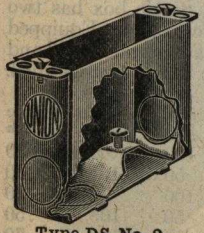
Type DS No. 2.—Same as above, with clamps.

Type DS No. 3.—For Diamond H Switch. Has two 11/16-inch knock-outs for flexible conduit and one ½-inch knock-out for rigid conduit. Switch centers 3 7/16 inches.

Type DS No. 4.—Same as above, with clamps.

Type DS No. 5.—For H. & H. Switch. Has two 11/16-inch knock-outs for flexible conduit and one ½-inch knock-out for rigid conduit. Switch centers 3 7/32 inches.

Type DS No. 6.—Same as above, with clamps.



Type DS No. 2 Switch Box

Trade No.	Type	Clamps	Dimensions, Inches Depth	Dimensions, Inches Length	Dimensions, Inches Width	Price Each
57178	DS-1	Without	2 5/8	3 9/16	1 3/16	$0.50
57179	DS-2	With	2 5/8	3 9/16	1 3/16	.65
57180	DS-3	Without	2 5/8	3¼	1 3/16	.50
57181	DS-4	With	2 5/8	3¼	1 3/16	.65
57182	DS-5	Without	3	3	1 3/16	.50
57183	DS-6	With	3	3	1 3/16	.65

H & H WALL CASES

NATIONAL ELECTRICAL CODE STANDARD



No. 901
with No. 911 Clamp
Entering Loom Knock-out
and Fastened Under
Clamp Screw

WALL CASES

The ears used in mounting the wall cases are reversible and the wall cases can be set flush in the walls that have already been plastered or can be mounted on the laths in wall not yet plastered, and in this latter case the ears have to be reversed. When specified, wall cases will be shipped with ears reversed.

Knock-out outlets are provided as follows: Four outlets in the bottom for 3/8-inch conduit, two at each end for 1/4-inch conduit.

All wall cases have screws in the bottom for fastening the No. 911 armored conduit clamps, so the shallow wall cases can be used on armored as well as non-metallic conduit work.

SHALLOW TYPE—DEPTH, 2 1/16 INCHES

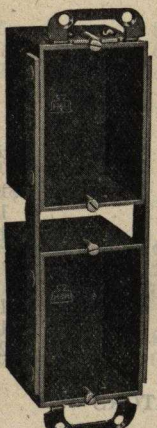
Horizontal Style

Trade No.	Mfrs. No.	No. of Switches	Dimensions Inches	Std. Pkg.	Wt., Lbs. Stk. Pkg.	Price Each
020849	901	1	2 x 3 x2 1/16	*	74	$0.25
020850	902	2	3 3/16 x 3 x2 1/16	*	65	.50
020851	903	3	5 5/8 x 3 x2 1/16	*	62	.75
020852	904	4	7 7/16 x 3 x2 1/16	*	65	1.00

For larger wall cases, for each switch add 1 3/16 inches, and 25 cents to price list.

Tandem Style

020857	912	2	2 1/8 x 6 5/8 x2 1/16	*	75	.50
020858	913	3	2 1/8 x10 1/4 x2 1/16	*	75	.75
020859	914	4	2 1/8 x13 7/8 x2 1/16	*	75	1.00
020860	915	5	2 1/8 x17 1/2 x2 1/16	*	75	1.25



No. 912

DEEP TYPE—DEPTH, 2 3/4 INCHES

Horizontal Style

046613	3031	1	2 x 3 x2 3/4	*	94	.28
036614	3032	2	3 3/16 x 3 x2 3/4	*	84	.56
036615	3033	3	5 5/8 x 3 x2 3/4	*	84	.82

For larger sizes add 1 3/16 inches to the width for each additional gang and 26 cents to the list price.

Tandem Style

036633	3042	2	2 1/8 x 6 5/8 x2 3/4	*	95	.56
036634	3043	3	2 1/8 x10 1/4 x2 3/4	*	95	.82

For each additional gang, add 3 5/8 inches to the height and 26 cents to the list price.

*100 single wall cases or their equivalent in gangs shall constitute a standard package.



No. 3047

WALL CASES FOR DOOR SWITCHES

A special wall case for door switches to be used with flexible non-metallic conduit, or with iron conduit with knock-out outlets for 5/8 and 7/8-inch conduit.

020848	3047	1	1 1/4 x 2 7/8 x2 3/4	30	20	.40

CONDUIT FASTENERS

Brass Fasteners for Holding Flexible Conduit in Wall Cases

Insert conduit through outlet in wall case. Force fastener over end of conduit, as shown in illustration; the teeth of fastener will engage the fabric.

Trade No.	Mrs. No.	Size of Conduit, Inches	Price per 100
020862	5007	1/4	$1.00
020863	5008	3/8	1.00



No. 5007

Clamps for Fastening Armored Conduit in Wall Cases

By using these clamps, shallow wall cases can be used on armored conduit work. They are small enough to go in a loom knock-out and lie flat on the bottom, taking up no room.

Trade No.	Mfrs. No.	Std. Pkg.	Price per 100
90005	911	100	$9.00



No 911

REALFLEX ARMORED CABLE



Realflex is a steel armored conductor which most satisfactorily combines real flexibility and adequate strength. The armor is made from the highest grade of galvanized steel wire, which presents a flattened exterior of neat, clean-cut design, making it possible to be fished through walls, under floors, around joists and posts with an absolute minimum of friction. There are no sharp edges to injure either the interior rubber covered wires or the user's hands.

The conductor used is high quality New Code insulated wire and the core of one copper wire is different in color from the other, thereby saving time and trouble in testing out.

Realflex is so flexible that it can be tied into a single or even a double knot of 3-inch diameter without the slightest injury to the armor. There is, however, no limpness embodied in its flexibility and it can be pushed or pulled without kinking, as easily as rigid conduit.

Realflex is made in a complete line of sizes, including twin-conductor, three-conductor, lead covered and armored cord. Lead covered Realflex is especially desirable for use wherever a moisture-proof conductor embodying extreme flexibility is required, as in packing plants, breweries, cold storage buildings, damp basements and mines.

STEEL ARMORED CONDUCTORS

Twin Conductors

Trade No.	Size B. & S.	Approx. Feet per Coil	Price, per 1000 Ft.
120011	14	150–250	$104.00
120012	12	150–250	135.00
120013	10	100–200	185.00

Three Conductors

120014	14	150–250	138.00
120015	12	150–250	170.00
120016	10	100–200	235.00

LEAD COVERED AND STEEL ARMORED CONDUCTORS

Twin Conductors

120017	14	100–200	164.00
120018	12	100–200	211.00
120019	10	100–150	255.00

Three Conductors

120020	14	100–150	222.00
120021	12	100–150	290.00
120022	10	100–150	325.00

ARMORED CORD

Twisted Conductors

120023	18	150–250	65.00
120024	16	150–250	80.00
120025	14	150–250	115.00

ARMORED RE-ENFORCED CORD

Twisted Conductors

120026	18	150–250	111.00
120027	16	150–250	125.00
120028	14	150–250	175.00

Prices on other sizes and types quoted on application.

SPRAGUE FLEXIBLE STEEL ARMORED CONDUCTORS

NATIONAL ELECTRICAL CODE STANDARD

Greenfield Flexible Steel Armored Conductors, which are covered by broad fundamental patents, while adapted to new building construction, find special favor on account of the ease with which they can be installed in finished buildings. The armor is composed of convex and concave galvanized metal strips, wound spirally upon each other and over the insulated conductors. A gasket is placed between the inner and outer metal strips, thus further rendering the conductor moisture-proof. Prices on larger sizes quoted on application.

TWIN CONDUCTORS, TYPE BX



Solid

Trade No.	Size B. & S.	Approx. Outside Diam. in Inches	Approx. Feet in Coil	Wt., Lbs. per 100	Price, per 1000 Ft.
048963	14	.630	150–250	42	$104.00
048964	12	.670	150–250	48	135.00
048965	10	.720	150–250	54	185.00
		Stranded			
048966	8	.830	100–150	80	235.00
048967	6	1.116	100	115	370.00
048967A	4	1.203	100	140	575.00

THREE CONDUCTORS, TYPE BX3



Solid

048968	14	.675	150–250	50	138.00
048969	12	.715	150–250	55	170.00
048970	10	.785	100–200	65	235.00
		Stranded			
048971	8	.890	100–150	95	325.00
048972	6	1.144	100	140	472.00

TWIN CONDUCTORS, TYPE BM



Solid, for Marine Work

This type of armored conductor is specially insulated for the wiring of vessels.

048973	14	.741	100–200	52	139.00
048974	12	.741	100–200	60	189.00
048975	10	.750	100–150	64	220.00

SINGLE CONDUCTORS, TYPE D



Solid

048976	14	.378	250	20	61.00
048977	12	.384	250	22	71.00
048978	10	.434	250	26	90.00
048979	8	.464	250	28	106.00
048980	6	.609	250	54	145.00
		Stranded			
048981	10	.450	250	23	95.00
048982	8	.469	250	28	115.00
048983	6	.631	250	54	160.00
048984	4	.717	200	63	205.00
048985	2	.783	200	71	266.00
048986	1	.900	100	98	315.00

SPRAGUE FLEXIBLE STEEL ARMORED CONDUCTORS

NATIONAL ELECTRICAL CODE STANDARD

TWIN CONDUCTORS, TYPE BXL



LEAD COVERED AND STEEL ARMORED

Solid

Trade No.	Size B. & S.	Approx. Outside Diam. in Inches	Approx. Feet in Coil	Wt., Lbs. per 100 Ft.	Price, per 1000 Ft.
049059	14	.730	100–200	68	$164.00
049060	12	.758	100–200	78	211.00
049061	10	.863	100–150	110	255.00
		Stranded			
049062	8	.978	100–150	136	345.00
049063	6	1.152	100	205	625.00

THREE CONDUCTORS, TYPE BXL-3



LEAD COVERED AND STEEL ARMORED

Solid

049064	14	.782	100–150	78	222.00
049065	12	.815	100–150	97	290.00
049066	10	.933	100–150	129	325.00
		Stranded			
049067	8	1.056	100–150	164	450.00

SINGLE CONDUCTORS, TYPE DL



LEAD COVERED AND STEEL ARMORED

Stranded

049068	10	.506	250	53	120.00
049069	8	.564	200	72	145.00
049070	6	.713	200	96	196.00
049071	4	.756	150	110	249.00
049072	2	.753	150	125	319.00
049073	1	.897	100	165	388.00

The flexible steel armored, lead covered conductors listed above are superior to any other class of wiring material for use in wet places, such as breweries, packing houses, cold storage buildings, coal breakers and the like, in which classes of work these materials are being extensively and satisfactorily used.

STEEL ARMORED FLEXIBLE CORD, TYPE E



049074	18	.414	250	20	65.00
049075	16	.447	250	22	80.00
049076	14	.635	250	38	115.00

STEEL ARMORED FLEXIBLE RE-ENFORCED CORD, TYPE EM



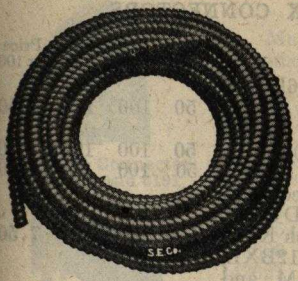
049077	18	.530	250	25	111.00
049078	16	.540	250	26	125.00
049079	14	.700	250	48	175.00

Prices on larger sizes quoted on application.

SPRAGUE FLEXIBLE STEEL CONDUIT AND COUPLINGS

GALVANIZED FINISH

GREENFIELD FLEXIBLE STEEL CONDUIT



Flexible Steel Conduit

Inside Diam. Inches	Single-strip Type: Trade No.	Outside Diam. Inches	Wt., Lbs. per 100 Ft.	Double-strip Type: Trade No.	Outside Diam. Inches	Wt., Lbs. per 100 Ft.	Feet per Coil	Price per 100 Ft.
5/16	061750	.476	18	061759	.503	21	250	$5.00
3/8	061751	.573	29	061760	.635	34	250	7.50
1/2	061752	.875	54	061761	.890	63	100	10.00
3/4	061753	1.062	68	061762	1.166	80	50	13.00
1	061754	1.359	114	061763	1.460	144	50	21.00
1 1/4	061755	1.625	138	061764	1.782	176	50	26.00
1 1/2	061756	1.875	182	061765	2.025	234	25–50	35.00
2	061757	2.375	252	061766	2.520	277	25–50	45.00
2 1/2	061758	3	280	.....	.....	...	25	52.00

CONDUIT COUPLINGS



Coupling for D. S. Conduit

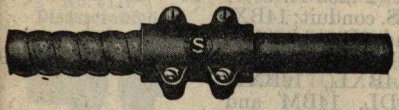


Coupling for S. S. Conduit

FLEXIBLE

For Single-strip and Double-strip Conduit

Trade No.	Mfrs. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
061767	6160*	5/16	10	100	18	$8.00
061769	6162	1/2	10	100	52	9.25
		For Double-strip Conduit				
57038	6062*	3/8	10	100	24	8.50
061785	6063	3/4	10	100	72	12.00
061786	6064	1	10	100	121	16.00
061787	6065	1 1/4	10	50	61	22.00
061788	6066	1 1/2	10	50	78	30.00
061789	6067	2	10	50	102	43.00
		For Single-strip Conduit				
57039	6161*	3/8	10	100	24	8.50
061770	6163	3/4	10	100	73	12.00
061771	6164	1	10	100	98	16.00
061772	6165	1 1/4	10	50	57	22.00
061773	6166	1 1/2	10	50	67	30.00
061774	6167	2	10	50	111	43.00
061775	6168	2 1/2	5	10	39	75.00



Nos. 6072 to 6077



Nos. 6173 to 6177

COMBINATION

For Double-strip and Single-strip and Rigid Conduit, for ½-inch only

061790	6072	1/2	10	100	45	12.50
		For Double-strip and Rigid Conduit				
061791	6073	3/4	10	100	74	16.00
061792	6074	1	10	100	111	21.00
061793	6075	1 1/4	10	50	54	30.00
061794	6076	1 1/2	10	50	82	40.00
061795	6077	2	10	50	104	60.00
		For Single-strip and Rigid Conduit				
061777	6173	3/4	10	100	66	16.00
061778	6174	1	10	100	97	21.00
061779	6175	1 1/4	10	50	71	30.00
061780	6176	1 1/2	10	50	81	40.00
061781	6177	2	10	50	101	60.00

In ordering couplings it is advisable to order one coupling to every coil of Greenfield Flexible Steel Conduit.

*These couplings are furnished with only two ears and two securance bolts.

SPRAGUE FLEXIBLE STEEL CONDUIT FITTINGS



Stamped Steel Box Connector

OUTLET AND JUNCTION BOX CONNECTORS

Trade No.	Mfrs. No.	Adapted for	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
084815	7118	10D, 12D and 14D Cable; 16E and 18E cord (½-inch K. O.)	50	100	17	$7.50
084816	7119	5/16-inch D. S. conduit; 8D. 16EM 18EM cord (½-inch K. O.)	50	100	16	7.50
084817	*7119½	5/16-inch S. S. conduit; (½-inch K. O.).	50	100	16	7.50
038469	7120	⅜-inch S. S. and D. S. conduit; 14BX, 12BX, 14BX3 and 6D cable; 14E and 14EM cord (½-inch K.O.)	50	100	12	7.50
038470	6121	10BX, 12BX3, 14BXL, 12BXL, 14BXL3, 4D, 6DL, 14BM and 12BM cable (½-inch K. O.)	50	100	13	9.00
038471	6122	10BX3, 12BXL3, 2D, 4DL, 2DL and 10BM cable (½-inch K. O.)	50	100	15	9.00
038472	7123	½-inch S. S. and D. S. conduit; 8BX, 8BX3, 10BXL, 8BXL, 10BXL3 and 1D cable (½-inch K. O.)	50	100	17	9.00
038473	6124	¾-inch S. S. conduit; 6BX and 8BXL3 cable (¾-inch K. O.)	25	100	33	12.00
038474	6124½	4BX, 6BX3 and 6BXL cable (1-inch K. O.)	20	100	43	18.00
038475	6125	1-inch S. S. conduit (1-inch K. O.)	20	100	39	18.00
038476	6126	1¼-inch S. S. conduit (1¼-inch K.O.)	20	100	49	25.00
038477	6127	1½-inch S. S. conduit (1½-inch K.O.)	20	100	65	35.00
038478	6128	2-inch S. S. conduit (2-inch K. O.)	10	50	48	55.00
038479	6129	2½-inch S. S. conduit (2½-inch K.O.)	5	25	43	75.00
038481	6131	¾-inch D. S. conduit (¾-inch K. O.)	25	100	31	12.00
038482	6132	1-inch D. S. conduit (1-inch K. O.)	20	100	48	18.00
038483	6133	1¼-inch D. S. conduit (1¼-inch K.O.)	20	100	53	25.00
038484	6133½	1½-inch D. S. conduit (1½-inch K.O.)	10	50	48	35.00
038485	6134	2-inch D. S. conduit (2-inch K. O.)	10	50	66	55.00



Malleable Iron Box Connector



Stamped Steel Panel Box Connector

PANEL BOX CONNECTORS

038499	6135	½-inch D. S. conduit; 8BX3, 10BXL, 8BXL, 10BXL3 and 1D cable (½-inch K. O.)	25	100	27	18.00
038500	6136	¾-inch D. S. conduit (¾-inch K. O.)	10	100	44	25.00
011255	6137	1-inch D. S. conduit (1-inch K. O.)	10	100	61	29.00
011256	6138	1¼-inch D. S. conduit (1¼-inch K.O.)	10	100	78	35.00
011257	6138½	1½-inch D. S. conduit (1½-inch K.O.)	10	50	58	50.00
011258	6139	2-inch D. S. conduit (2-inch K. O.)	10	50	75	65.00
038486	6140	⅜-inch S. S. and D. S. conduit; 14BX, 12BX, 14BX3 and 6D cable; 14E and 14EM cord (½-inch K. O.)	50	100	19	13.00
038487	6141	10BX, 12BX3, 14BXL, 12BXL, 14BXL3, 4D, 6DL, 14BM and 12BM cable (½-inch K. O.)	50	100	23	18.00
038488	6142	10BX3, 12BXL3, 2D, 4DL, 2DL and 10BM cable (½-inch K. O.)	50	100	27	18.00
038489	6143	½-inch S. S. conduit; 8BX, 8BX3, 10BXL, 8BXL, 10BXL3 and 1D cable (½-inch K. O.)	25	100	30	18.00
038490	6144	¾-inch S. S. conduit; 6BX and 8BXL3 cable (¾-inch K. O.)	20	100	41	25.00
038493	6144½	4BX, 6BX3 and 6BXL cable (1-inch K. O.)	10	100	53	30.00
038494	6145	1-inch S. S. conduit (1-inch K. O.)	10	100	49	30.00
038495	6146	1¼-inch S. S. conduit (1¼-inch K.O.)	10	100	67	40.00
038496	6147	1½-inch S. S. conduit (1½-inch K.O.)	10	50	48	50.00
038497	6148	2-inch S. S. conduit (2-inch K. O.)	10	50	50	70.00
038498	6149	2½-inch S. S. conduit (2½-inch K.O.)	5	25	45	85.00



Malleable Iron Panel Box Connector

*These connectors are stamped steel. All others are malleable iron.

Panel box connectors with an extra locknut may be used with cast iron boxes having a wall thickness too great for the above connectors.

Above prices include locknuts.

SPRAGUE FLEXIBLE STEEL CONDUIT FITTINGS



45-degree Connector Nos. 6190 and 6191



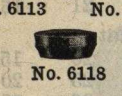
90-degree Connector Nos. 6192 and 6193



No. 6113 No. 6115



No. 6118







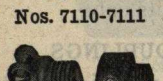
No. 6115 Disassembled



Nos. 7110-7111



Nos. 7112-7113



Nos. 7114-7115



Brass Terminal Bushing Lead Bushing

ANGLE BOX CONNECTORS

For Nos. 14BX, 12BX and 14BX3 Cable; 14E and 14 EM Cord

Malleable iron, hot galvanized finish. For flexible steel conduit and armored conductors.

Trade No.	Mfrs. No.	Size Conduit Inches	Degree Angle	Size K. O. Inches	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
038451	6190	..	45	½	20	100	28	$12.00
038453	6192	..	90	½	20	100	38	16.00
		For Single Strip and Double Strip Conduit						
038452	6191	½	45	½	20	100	31	15.00
038454	6193	½	90	½	20	100	44	20.00
143625	*6194	¾	45	¾	..	10	5	25.00
143626	*6194A	¾	90	¾	..	10	8	30.00
143627	*6195	1	90	1	..	10	9	60.00
143628	*6196	1¼	90	1¼	..	10	14	75.00
143629	*6197	1½	90	1½	..	10	19	100.00

*Specify whether connector is for single or double strip conduit.

INSULATED BRASS CONNECTORS

For Type E steel armored flexible cord.

Trade No.	Mfrs. No.	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
27836	6111	50	200	5	$8.00

Brass nipple, sleeve and locknut for No. 6115 when used with attachment plugs.

27820	6113	50	200	13	17.50

Connector for Nos. 16 and 18 Type E Cord with ⅞-inch nipple, locknut and cap.

038455	6115	50	200	10	10.00

Connector for Nos. 16 and 18 Type E Cord.

038458	6118	50	200	1	2.00

Brass cap for 6115.

SOCKET AND ROSETTE ADAPTERS

Galvanized finish. For steel armored flexible cord.

Trade No.	Mfrs. No.	Description	For Cord Size	Unit Pkg.	Std. Pkg.	Wt.,Lbs. Std.Pkg.	Price per 100
143630	7116	⅜-inch socket and squeeze connector.....	16&18E	50	100	12	$7.50

Nipple end provided with ⅜-inch thread; without locknut; will also fit all standard ⅜-inch threads.

143631	7117	⅜-inch socket adapter same as above.....	16&18EM	50	100	11	7.50
143632	7110	⅛-inch socket adapter fitted with No. 7116....	16&18E	50	100	23	17.50
143633	7111	⅛-inch socket adapter, fitted with No. 7117....	16&18EM	50	100	22	17.50
143634	7112	⅜-inch socket adapter, fitted with No. 7120....	14E	50	100	24	17.50
143635	7113	⅜-inch socket adapter, fitted with No. 6121....	14EM	50	100	26	17.50
143636	7114	Rosette adapter, fitted with No. 7116.....	16&18E	50	100	24	21.50
143637	7115	Rosette adapter, fitted with No. 7117.....	16&18EM	50	100	23	21.50

BRASS TERMINAL BUSHINGS

For flexible steel armored conductors.

Trade No.	Mfrs. No.	Description	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
038459	6080	For Nos. 14BX, 12BX, and 14E	100	200	8	$2.50
038460	6081	For Nos. 14BX3, 2BX3 and 10BX	100	200	7	4.75
038461	6082	For No. 10BX3	100	200	7	4.75
038462	6083	For No. 8BX	50	100	7	6.25
055053	6084	For No. 8BX3.....	50	100	7	6.75

LEAD BUSHINGS

For D. S. Type of Greenfield Flexible Steel Conduit.

Trade No.	Mfrs. No.	Size of Conduit Inches	Unit & Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100	Trade No.	Mfrs. No.	Size of Conduit Inches	Unit & Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
27822	6040	⅜	100	1	$0.90	27826	6044	1¼	25	2	$2.50
27823	6041	½	100	2	.95	27827	6045	1½	25	3	5.00
27824	6042	¾	50	2	1.30	27828	6046	2	25	4	7.50
27825	6043	1	50	2	1.70	....	....	....	....	....	....

T & B CONNECTORS



Hood Connector

HOOD CONNECTORS*

For Armored Conductors

Trade No.	Mfrs. No.	Size Inches	Std. Pkg.	Wt., Lbs. per 100	Price per 100
053069	200	⅜	100	13	$7.50
For Armored Lead Conductors					
053070	201	⅜A	100	13	7.50
For Flexible Metallic Conduit					
053071	202	½	100	15	9.00
053072	203	¾	100	19	12.00
053073	204	1	50	28	18.00
053074	205	1¼	50	44	25.00

⅜-inch takes No. 14 2-wire and No. 14 3-wire and No. 12 2-wire S. S. or D. S. conductors.
⅜-inch A takes No. 12 3-wire, No. 10 2-wire and No. 14 and No. 12 2-wire, leaded S. S. or D. S. conductors.
½-inch takes ½-inch S. S. or D. S. conduits.
¾, 1, and 1¼-inch take S. S. conduits only.



45° Hood Angle Connector

45° AND 90° HOOD ANGLE CONNECTORS*

For Armored Conductors

Trade No.	Mfrs. No.	Size Inches	Degree	Std. Pkg.	Wt., Lbs. per 100	Price per 100
053063	211	⅜	45	100	16	$12.00
053064	212	⅜	90	100	21	16.00
For Flexible Metallic Conduit						
053065	213	½	45	100	20	15.00
053066	214	½	90	100	25	20.00
053067	215	¾	45	50	26	25.00
053068	216	¾	90	50	28	30.00

⅜-inch takes No. 14 2 and No. 14 3-wire and No. 12 2-wire S. S. or D. S. conductors.
½-inch takes ½-inch S. S. or D. S. conduits.
¾-inch takes ¾-inch S. S. conduits only.



90° Hood Angle Connector

HOOD PANEL CONNECTORS*

For Armored Conductors

Trade No.	Mfrs. No.	Size Inches	Std. Pkg.	Wt., Lbs. per 100	Price per 100
053075	220	⅜	100	13	$13.00
For Flexible Metallic Conduit					
053076	221	½	100	20	18.00
053077	222	¾	100	24	25.00

⅜-inch takes No. 14 2 and No. 14 3-wire and No. 12 2-wire S. S. or D. S. conductors.
½-inch takes ½-inch S. S. or D. S. conduits.
¾-inch takes ¾-inch S. S. conduits only.



Hood Panel Connector

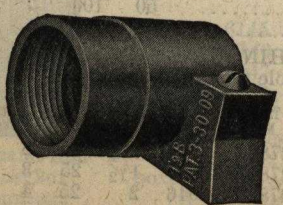
HOOD COMBINATION COUPLINGS

For connecting flexible and rigid metallic conduits, also for connecting flexible metallic conduit to outlet boxes by means of the T & B chase nipple. One-piece malleable iron galvanized. Cannot pull apart.

053078	230	½	100	19	12.50
053079	231	¾	100	29	16.00
053080	232	1	50	35	21.00
053081	233	1¼	50	43	30.00
096824	234	1½	50	75	40.00
096825	235	2	50	98	60.00

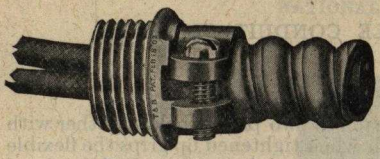
Nos. 234 and 235 are squeeze type.
½-inch takes S. S. or D. S. conduits.
¾, 1, 1¼, 1½ and 2-inch take S. S. conduit.

*A locknut attached to each connector is furnished free of cost.



Hood Combination Coupling

T & B CONNECTORS



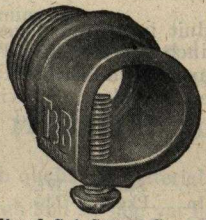
Squeeze Connector



Connector Attached to Socket



Squeeze Connectors Nos. 265 to 270



Inclined Set Screw Connector



Set Screw Connector



Standard Connector

SQUEEZE CONNECTORS

For Armored Cord—Nos. 18 and 16 S. S.

Trade No.	Mfrs. No.	Size Inches	Std. Pkg.	Wt., Lbs. per 100	Price per 100
53459	*250	¼	100	4	$7.50

For Armored Cord—Nos. 18 and 16 D. S.

53460	*251	¼	100	4	7.50

For Re-enforced Armored Cord—Nos. 18 and 16 S. S. or D. S.

53461	*252	5/16	100	4	7.50

For Armored Conductors

53454	253	⅜	100	9	7.50

For Flexible Metallic Conduit

53458	254	½	100	13	9.00
53462	255	¾	100	21	12.00
53463	256	1	50	25	18.00
53464	257	1¼	50	40	25.00
53465	258	1½	50	65	35.00
53466	259	2	50	86	55.00

The ¼ and 5/16-inch sizes have ⅜-inch (pipe size) threaded ends to fit standard sockets.

*No locknuts are furnished with Nos. 250, 251 and 252.

⅜-inch takes No. 14-2 and No. 14-3 wire and No. 12-2 wire S. S. or D. S. conductors. ¾, 1, 1¼, 1½, and 2-inch take S. S. conduits only.

45° AND 90° SQUEEZE CONNECTORS

For Armored Conductors

Trade No.	Mfrs. No.	Size Inches	Degree	Std. Pkg.	Wt., Lbs. per 100	Price per 100
53467	265	⅜	45	100	12	$12.00
53468	266	⅜	90	100	13	16.00

For Flexible Metallic Conduit

53469	267	½	45	100	16	15.00
53470	268	½	90	100	18	20.00
53471	269	¾	45	50	22	25.00
53472	270	¾	90	50	24	30.00

⅜-inch takes No. 14-2 and No. 14-3 wire and No. 12-2 wire S. S. or D. S. conductors.

½-inch takes ½-inch S. S. or D. S. conduits.

¾-inch takes ¾-inch S. S. conduits only.

INCLINED SET SCREW CONNECTORS

For Armored Conductors

Trade No.	Mfrs. No.	Size Inches	Std. Pkg.	Wt., Lbs. per 100	Price per 100
53473	240	⅜	100	8	$7.50

SET SCREW CONNECTORS

For Armored Conductors

53474	243	⅜	100	12	7.50

For Flexible Metallic Conduit

58215	244	½	100	13	9.00
58217	245	¾	100	18	12.00
58219	246	1	50	32	18.00
58221	247	1¼	50	46	25.00

Locknuts furnished with all above connectors without charge.

STANDARD CONNECTORS

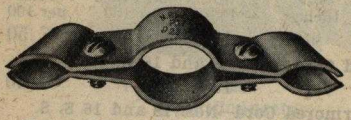
To install, loosen screw (thereby forcing wedge down), slip through hole in box, insert cable and tighten up screw which will clamp cable and fasten connector in box in one operation. Do not require locknut. Can be used in any box having ⅞-inch hole.

For Armored Conductors

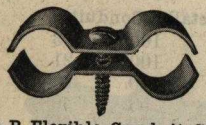
58223	280	⅜	100	10	7.50

Especially designed for use with Nos. 160 and 161 boxes.

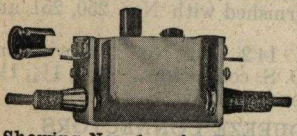
FLEXIBLE CONDUIT CLAMPS AND BUSHINGS



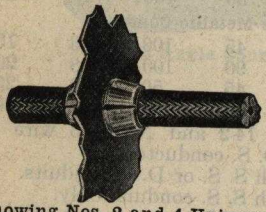
Type A Flexible Conduit Clamp



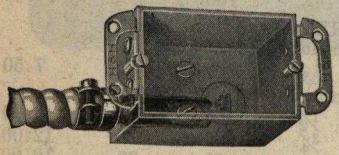
Type B Flexible Conduit Clamp



Showing Nos. 1 and 3 Universal Bushings Installed



Showing Nos. 2 and 4 Universal Bushings Installed





H & H Conduit Clamp



Conduit Fastener

FLEXIBLE CONDUIT CLAMPS

Type A

This clamp is made in two pieces, held together with machine screw which when tightened up grips the flexible conduit and the gas pipe, and being installed back of plaster line, prevents any displacement of the conduit.

Trade No.	Description	Price per 1000 Pairs
89998	3/8-in. combination clamp, for 3/8-in. gas pipe	$40.00
89999	1/2-in. combination clamp, for 1/2-in. gas pipe	40.00

Type B

This clamp consists of two members held together by a wood screw which is fastened directly to the woodwork at all outlets.

90000	Straight electric work.....	25.00

UNIVERSAL BUSHINGS

For holding flexible conduit in switch boxes, outlet boxes and all 5/8-inch and 7/8-inch knock-outs: This is a one-piece bushing, having tapered ends which allow it to be quickly pushed or pulled into place. It is installed or removed without the use of any tools and without injury to the tubing or box.

Trade No.	Mfrs. No.	Size of K. O., In.	Size of Tubing, In.	Std. Pkg.	Wt. Lbs.	Price per 1000
90001	1	5/8	1/4 and 5/16	100	....	$30.00
90002	2	7/8	1/4 and 5/16	100	....	35.00
90003	3	5/8	7/32	100	....	30.00
90004	4	7/8	7/32	100	....	35.00

H & H CONDUIT CLAMPS

By the use of this clamp it is possible to use H & H Shallow Wall Cases on flexible metallic conduit installations. This clamp obviates the necessity of carrying two types of boxes in stock, one for flexible non-metallic and one for flexible metallic conduit installations.

Trade No	Mfrs. No.	Std. Pkg.	Price Each
90005	911	100	$0.09

CONDUIT FASTENERS

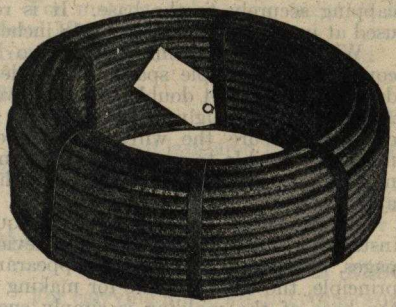
Brass Fasteners for Holding Flexible Conduit in Wall Cases

Trade No.	Mfrs. No.	Size of Conduit, Inches	Price per 100
020862	5007	1/4	$1.00
020863	5008	3/8	1.00

Insert conduit through outlet in wall cases. Force fastener over end of conduit as shown in illustration; the teeth of fastener will engage the fabric.

NON-METALLIC FLEXIBLE CONDUIT

NATIONAL ELECTRICAL CODE STANDARD



All non-metallic flexible conduits are similar in that they are highly flexible, thoroughly water and fireproof, of high insulating properties, and form an excellent protection to wires and cables.

Non-metallic flexible conduit is composed of closely woven canvas, which furnishes a firm, slippery raceway for the fishing of wires. To this lining is cemented a layer of spirally wound fiber strip, which acts as the framework of the tube. Over this framework is a tightly woven envelope of cotton, which, in turn, is coated with a compound containing a large percentage of finely divided mica.

It is moisture-proof and stands a very severe fire test. It is regularly examined and labeled by the Underwriters' Laboratories and each length is fished before leaving the factory.

A FEW PROMINENT CHARACTERISTICS OF NON-METALLIC FLEXIBLE CONDUIT

High quality of material and insulating compounds.

Tough and strong, yet flexible.

Regularity of inside diameter.

Smooth and firm inside surface, no obstructions, easy fishing of wires.

Economical to install.

No splitting and pulling apart. The size of the interior diameter remains equal and circular throughout the runs, or turns, and curves of short radius.

Prices Effective August 1, 1913

Trade No.	Inside Diam. Inches	Feet to Coil	Wt., Lbs. per 1000 Feet	Price per Foot
16762	7/32	250	53	$0.05½
027321	¼	250	57	.06
027322	⅜	250	76	.09
027323	½	200	92	.12
027324	⅝	200	115	.15
027325	¾	150	137	.18
027326	1	100	225	.25
027327	1¼	100	300	.33
027328	1½	Odd lengths	340	.40
027329	1¾	Odd lengths	450	.47
027330	2	Odd lengths	460	.55

Size 7/32-inch is .05 inch larger than nominal size.

Sizes ¼-inch to 1-inch are .07 inch larger than nominal size.

Sizes 1¼-inch to 2-inch are .125 inch larger than nominal size.

NATIONAL METAL MOLDING



No. 222



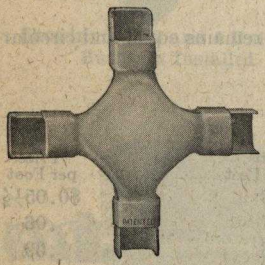
No. 223



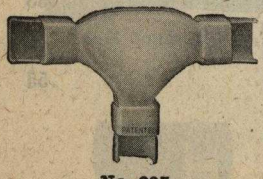
No. 244



No. 255



No. 234



No. 235

No. 222 SYSTEM

The construction of No. 222 National Metal Molding is distinctive, yet simple, and permits of especially easy installation. It consists of a base, capping and spring clips, which latter hold the capping securely to the base. It is recommended that these be used at intervals not exceeding 18 inches.

While designed primarily for two No. 14 single braid rubber covered wires, ample space is provided to accommodate No. 14 duplex, two No. 14 double braid or two No. 12 single braid wires. All of these fit snugly in the base and it is unnecessary to hold or otherwise secure the wires before the capping is placed. This makes it possible to install the base and fittings, lay in the wires, make all wire connections and test the entire installation before applying the capping.

Comparatively few fittings are required to make a complete installation, and these, and the devices listed in the following pages, are simple and neat in appearance. Through a snap-bond principle, the use of screws for making connections is unnecessary; the base of the molding is simply snapped into the base of the fittings and held securely, forming a perfect electrical bond.

A decided advantage of this molding is that it may be installed as an independent system or as an extension of or in combination with a No. 333 National Metal Molding System. No. 333 Molding provides ample space for three wire circuits or for four No. 14 single braid wires, both of which it is frequently advisable to install in a single line. Fittings for connecting a No. 222 System to a No. 333 System, conduit, armored conductor, wood molding and open work systems are listed in the following pages.

Molding is shipped in 8-foot 4-inch lengths; two clips are furnished with each length. Base of molding is punched and countersunk for No. 6 flat head wood screws or toggle bolts of corresponding size, at spacings of about 25 inches. Base, however, should be secured to surface at not exceeding 4 inches from point of connection to all fittings.

No. 222 molding is easily cut by simply notching top edges and bottom with a file and bending *away* from the edges. No special tools are required, but the use of a No. 318 punch, with interchangeable dies, is recommended where necessary to provide additional holes for support.

MOLDING

Trade No.	Mfrs. No.	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price, per 100 Ft.
108602	222	100 ft.	1000 ft.	250	$6.50

SHERARDIZED FITTINGS

SCHEDULE R
Spring Clips

For securing capping of No. 222 metal molding to base. Should be used on runs of molding at intervals not exceeding 18 inches.

Trade No.	Mfrs. No.	For Use with Molding No.	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
108603	223	222	100	1000	10	$0.80

Base Couplings

For use in connecting two lengths of No. 222 molding. Connection is made by simply snapping the base of the molding into the base of the coupling and applying a spring clip over the joint.

108604	244	222	20	100	7	2.50

Ground Clamps

An exceedingly simple and effective fitting for grounding a No. 222 system.

108605	255	222	10	100	7	4.00

Crosses

Consists of a base and cap. Ample space is provided for making splices. No screws are required to connect the molding, base of which is simply snapped into the base of the fitting, a perfect snap bond resulting.

108606	234	222	10	100	45	20.00

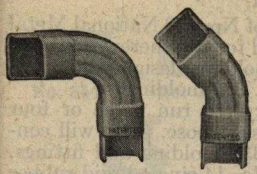
Tees

Design is similar to that of the cross, and connections are made on the same snap bond principle. Ample space is provided for making splices.

108607	235	222	20	100	31	14.00

NATIONAL METAL MOLDING

SCHEDULE R



No. 236 No. 237

SHERARDIZED FITTINGS

90° FLAT ELBOWS

For making right angle turns of lines of No. 222 National Metal Molding.

Trade No	Mfrs. No.	For Use with Molding No.	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
121837	236	222	20	100	11	$8.00

45° FLAT ELBOWS

Used where it is desired to make a turn at an angle of 45 degrees.

121838	237	222	10	100	10	8.00



No. 238

INTERNAL ELBOWS

To continue a line inside corners, or from walls to ceiling.

121839	238	222	10	100	11	8.00



No. 239

EXTERNAL ELBOWS

For carrying a line around corners or around beams and girders.

121840	239	222	10	100	11	8.00



No. 241

JUNCTION BOXES

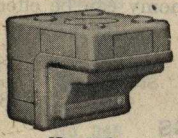
Four molding twistouts in sides and ½-inch conduit knockout in bottom. Cap is secured to base without use of screws; simply apply and give slight turn. With No. 222 molding, use No. 277 bushing; with No. 333, use No. 279 bushing.

121841	241	222 or 333	10	100	26	15.00

CORNER AND TWIST BOXES

Six molding twistouts in sides and ½-inch conduit knockout in back. Designed as a distribution box or for changing plane of molding lines. With No. 222 molding, use No. 277 bushing; with No. 333, use No. 279 bushing.

121842	276	222 or 333	10	100	34	18.00



No. 276

BUSHINGS

Must be used in making entry of No. 222 molding into fittings and devices having twistouts designed primarily for this molding. Connections are made without the use of screws. Base is provided with a flanged tongue which fits into slots in the fittings and devices.

121843	277	222	20	100	9	3.00



No. 277

No. 278 REDUCING BUSHINGS

For connecting No. 222 molding to fittings designed primarily for use with No. 333 molding. Slot is provided for connecting to bases of these fittings.

121844	278	222	10	100	9	3.00



No. 278

No. 279 REDUCING BUSHINGS

For connecting No. 333 molding to fittings and devices designed primarily for use with No. 222 molding. Applied to fittings or devices in same manner as No. 277.

121845	279	333	10	100	9	3.00



No. 279

COMBINATION COUPLINGS

For use in connecting either Nos. 222 or 333 two wire molding systems to wood molding or open work systems. An exceedingly neat and simple fitting, easily applied.

121846	269	222 or 333	10	100	20	17.00



No. 269

BOX CONNECTORS

Used to connect No. 222 molding to panel or junction boxes having ½-inch knockouts. No screws are required, the molding and capping fitting tightly into the opening provided. This connector, in combination with a ½-inch conduit coupling is also used in connecting No. 222 molding to rigid conduit.

121847	301	222	20	100	13	12.00



No. 301

SPANNER STRIPS

For attaching canopy type devices at conduit box outlets, either directly to box cover lugs or where open covers are used. No. 290 is for use at 3-inch conduit box outlets. No. 291 is for use at 4-inch conduit box outlets.

121848	290	222	10	100	19	6.00
121849	291	222	10	100	19	6.00

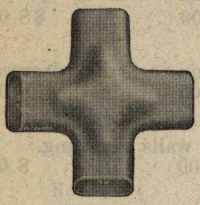


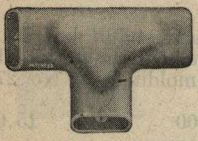
No. 290 and 291

NATIONAL METAL MOLDING



No. 333


No. 334

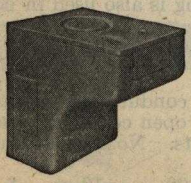

No. 335


No. 336


No. 437


No. 337


No. 338


No. 376

No. 333 SYSTEM

There has been no change in the design of No. 333 National Metal Molding nor in that of the fittings designed for use therewith. Nor is it intended or expected that No. 222 molding, designed for two-wire work only, will entirely supersede No. 333 molding.

It is frequently desirable, or necessary, to run three or four wires in a single line of molding. For this purpose, there will continue to be a large demand for the No. 333 molding and fittings. Ample space is provided therein for four No. 14 single braid rubber covered wires or for three No. 14 or three No. 12 single or double braid rubber covered wires. Necessary and simple fittings for interconnecting Nos. 222 and 333 systems are listed and described in following pages.

No. 333 molding consists of a base and capping, which latter snaps securely on to the base. Connections to fittings and devices are made by means of the well known screw and key-hole slot principle. Connections to fittings and devices designed primarily for use with No. 222 molding are made by means of the No. 279 bushing. The base of the molding is secured to the base of the bushing by means of the screw and key-hole slot principle. A further bond is provided, however, by the fact that the capping of No. 333 molding snaps securely into the base of the bushing. The bushing is connected to the fitting or device by means of the flanged tongue and slot as heretofore described.

Molding and capping is shipped unassembled, but held together by clips in lengths of 8 ft. 4 in. Each end of each length of base is provided with a key-hole slot for connecting to fittings and devices. Three additional holes are punched and countersunk for No. 8 flat head wood screws or toggle bolts of corresponding size.

While no special tools are required for installation, the use of the No. 418 punch, with interchangeable dies and the No. 422 shear is recommended, as a considerable labor economy can be effected thereby.

MOLDING

Trade No.	Mfrs. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price per 100
040309	333	100 ft.	1000 ft.	400	$8.00

SHERARDIZED FITTINGS

SCHEDULE R

Crosses

Cap is recessed to provide ample space for splices. Screws for making connection to molding are upset to prevent their falling out.

Trade No.	Mfrs. No.	For Use With Molding No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price per 100
040311	334	333	30	120	26	17.00

Tees

Design similar to that of the cross. Recessed cover provides ample space for splices.

040312	335	333	30	120	23	14.00

90° Flat Elbows

A simple fitting for making right angle turns. Connecting screws are upset to prevent their falling out.

040313	336	333	30	240	30	11.00

45° Flat Elbows

Used where it is desired to make a 45-degree turn of a line of No. 333 molding.

58561	437	333	20	100	7	11.00

External Elbows

For carrying a line of No. 333 molding around corners or beams and girders.

040314	337	333	30	60	8	11.00

Internal Elbows

Used for carrying a line of No. 333 molding from wall to ceiling or inside corners.

040315	338	333	30	120	12	11.00

Corner Boxes

Provided with ½-inch conduit knockout in back and four molding twistouts in sides. With No. 333 molding use No. 377 bushing; with No. 222, use No. 278 bushing.

072999	376	222 or 333	10	20	8	25.00

NATIONAL METAL MOLDING

SCHEDULE R


No. 344


No. 436

SHERARDIZED FITTINGS

BASE COUPLINGS

For connecting two lengths of No. 333 molding. Connecting screws, for use in key-hole slots, are upset to prevent falling out.

Trade No.	Mfrs. No.	For use with Molding No.	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
040310	344	333	50	500	15	$2.50


No. 355

FITTING CONNECTORS

Used for making close connection of two fittings or devices.

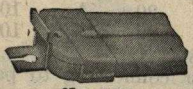
43222	436	333	50	250	4	1.50


No. 377

GROUND CLAMPS

A simple but effective fitting for grounding a No. 333 system.

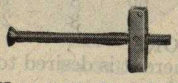
074989	355	333	20	40	2	6.00


No. 433

CLAMP BUSHINGS

For connecting No. 333 molding to fittings and devices having twistouts designed primarily therefor.

072998	377	333	50	200	8	3.50


Nos. 419A, B and C

DOUBLE CLAMP BUSHINGS

For connecting two lines of No. 333 molding to fittings and devices having twistouts designed primarily for this molding.

43223	433	333	10	100	10	12.00

TOGGLE BOLTS

Designed especially for use with National Metal Moldings. No. 419A is $\frac{1}{8}$x4 inches; No. 419B, $\frac{3}{16}$x4 inches; No. 419C, $\frac{1}{4}$x4 inches.

074993	419A	222	50	100	4	7.50
074994	419B	333	50	100	6	8.50
074995	419C	333	50	100	8	9.00


Nos. 420A, B and C

CONE HEAD TOGGLE BOLTS

Designed especially for fastening either Nos. 222 or 333 molding to metal or tile ceilings. No. 420A, $\frac{5}{32}$x2 inches; No. 420B, $\frac{5}{32}$x3 inches; No. 420C, $\frac{5}{32}$x4 inches.

074996	420A	222 or 333	100	500	5	3.00
074997	420B	222 or 333	100	500	7	3.35
074998	420C	222 or 333	100	500	9	3.70


No. 421

EXPANSION SHIELDS

Used in conjunction with flat head wood screws for fastening molding and fittings to concrete or brick surfaces.

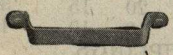
074992	421	222 or 333	100	100	2	6.50


No. 345

SINGLE PLAIN CLAMPS

For use in fastening molding to uneven surfaces.

074990	345	333	100	1000	10	.75


No. 354

DOUBLE PLAIN CLAMPS

For fastening two lines of molding to all surfaces.

074991	354	333	50	100	3	1.50


No. 434

SINGLE BASE PLATE CLAMPS

Especially for use on uneven plastered surfaces.

43273	434	333	100	1000	22	3.60


No. 435

DOUBLE BASE PLATE CLAMPS

For supporting two lines of molding to uneven plastered surfaces.

43274	435	333	50	200	8	4.50


No. 425

PLAIN STRAP CLAMPS

For use where the surfaces over which molding is run are so uneven that the capping cannot be made to stay snapped to base.

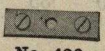
43267	425	333	100	1000	10	.75


No. 428

BASE STRAP CLAMPS

To be used in same manner as No. 425 except that it is designed to also support the molding as it is punched and countersunk for a No. 8 flat head wood screw or toggle bolt of corresponding size.

43272	428	333	100	1000	8	1.50


No. 426

TWO LINE SUSPENSION STRIPS

For supporting two parallel runs of molding on concrete or brick surfaces.

43213	426	222 or 333	50	100	3	4.00

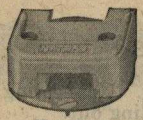

No. 427

THREE LINE SUSPENSION STRIPS

For use in supporting three parallel lines of molding.

43214	427	222 or 333	20	50	5	5.50

NATIONAL METAL MOLDING


No. 369

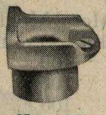

No. 404


No. 367


No. 401


No. 417


No. 402


No. 403

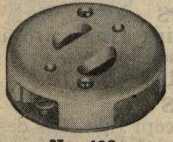

No. 405


No. 415


No. 416


No. 411


No. 414


No. 423


No. 424

SCHEDULE R

SHERARDIZED FITTINGS

For Use With No. 333 National Metal Molding

WOOD MOLDING COUPLINGS

For connecting to existing installations of wood molding, either in a straight line or at right angles.

Trade No.	Mfrs. No.		For Use with Molding No.	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
43266	369		333	10	20	4	$15.00

OPEN WORK COUPLINGS

For two-wire work, use with No. 367 covers; for three wire circuits, with No. 368 cover.

074988	404		333	10	20	7	18.00

OPEN WORK COUPLING COVERS

For use with No. 404 open work couplings.

074986	367	2-wire	333	10	20	4	10.00
074987	368	3-wire	333	10	20	4	10.00

BOX CONNECTORS

Furnished complete with locknuts. For connecting to panel cabinets or other boxes having conduit knockouts.

071174	401	½-in.	333	30	60	8	15.00
43261	401A	¾-in.	333	10	20	3	20.00

ANGLE BOX CONNECTORS

For use in the same manner as No. 401 where it is desired to run the molding at right angles from the knockouts.

071177	417	½-in.	333	20	40	8	18.00
43268	417A	¾-in.	333	10	20	4	22.00

CONDUIT COUPLINGS

For connecting molding to rigid conduit as in passing through floors.

071175	402	½-in.	333	30	60	10	15.00
43262	402A	¾-in.	333	10	20	3	20.00

ANGLE CONDUIT COUPLINGS

Used same as No. 402 but to change direction of the line.

071176	403	½-in.	333	20	40	8	18.00
43263	403A	¾-in.	333	10	20	4	22.00

CONDUIT COUPLINGS

For running a line of molding at right angles from a line of conduit.

071178	405	½-in.	333	10	20	15	35.00
43264	405A	¾-in.	333	5	10	10	40.00

RIGHT-HAND CONDUIT COUPLINGS

For connecting to ½-inch rigid conduit and changing direction to the right.

43270	415		333	10	50	9	18.00

LEFT-HAND CONDUIT COUPLINGS

For connecting to ½-inch rigid conduit and changing direction to the left.

43271	416		333	10	50	9	18.00

CONDUIT COUPLINGS

For tapping from the back of a line of molding to rigid conduit, as from a ceiling to the floor above.

071179	411	½-in.	333	10	20	6	25.00
43265	411A	¾-in.	333	10	10	4	30.00

CABLE CONNECTORS

For connecting armored conductors to molding systems. In making such connections, this fitting must be used with a No. 341 junction box or some similar fitting having twistouts.

43221	414		333	10	20	3	20.00

SUB-BASES

Base for Sub-base Devices for installing devices at intersecting lines of molding. Base plate has one opening and three molding twistoffs.

58551	423		222 or 333*	10	100	35	20.00

ANGLE SUB-BASES

Used in the same manner as No. 423.

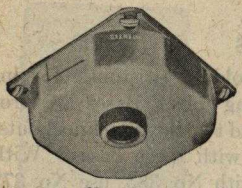
58552	424		222 or 333*	10	100	40	30.00

*With No. 222 molding use No. 278 bushing; with No. 333, no bushing is required.

NATIONAL METAL MOLDING

SCHEDULE R

SHERARDIZED FITTINGS FOR USE WITH NATIONAL METAL MOLDINGS

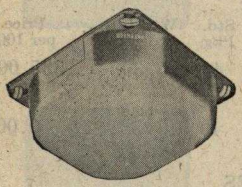


No. 339

CORD DROP BOXES

Cover is provided with eyelet type bushing for re-enforced cord. Has four molding twistouts in sides and ½-inch conduit knockout in bottom. Cover screws are upset and do not have to be removed as heads are rectangular and pass through slots in cover. With No. 222 molding, use No. 278 bushing; with No. 333, use No. 377 bushing.

Trade No.	Mfrs. No.	For Use with Molding No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price per 100
43201	339	222 or 333	20	60	20	$25.00



No. 341

JUNCTION BOXES

Same in all respects as No. 339 except that it is for use as a junction box only. With No. 222 molding, use No. 278 bushing; with No. 333, use No. 377 bushing.

075226	341	222 or 333	20	120	39	25.00

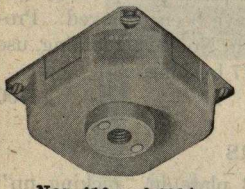


Nos. 342 and 342R

SWITCH BASES

Same general design as Nos. 339 and 341. Screw centers are of the proper spacing for mounting all standard snap switches; also for mounting sub-base type of devices. Furnished complete with screws for mounting switches. With No. 222 molding, use No. 278 bushing; with No. 333, use No. 377 bushing.

		10-ampere Size				
075227	342	222 or 333	20	120	35	25.00
		5-ampere Size				
43202	342R	222 or 333	20	120	35	25.00

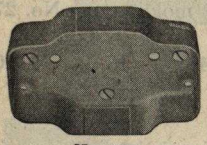


Nos. 410 and 410A

FIXTURE BOXES

Covers are provided with special tapped hard fiber bushings, making these complete outlets for lighting fixtures. Otherwise similar to No. 339. With No. 222 molding, use No. 278 bushing; with No. 333, use No. 377 bushing.

		Bushing Tapped for ⅛-inch Gas Pipe				
43203	410	222 or 333	10	100	40	35.00
		Bushing Tapped for ⅜-inch Gas Pipe				
43204	410A	222 or 333	10	100	40	35.00



No. 375

JUNCTION BOXES

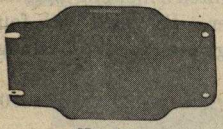
To be used in conjunction with special covers Nos. 378, 379, 380, 381 and 383. Provided with four molding twistouts. With No. 222 molding, use No. 278 bushing; with No. 333, use No. 377 bushing.

072994	375	222 or 333	20	120	30	20.00

JUNCTION BOX COVERS

A plain blank cover for use in conjunction with No. 375 box.

072993	383	.....	20	40	4	5.00

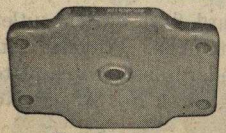


No. 383

PORCELAIN COVERS

Drop cord covers for use in conjunction with No. 375 junction box.

		One-hole				
072989	378	.....	10	40	10	10.00
		Two-hole				
072990	379	.....	10	40	10	10.00
		Three-hole				
072991	380	.....	10	40	10	10.00
		Four-hole				
072992	381	.....	10	40	10	10.00

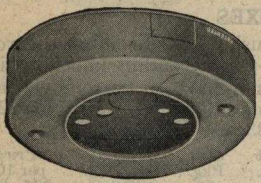


Nos. 378-381

NATIONAL METAL MOLDING

SCHEDULE R

SHERARDIZED FITTINGS FOR USE WITH NATIONAL METAL MOLDINGS

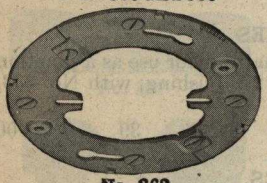


Nos. 365 and 366

CANOPY BASES

Standard canopy bases, with four molding twistouts, for installing fixtures on straight metal molding jobs. Bases are provided with one ½-inch conduit knockout and two flextube knockouts. Any standard fixture stud may be used with these bases. With No. 222 molding, use No. 278 bushing; with No. 333, use No. 377 bushing.

Trade No.	Mfrs. No.	For use with Molding No.	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
		4½-inch Diameter				
064747	365	222 or 333	10	40	30	$35.00
		6-inch Diameter				
064748	366	222 or 333	10	40	53	50.00



No. 363

ADAPTER PLATES

For use with No. 363B cover in "picking up" and extending circuits from fixture outlets without removing or disturbing the fixture. Plate is arranged with slots and holes for fastening to any 3 or 4-inch outlet box. A special yoke is also furnished for fastening to "open" covers.

064751	363	222 or 333	10	60	20	25.00



No. 363A

BLANK COVERS

For use in conjunction with No. 363 plate in "picking up" circuits at old outlets where the fixtures have been removed. Provided with four molding twistouts. With No. 222 molding, use No. 278 bushing; with No. 333, use No. 377 bushing.

064749	363A	222 or 333	10	20	8	15.00



No. 363B

SPLIT COVERS

For use in conjunction with No. 363 plate in "picking up" circuits at fixture outlets without removal of fixture. Provided with four molding twistouts. With No. 222 molding, use No. 278 bushing; with No. 333, use No. 377 bushing.

064750	363B	222 or 333	10	40	18	17.00

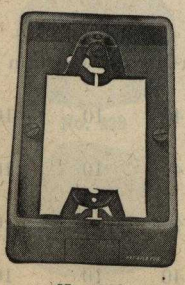


No. 438

SWITCH BOXES

This is a complete flush switch outlet consisting of a special shallow type flush switch box on which is mounted a molding adapter. All standard flush plates will fit this adapter. Provided with four molding twistouts. With No. 222 molding, use No. 278 bushing; with No. 333, use No. 377 bushing.

43258	438	222 or 333	10	20	20	40.00



No. 441

FLUSH SWITCH ADAPTERS

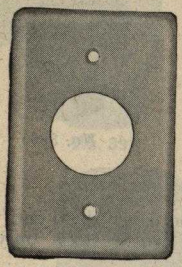
For extending circuits from any standard flush switch outlet. May be mounted on any standard flush switch box. Provided with four molding twistouts. Will take any standard flush switch plate. With No. 222 molding, use No. 278 bushing; with No. 333, use No. 377 bushing.

43257	441	222 or 333	10	100	34	27.00

NATIONAL METAL MOLDING

SCHEDULE R

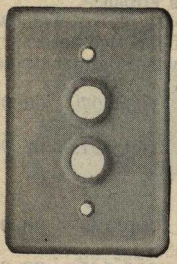
SHERARDIZED FITTINGS FOR USE WITH NATIONAL METAL MOLDINGS



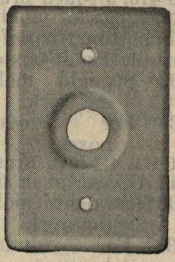
No. 447



No. 448



No. 451



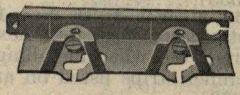
No. 461



No. 442



No. 443



No. 444



No. 445



No. 446

FLUSH PLATES

Furnished in the sherardized finish only, and of the types illustrated and listed. Standard in all respects, although especially designed for metal molding work.

Trade No.	Mfrs. No.	Style	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
		Plug Type				
43255	447	Single	10	100	15	$12.00
		Blank Type				
43256	448	Single	10	100	15	12.00
		Push Type				
43249	451	Single	10	100	16	12.00
43250	452	Two-gang	10	50	16	24.00
43251	453	Three-gang	10	25	13	36.00
		Rotary Type				
43252	461	Single	10	100	17	12.00
43253	462	Two-gang	10	50	16	24.00
43254	463	Three-gang	10	25	14	36.00

FLUSH SWITCH ADAPTERS

Double Split Type

For use in the same manner as No. 441 except for gang work. In conjunction with spacers, as many gangs as may be desired may be built up. All standard flush plates will fit these combinations. With No. 222 molding use No. 278 bushing; with No. 333, use No. 377 bushing.

Trade No.	Mfrs. No.	For use with Molding No.	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
43259	442	222 or 333	10	100	50	$55.00

SINGLE SWITCH ADAPTER SPACERS

For use with No. 442 split type flush switch adapter. While designed primarily for converting this into a three-gang adapter, may be used in making up other combinations. With No. 222 molding use No. 278 bushing; with No. 333, use No. 377 bushing.

Trade No.	Mfrs. No.	For use with Molding No.	Unit Pkg. Pairs	Std. Pkg. Pairs	Wt., Lbs. Std. Pkg.	Price per 100 Pairs
43260	443	222 or 333	10	100	13	$20.00

TWO-GANG SWITCH ADAPTER SPACERS

Used in such combinations as desired, in conjunction with No. 442 adapter, in building up gangs. With No. 222 molding use No. 278 bushing; with No. 333, use No. 377 bushing.

69272	444	222 or 333	4	20	6	40.00

THREE-GANG SWITCH ADAPTER SPACERS

For building No. 422 adapter into gangs. May be used in such combinations as desired. With No. 222 molding use No. 278 bushing; with No. 333, use No. 377 bushing.

69273	445	222 or 333	2	4	1	60.00

FOUR-GANG SWITCH ADAPTER SPACERS

For building up gang combinations as desired, in conjunction with No. 442 adapter. With No. 222 molding use No. 278 bushing; with No. 333, use No. 377 bushing.

69274	446	222 or 333	2	4	2	80.00

NATIONAL METAL MOLDING DEVICES

SCHEDULE X



No. 356


No. 474


Nos. 476 and 472
Nos. 477 and 473



No. 399

KEYLESS RECEPTACLES

No. 356, Sherardized

Base plate permits of its use for either continuous or "dead end" work. Shipped "dead end." For continuous work, it is only necessary to twist off blanking ear.

Trade No.	Mfrs. No.	For Use with Molding No.	Description	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
075221	356	333	.....	10	100	39	$38.00



No. 399B

Nos. 474 and 475, 3½-inch Brush Brass Finish

Provided with four openings for molding. Base of No. 474 has four flextube knockouts in bottom; that of No. 475 has two necessary openings for wires for installation at box outlets with spanner strips.

85027	474	222 or 333*	Straight molding work....	1	100	97	60.00
85026	475	222 or 333*	For conduit boxes.....	1	100	97	62.00



No. 575B

Nos. 470 and 471, 4½-inch Brush Brass Finish

Same as Nos. 474 and 475 except in size.

85031	470	222 or 333*	Straight molding work....	1	100	145	90.00
85030	471	222 or 333*	For conduit boxes.....	1	100	145	92.00

Nos. 476 and 477, 3½-inch All Porcelain

Bases are the same as those furnished with Nos. 474 and 475 nd the receptacles are installed in the same manner.

85029	476	222 or 333*	Straight molding work....	1	100	100	50.00
85028	477	222 or 333*	For conduit boxes.....	1	100	100	52.00



No. 571B

Nos. 472 and 473, 4½-inch All Porcelain

Same as Nos. 476 and 477, except in size.

85033	472	222 or 333*	Straight molding work....	1	100	133	60.00
85032	473	222 or 333*	For conduit boxes.....	1	100	133	62.00

No. 399, Sherardized, Sub-base Type

Used in conjunction with Nos. 423 and 424 sub-bases where a receptacle is desired at a cross, tee or elbow.

58540	399	222 or 333	.....	10	100	40	27.00

No. 399B, Sherardized

Base is provided with four twistouts for molding.

58554	399B	222 or 333†	.....	10	100	38	38.00



No. 577B

No. 575B, 3½-inch Brush Brass Finish

Four molding twistouts in sides; four flextube knockouts, and large knockout to be removed when installing at conduit box outlets, in bottom, by spanner strips listed on another page.

58555	575B	222 or 333†	.....	1	100	90	60.00

No. 571B, 4½-inch Brush Brass Finish

Same as No. 575B except in size. In attaching to conduit box outlets use spanner strips listed on another page.

58556	571B	222 or 333†	.....	1	100	127	90.00

No. 577B, 3½-inch, All Porcelain

Base is same as on No. 575B. For attaching to conduit box outlets use spanner strips listed on another page.

58557	577B	222 or 333†	.....	1	100	94	50.00



No. 573B

No. 573B, 4½-inch, All Porcelain

Base is same as on No. 571B. For attaching to conduit box outlets use spanner strips listed on another page.

58558	573B	222 or 333†	.....	1	100	128	60.00

*With No. 222 molding, use No. 278 bushing; with No. 333, no bushing is required.

†With No. 222 molding, use No. 277 bushing; with No. 333, use No. 279 bushing.

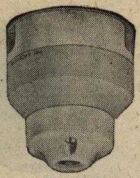
NATIONAL METAL MOLDING DEVICES

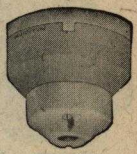
SCHEDULE X

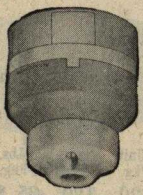

No. 397


No. 398

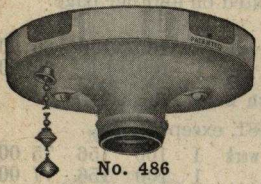

No. 398B


No. 360


No. 390

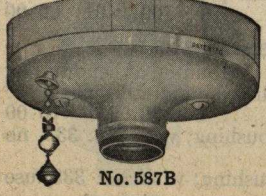

No. 390B


No. 395


No. 486


No. 396


No. 396B


No. 587B

KEY RECEPTACLES

No. 397, Sherardized

Provided with a base plate which permits of its use for either "dead end" or continuous work. Shipped "dead end." For continuous work it is only necessary to twist off the blanking ear on plate.

Trade No.	Mfrs. No.	For Use with Molding No.	Description	Unit Pkg.	Std. Pkg.	Wt.,Lbs. Std. Pkg.	Price per 100
58541	397	333	.....	10	100	51	$44.00

No. 398, Sherardized, Sub-base Type

To be used where a key receptacle is desired at a cross, tee or elbow. Must be mounted on either a No. 423 or 424 sub-base.

58542	398	222 or 333	.....	10	100	45	39.00

No. 398B, Sherardized

Base is provided with four twistouts for molding.

51714	398B	222 or 333*	.....	10	100	46	44.00

ATTACHMENT PLUGS

Nos. 360 and 360A, Sherardized

Fitted with base plates, for use in either "dead end" or continuous work.

58545	360	333	Porcelain cap.....	10	100	55	38.00
58547	360A	333	Composition cap..	10	100	52	41.00

Nos. 390 and 390A, Sherardized, Sub-base Type

For installation at a cross, tee or elbow. Must be mounted on either a No. 423 or No. 424 sub-base.

58546	390	222 or 333	Porcelain cap.....	10	100	45	35.00
58548	390A	222 or 333	Composition cap..	10	100	42	39.00

Nos. 390B and 390C, Sherardized

Base has four molding twistouts.

51715	390B	222 or 333*	Porcelain cap.....	10	100	50	38.00
51716	390C	222 or 333*	Composition cap..	10	100	48	41.00

CHAIN PULL RECEPTACLES

No. 395, Sherardized

Base plate for either continuous or "dead end" work. Shipped "dead end." For continuous work it is only necessary to twist off blanking ear on base.

58543	395	333	.....	10	100	50	70.00

Nos. 486 and 487, 4½-inch Brush Brass Finish

Four openings for molding. No. 486 base has four flextube knockouts and one ½-inch conduit knockout. No. 487 has necessary openings for wires for attaching to conduit box outlets with spanner strips listed on another page.

51717	486	222 or 333†	Straight molding work..	1	50	97	128.00
51718	487	222 or 333†	For conduit boxes	1	50	97	130.00

No. 396, Sherardized, Sub-base Type

For installation where this type of receptacle is desired at intersecting lines of molding. Must be mounted on sub-bases.

58544	396	333	.....	10	100	44	62.00

No. 396B, Sherardized

Base has four molding twistouts.

51719	396B	222 or 333*	.....	10	100	46	70.00

No. 587B, 4½-inch Brush Brass Finish

Four molding twistouts in sides and four flextube knockouts in bottom; also a large knockout for mounting on conduit box outlets with spanner strips listed on another page.

51720	587B	222 or 333*	.....	1	50	90	128.00

*With No. 222 molding use No. 277 bushing; with No. 333, use No. 279 bushing.

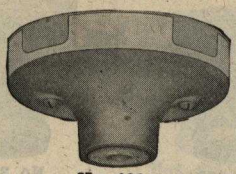
†With No. 222 molding use No. 278 bushing; with No. 333, no bushing is required.

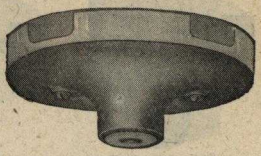
NATIONAL METAL MOLDING DEVICES

SCHEDULE X


No. 348


No. 431


No. 481


No. 479


No. 432

PORCELAIN ROSETTES

Base is such that this device can be used for either continuous or "dead end" work.

Trade No.	Mfrs. No.	For Use on Molding No.	Description	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
43192	348	333	.....	20	120	35	$10.00

DROP CORD ROSETTES

No. 431, Sherardized

Base plate is for use for either continuous or "dead end" work.

43189	431	333	.....	10	120	52	28.00


No. 348B

Nos. 480 and 481, 3½-inch Brush Brass Finish

Four openings for molding, three closed, blanking ears to be twisted off as desired. Base of No. 480 has four Flextube knockouts; that of No. 481, necessary openings for wires for mounting at conduit box outlets with spanner strips listed on another page.

85039	480	222 or 333*	Straight molding work	1	100	100	60.00
85038	481	222 or 333*	For conduit boxes ...	1	100	100	62.00


No. 432B

Nos. 478 and 479, 4½-inch Brush Brass Finish

Same in all respects as Nos. 480 and 481, except larger.

85043	478	222 or 333*	Straight molding work	1	100	156	75.00
85042	479	222 or 333*	For conduit boxes ...	1	100	156	77.00

No. 432, Sherardized, Sub-base Type

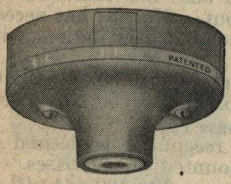
For installation where a drop cord is desired at intersecting lines of molding. Must be mounted on sub-base listed on another page.

43190	432	222 or 333	.....	10	120	37	25.00

PORCELAIN ROSETTES

Four molding twistouts in sides of base.

43193	348B	222 or 333†	.....	10	100	32	10.00



No. 581B

DROP CORD ROSETTES

No. 432B, Sherardized

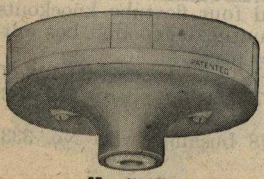
Base has four molding twistouts.

43194	432B	222 or 333†	.....	10	100	41	28.00

No. 581B, 3½-inch Brush Brass Finish

Four molding twistouts in sides; four Flextube and one large knockout in bottom, the latter for mounting at conduit box outlets by means of spanner strips listed on another page.

43195	581B	222 or 333†	.....	1	100	91	60.00



No. 579B

No. 579B, 4½-inch Brush Brass Finish

Same as No. 581B except of larger size. Mounted at conduit box outlets through the use of spanner strips listed on another page.

43196	579B	222 or 333†	.....	1	100	136	75.00

*With No. 222 molding use No. 278 bushing; with No. 333, no bushing is required.

†With No. 222 molding use No. 277 bushing; with No. 333, use No. 279 bushing.

NATIONAL METAL MOLDING DEVICES

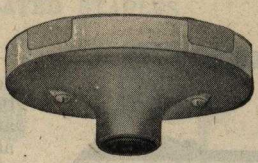
SCHEDULE X



No. 430



No. 485



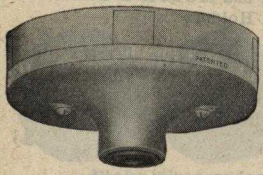
No. 482



No. 429B



No. 585B



No. 583B



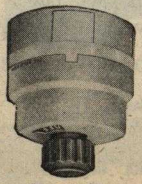
No. 429



No. 392



No. 393B



No. 394B

FIXTURE ROSETTES

Nos. 430 and 430A, Sherardized

Have standard base plates for either continuous or "dead end" work. Are fitted with special tapped composition bushings.

Trade No.	Mfrs. No.	For use with Molding No.	Description	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
85046	430‡	333	.....	10	80	30	$40.00
85047	430§	333	.....	10	80	30	40.00

Nos. 484 and 485, 3½-inch Brush Brass Finish

Base plate of No. 484 has four flextube knockouts. That of No. 485, semi-circular openings for mounting at conduit box outlets by means of special spanner strips listed on another page.

85041	484§	222 or 333*	Straight Molding Work	1	100	101	64.00
85040	485§	222 or 333*	For 4-in. Conduit Boxes	1	100	101	66.00

Nos. 482 and 483, 4½-inch Brush Brass Finish

Same general design as Nos. 484 and 485, only difference being in size.

85045	482§	222 or 333*	Straight Molding Work	1	100	156	80.00
85048	483§	222 or 333*	For Conduit Boxes...	1	100	156	82.00

Nos. 429B and 429C, Sherardized

Four molding twistouts.

85049	429B‡	222† or 333†	.....	10	100	29	40.00
85050	429C§	222§ or 333†	.....	10	100	29	40.00

No. 585B, 3½-inch Brush Brass Finish

Base provided with four molding twistouts in sides, four flextube knockouts and large knockout in bottom for mounting on conduit box outlets with spanner strips listed on another page.

85051	585B§	222 or 333†	.....	1	100	89	64.00

No. 583B, 4½-inch Brush Brass Finish

Same as No. 585B except larger. For mounting on conduit box outlets with spanner strips listed on another page.

85052	583B	222 or 333†	.....	1	100	136	80.00

Nos. 429 and 429A, Sherardized, Sub-base Type

Provided with special tapped bushings. For use in installing fixtures at intersecting lines of molding in conjunction with Nos. 423 or 424 sub-bases.

85053	429‡	222 or 333	.....	10	100	35	35.00
85054	429A§	222 or 333	.....	10	100	35	35.00

5-AMPERE SNAP SWITCHES

No. 391, Sherardized, Non-indicating

Base plate for either continuous or "dead end" work. Shipped "dead end." For continuous work it is but necessary to twist off blanking ear.

58550	391	333	.....	10	100	49	41.00

No. 392, Sherardized, Indicating

Same as No. 391 except of the indicating type.

58549	392	333	.....	10	100	49	45.00

No. 393B, Sherardized, Non-indicating

Base is provided with four molding twistouts.

85055	393B	222 or 333†	.....	10	100	44	41.00

No. 394B, Sherardized, Indicating

Same in all respects as No. 393B except of the indicating type.

34288	394B	222 or 333†	.....	10	100	45	45.00

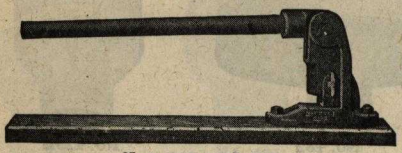
*With No. 222 molding, use No. 278 bushing; with No. 333, no bushing is required.

†With No. 222 molding, use No. 277 bushing; with No. 333, use No. 279 bushing.

‡Bushings tapped for ⅛-inch gas pipe.

§Bushings tapped for ⅜-inch gas pipe.

NATIONAL METAL MOLDING TOOLS



Nos. 318 and 418

LEVER TYPE HAND PUNCHES

These punches are designed for easy and accurate punching of additional holes in the bases of National Metal Moldings. All parts are interchangeable. Punches are shipped assembled on wood bases, complete with handles as illustrated. While not essential, they are great labor savers.

Trade No.	Mfrs. No.	For Use with Molding No.	Ship. Wt., Lbs.	Net Price Each
43224	318	222	12	$3.25
074999	418	333	12	3.25

INTERCHANGEABLE PARTS FOR PUNCHES



No. 318-D



No. 318-E



No. 318-F

FOR USE WITH No. 222 MOLDING ONLY

Trade No.	Mfrs. No.	Ship. Wt. Oz.	Net Price Each
	Punch Holders		
43225	318-D	6	$0.30
	Dies		
43226	318-E	1	.25
	Punches		
43227	318-F	1	.15
	Taper Pins		
	For securing punch to punch holder.		
43228	318-G	1	.05



No. 418-D



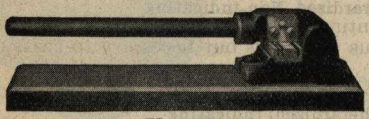
No. 418-E



No. 418-F

FOR USE WITH No. 333 MOLDING ONLY

	Punch Holders		
43229	418-D	6	.30
	Dies		
43230	418-E	1	.25
	Punches		
50036	418-F	1	.15
	Taper Pins		
	For securing punch to punch holder.		
50037	418-G	1	.05

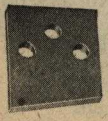


No. 422

LEVER TYPE HAND SHEARS

This shear is arranged to cut the base and capping of No. 333 molding separately, not as-assembled, the shear blocks being provided with separate grooves for each, as illustrated. It is shipped assembled on wood base, complete with handle. All parts are of hardened steel and, with good care will last indefinitely.

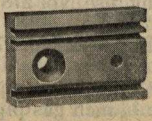
Trade No.	Mfrs. No.	For Use with Molding No.	Ship. Wt., Lbs.	Net Price Each
43220	422	333 only	8	$2.75



No. 422-D



No. 422-E



No. 422-F

Trade No.	Mfrs. No.	Ship. Wt., Oz.	Net Price Each
	Shears		
50038	422-D	2	$0.25
	Shear Blocks		
50039	422-E	3	.20
50040	422-F	8	.30

STAPLES, CLEATS AND NAILS

BLAKE INSULATED STAPLES



No. 1



No. 3



No. 5



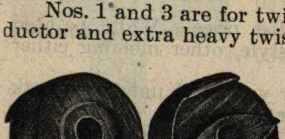
No. 6



No. 7

Trade No.	Mfrs. No.	Description	Size Inches	Price per 1000
011745	1	For hard wood	1/2	$3.00
011746	3	For general use	3/4	3.00
011747	5	For hard wood	5/8	3.40
011748	6	For general use	3/4	$3.40
011748A	7	For soft wood	7/8	3.40
.....	....	.....	....	....

Nos. 1 and 3 are for twisted pair and single wires. Nos. 5, 6 and 7 are for three-conductor and extra heavy twisted pair wire.



Blake Cleats

BLAKE CLEATS

Made of compressed wood. The center partition protects the wire from the nail or screw.

Trade No.	Description	Std. Pkg.	Price per 100
011744	For duplex wire	100	$0.70

LEATHER NAIL HEADS

011112	Price, per 1000	1.00



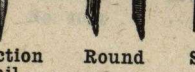
Perfection Nail — Round — Square

Copper Staples

PERFECTION INSULATED NAILS, PLAIN TOP

Trade No.	Mfrs. No.	Size of Shank, Inches	Price per 1000
011749	18	1/2	$1.25
011750	18	5/8	1.25
011751	18	3/4	1.25

Furnished in light oak, dark oak, dark green and black.



Brass Cleat

PLAIN COPPER STAPLES, ROUND AND FLAT

Trade No.	Size Inches	Style	Price per Lb.
011113	3/8	Round top	$0.30
011114	1/2	Round top	.30
55623	1/2	Flat top	.30



Style A Fiber Cleat

BRASS CLEATS

Trade No.	Outside Diam., In.	Price per 100	Trade No.	Outside Diam., In.	Price per 100
07837	3/16	$6.50	07839	1/2	$10.00
07838	3/8	8.00	07840	11/16	15.00



Style B Fiber Cleat

BRASS CORNER CLEATS

07841	3/8	7.50	07843	11/16	12.50
07842	1/2	8.00	....	....	....



Style C Fiber Cleat

HARD FIBER CLEATS

Trade No.	Style	Length Inches	Width Inches	Thickness Inches	Groove Inches	Price per 1000
08246	A	3/4	13/32	1/4	1/4x1/8	$9.00
08247	B	3/4	13/32	1/4	1/8x1/8	9.00
08249	C	11/16	15/32	1/4	1/4x1/8	8.00
08250	D	1 1/8	13/32	1/4	1/8x1/8	18.00
08248	E	1 5/8	9/16	1/2	1/4x1/4	30.00



Style D Fiber Cleat

Style E is similar to Style B, but larger.

WOOD MOLDING AND CLEATS



Wire Grip Molding

WIRE GRIP MOLDING

Trade No.	Mfrs. No.	No. Grooves	Size of Groove Inches	Price, per 1000 Feet: Softwood Painted White	Hard or Softwood Oak Stain	Hard or Softwood Unfin.
07799	3	2	1/4	$32.00	$30.00	$28.00
07800	4	3	1/4	40.00	40.00	38.00
07801	5	2	3/8	40.00	38.00	36.00
07802	6	3	3/8	50.00	50.00	46.00
07803	7	2	1/2	44.00	42.00	40.00
07804	8	3	1/2	60.00	58.00	56.00



One-wire Cleat

Trade No.	Mfrs. No.	No. of Grooves	Size of Groove Inches	Price, per 1000 Feet: Oakwood Finished	Oakwood Unfin.
145198	3	2	1/4	$40.00	$38.00
145199	4	3	1/4	54.00	48.00



Three-wire Cleat

Extra capping two-fifths of list price. White painted molding is quoted inserted cap style, other molding either wide or inserted cap.

When ordering, state whether you want unfinished, oak stain or painted white. Hard or soft wood. Inserted cap or wide cap style. Give number of grooves and size of grooves. Prices on all sizes of telephone and ground wire moldings furnished on application.

WOOD CLEATS



No. 046443

One-wire

Trade No.	Size of Slot Inches	Price per 1000	Trade No.	Size of Slot Inches	Price per 1000
050467	1/4	$2.50	050470	3/4	$4.00
050468	3/8	3.00	050471	1	5.50
050469	1/2	3.50	.....	...	...,



No. 046447

Two-wire

050472	1/8	2.00	050473	3/16	2.50

Three-wire

050474	1/8	2.50	050475	3/16	3.00

FIXTURE BLOCKS OR WOOD ROSETTES



No. 046451

Solid

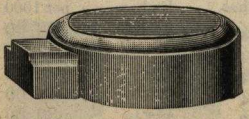
Trade No.	Size Inches	Price per 100	Trade No.	Size Inches	Price per 100
046443	7/8x3	$ 8.00	046445	7/8x5	$16.00
046444	7/8x4	12.00	046446	7/8x6	17.00

Hollow

046447	7/8x3	8.00	046449	7/8x5	16.00
046448	7/8x4	12.00	046450	7/8x6	17.00

Molding

046451	7/8x3	12.00	046453	7/8x5	18.00
046452	7/8x4	16.00	046454	7/8x6	22.00



No. 046455

Terminal

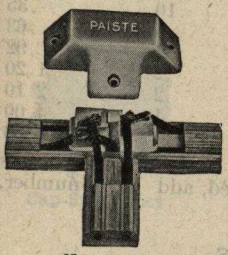
046455	7/8x3	12.00	046457	7/8x5	18.00
046456	7/8x4	16.00	046458	7/8x6	22.00

PAISTE MOLDING TAPLETS, CROSSOVERS AND CONNECTORS

NATIONAL ELECTRICAL CODE STANDARD

Molding taplets are used for making branches in either two or three-wire molding work. With them no soldering is necessary, as the branch wires come off from set screws.

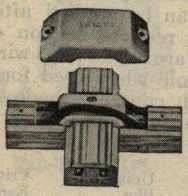
They are made on the Fielding principle, and set on top of the molding base. The main wires are run through the taplet and skinned ¼ inch to set under the contact screws, while the branch circuits are carried off in the branch molding from other contact screws.



No. 4090

TAPLETS

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
054340	4090	2-wire, single branch	250	130	$0.30
054341	4091	3-wire, single branch	100	120	.45
054342	4092	3 to 2-wire, single branch	100	98	.40
054343	4093	3 to 2-wire, double branch	100	110	.60
054344	4094	2-wire, double branch	100	77	.45


No. 4095

ANGLE TAPLETS

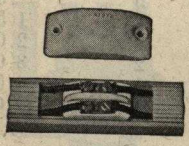
The angle taplets are for use where wires come through side wall from an adjacent room, and it is desired to take off a branch down the wall at that point.

054345	4107	2-wire	50	40	.50
054346	4108	3-wire	50	50	.60

CORNER TAPLETS

These corner taplets are for use at the corner of a room.

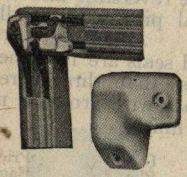
37345	4109	2-wire.....	50	50	.30


No. 4099

CROSSOVERS

This crossover is very simple, being a porcelain channel piece for the wire runways, with a neat porcelain cover over all.

054347	4095	2-wire crossing 2-wire	250	95	.15
054348	4096	3-wire crossing 3-wire	100	65	.20
054349	4097	2-wire crossing 3-wire	100	62	.20
054350	4098	3-wire crossing 2-wire	100	63	.20


No. 4109

CONNECTORS

These connectors are to be used for straight through work where heretofore a splice has been necessary to continue the running of the wire.

054351	4099	2-wire.....	250	81	.25
054352	4100	3-wire.....	100	55	.35



No. 5212

CROSSOVERS

This crossover does away with the use of porcelain tubes or flexible loom where wires in open work cross each other. The insulator can be slipped into place after the wires are run and fastened, and it cannot become unfastened unless forced off. For making a crossover it requires four; for a branch, just one.

For Open or Cleat Wiring

054353	5212	Single.....	250	29	.06

GEE VEE CONDUIT CAPS



Form A Cap



Service Cap



Service Cap Installed


Universal Cap on Horizontal or Vertical Pipe


Universal Cap on Vertical Pipe

FORM A CAPS

For capping the ends of conduit inside work. Furnished with 3-hole insulators. Seal furnished to close unused hole if used with but 2-wire. Insulators for ½, ¾ and 1 inch sizes are made of approved molded insulation. Insulators above 1 inch in size are made of porcelain. Galvanized finish. A lock nut to screw on the end of conduit and two screws to set up with a screw driver.

Trade No.	Mfrs. No.	Size Inches	Unit Pkg.	Price Each
14233	10012	½	10	$0.32
14234	10034	¾	10	.35
14235	10001	1	5	.63
14236	10114	1¼	2	.92
14237	10112	1½	2	1.20
14238	10002	2	2	2.10
14239	10212	2½	1	4.00
14240	10003	3	1	6.50

If castings only are desired add X to manufacturer's number. If insulators only are desired, add Y to number.

SERVICE CAPS

These Service Caps are galvanized to prevent corrosion, are threaded to the end of the conduit and furnish a separate insulated hole for each wire. Cap can be applied after service is connected up by cutting out reduced section of frame with a hack saw. All insulators are made for 3-wire, seal being furnished to close unused hole when used for 2 wires. Insulators for ½, ¾ and 1-inch caps are made of approved molded insulation, insulators for caps above 1 inch being made of porcelain.

Trade No.	Mfrs. No.	Size Inches	Unit Pkg.	Price Each
36861	6012	½	10	$0.45
36862	6034	¾	10	.50
36863	6001	1	5	.90
14241	6114	1¼	2	1.50
14242	6112	1½	2	2.00
14243	6002	2	2	3.00
14244	6212	2½	1	4.50
14245	6003	3	1	7.00

UNIVERSAL CAPS

For outside or inside work. They are reversible and can be used on either vertical or horizontal pipe. Especially convenient for heavy work.

All insulators are for three wires and seals are furnished to close unused holes when used for less than three wires. Insulators in two parts and held in place with grooves; no insulator screws to bother. Galvanized finish.

Trade No.	Mfrs. No.	Size Inches	Unit Pkg.	Price Each
36851	3012	½	5	$0.65
36852	3034	¾	5	.80
36853	3001	1	5	1.20
36854	3114	1¼	2	2.00
36855	3112	1½	2	2.75
36856	3002	2	1	4.00
36857	3212	2½	1	7.00
36858	3003	3	1	10.00
36859	3312	3½	1	15.00
36860	3004	4	1	20.00

JOHNSON'S CAP-SWIVEL-LETS AND LOCKNUTS

U. S. Pat. Feb. 27, '17
Canada Pat. July 18, 1916

CAP-SWIVEL-LETS

Cap-Swivel-Lets are non-separable flexible units adaptable to all classes of motor-wiring, meter loops, service entrances to buildings, combination box-outlets to open work and extensions, etc., where terminals of conduits will be exposed. They are affixed securely by any form of pliers or wrench to the wired conduit without twisting the wires.

Type A



Type A
Cap-Swivel-Let

Type A is a plain bushing for conduit terminals.

Trade No.	Mfrs. No.	Size Pipe Inches	Holes in Porcelain	Carton	Std. Pkg.	Wt., Lbs. Std., Pkg.	Price Each
57413	1012	½	2	10	100	13	$0.20
57414	1013	½	3	10	100	13	.20
57415	1022	¾	2	10	100	16	.30
57416	1023	¾	3	10	100	16	.30
57417	1032	1	2	10	100	23	.40
57418	1033	1	3	10	100	23	.40
57419	1042	1¼	2	5	50	16	.75
57420	1043	1¼	3	5	50	16	.75

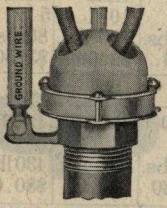
Standard finish is sherardized. For electro-copper-plated finish add 15 per cent to list prices.



Type AS
Cap-Swivel-Let

Type AS

Type AS is provided with lug attachment for receiving a ground wire when grounding of the system is required. Practical electricians find that Type AS reduces to a minimum the trying conditions found where conduit terminates at service entrance between sills and rafters. Extension allows use of blow torch in attaching ground wire.



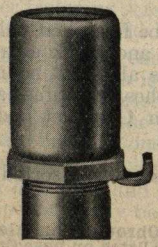
Type AS
Cap-Swivel-Let
Installed

Trade No.	Mfrs. No.	Size Pipe Inches	Holes in Porcelain	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
57421	1312	½	2	10	100	16	$0.30
57422	1313	½	3	10	100	16	.30
57423	1322	¾	2	10	100	20	.40
57424	1323	¾	3	10	100	20	.40
57425	1332	1	2	10	100	28	.50
57426	1333	1	3	10	100	28	.50

Standard finish, electro-copper-plated.

GROUNDING LOCKNUTS

Type N



Type N Locknut

Inspectors prefer the use of ground locknuts on enameled conduit where grounding of system or wires is required. They make perfect contact with conduit, and can be placed behind couplings or other fittings in through runs, or at end of conduit systems. For grounding conduit entering service boxes.

Trade No.	Mfrs. No.	Size Pipe Inches	Carton	Std. Pkg.	Price per 100
57427	11	½	50	500	$8.00
57428	12	¾	50	500	9.00
57429	13	1	50	100	12.00

TYPES A, B AND BE CONDULET BODIES

WITH OBROUND OPENINGS

Types A and B Condulet Bodies Take Obround Covers and Obround Conduletto Fittings

Type BE Condulet Bodies Take Obround Covers Only



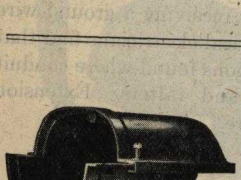
TYPE A CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½	2
Catalogue Number.	A1	A2	A3	A4	A5	A6
Standard Package..	200	100	50	20	10	5
Ship. Wt. Std. Pkg..	130 lbs.	95 lbs.	80 lbs.	60 lbs.	40 lbs.	30 lbs.
List Price, each....	$ .24	$ .31	$ .43	$ .62	$ .80	$1.66
Size in inches.....	**2½**	**3**	**3½**	**4**	**5**	**6**
Catalogue Number.	A7	A8	A9	A10	A012	A014
Standard Package..	5	5	5	5	5	5
Ship. Wt. Std. Pkg..	50 lbs.	55 lbs.	65 lbs.	70 lbs.	90 lbs.	100 lbs.
List Price, each....	$4.95	$5.45	$10.40	$11.70	$20.00	$30.00



TYPE B CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number.	B1	B2	B3	B4	B5
Standard Package..	200	100	50	20	10
Ship. Wt. Std. Pkg..	140 lbs.	100 lbs.	80 lbs.	65 lbs.	40 lbs.
List Price, each....	$ .29	$ .36	$ .50	$ .80	$1.04
Size in inches.....	**2**	**2½**	**3**	**3½**	**4**
Catalogue Number.	B6	B7	B8	B9	B10
Standard Package..	5	5	5	5	5
Ship. Wt. Std. Pkg..	30 lbs.	50 lbs.	60 lbs.	65 lbs.	70 lbs.
List Price, each....	$2.14	$5.35	$5.85	$11.35	$12.70



TYPE BE CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½	2
Catalogue Number.	BE1	BE2	BE3	BE4	BE5	BE6
Standard Package..	200	100	50	20	10	5
Ship. Wt. Std. Pkg..	390 lbs.	300 lbs.	190 lbs.	120 lbs.	100 lbs.	80 lbs.
List Price, each....	$ .40	$ .50	$ .85	$1.30	$2.00	$3.50
Size in inches.....	**2½**	**3**	**3½**	**4**	**5**	**6**
Catalogue Number.	BE7	BE8	BE9	BE10	BE012	BE014
Standard Package..	5	5	5	5	5	5
Ship. Wt. Std. Pkg..	160 lbs.	160 lbs.	225 lbs.	225 lbs.	430 lbs.	430 lbs.
List Price, each....	$9.35	$10.15	$21.30	$25.30	$70.00	$80.00

Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size, except that type BE Condulet bodies take Obround covers only.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a. Obround gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

TYPES C, CO AND D CONDULET BODIES

WITH OBROUND OPENINGS

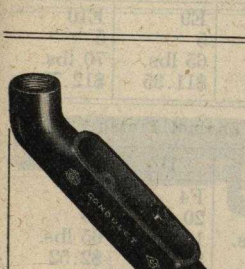
Take Obround Covers and Obround Conduletto Fittings



TYPE C CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue No.....	C1	C2	C3	C4	C5
Standard Package.	200	100	50	20	10
Weight Std. Pkg..	165 lbs.	120 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each...	$ .36	$ .41	$ .59	$ .94	$1.22

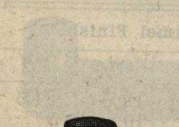
Size in inches.....	2	2½	3	3½	4
Catalogue No.....	C6	C7	C8	C9	C10
Standard Package.	5	5	5	5	5
Weight Std. Pkg..	35 lbs.	65 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each...	$2.43	$6.25	$7.40	$16.70	$18.30



TYPE CO CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue No.....	CO11	CO22	CO33	CO44	CO55
Standard Package.	75	50	25	15	10
Weight Std. Pkg..	120 lbs.	100 lbs.	60 lbs.	50 lbs.	50 lbs.
List Price, each...	$ .50	$ .65	$ .75	$1.25	$1.60

Size in inches.....	2	2½	3	3½	4
Catalogue No.....	CO66	CO77	CO88	CO99	CO1010
Standard Package.	5	5	5	5	5
Weight Std. Pkg..	45 lbs.	70 lbs.	80 lbs.	100 lbs.	120 lbs.
List Price, each...	$3.25	$7.80	$9.25	$21.00	$23.00



TYPE D CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue No.....	D1	D2	D3	D4	D5
Standard Package.	75	50	25	15	10
Weight Std. Pkg..	60 lbs.	60 lbs.	40 lbs.	50 lbs.	45 lbs.
List Price, each...	$ .34	$ .41	$ .57	$ .94	$1.22

Size in inches.....	2	2½	3	3½	4
Catalogue No.....	D6	D7	D8	D9	D10
Standard Package.	5	5	5	5	5
Weight Std. Pkg..	35 lbs.	65 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each...	$2.43	$6.25	$7.40	$16.70	$18.30

Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and with the same size cover openings may be assorted to make up a standard package. No other assortment is allowed.

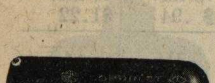
Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a. Obround gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

TYPES E, F AND FE CONDULET BODIES

WITH OBROUND OPENINGS

Type E Condulet Bodies Take Obround Covers and Obround Conduletto Fittings

Types F and FE Condulet Bodies Take Obround Covers Only



TYPE E CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1	1¼	1½
Catalogue Number..	E1	E2	E3	E4	E5
Standard Package...	200	100	50	20	10
Shipping Wt. Std. Pkg.	140 lbs.	110 lbs.	80 lbs.	60 lbs.	40 lbs.
List Price, each	$ .29	$ .35	$ .50	$ .80	$1.04
Size in inches	**2**	**2½**	**3**	**3½**	**4**
Catalogue Number..	E6	E7	E8	E9	E10
Standard Package...	5	5	5	5	5
Shipping Wt. Std. Pkg.	35 lbs.	55 lbs.	60 lbs.	65 lbs.	70 lbs.
List Price, each	$2.14	$5.35	$5.85	$11.35	$12.70



TYPE F CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1	1¼	1½
Catalogue Number..	F1	F2	F3	F4	F5
Standard Package...	100	100	50	20	10
Shipping Wt. Std. Pkg.	150 lbs.	200 lbs.	175 lbs.	105 lbs.	65 lbs.
List Price, each	$ .50	$ .65	$1.05	$1.64	$2.52
Size in inches	**2**	**2½**	**3**	**3½**	**4**
Catalogue Number..	F6	F7	F8	F9	F10
Standard Package...	5	5	5	5	5
Shipping Wt. Std. Pkg.	45 lbs.	115 lbs.	115 lbs.	265 lbs.	315 lbs.
List Price, each	$4.40	$11.70	$12.70	$26.60	$31.60



TYPE FE CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1	1¼	1½	2
Catalogue Number..	FE1	FE2	FE3	FE4	FE5	FE6
Standard Package...	100	100	50	20	10	5
Shipping Wt. Std. Pkg.	240 lbs.	350 lbs.	240 lbs.	175 lbs.	130 lbs.	100 lbs.
List Price, each	$ .50	$ .65	$1.05	$1.64	$2.52	$4.40
Size in inches	**2½**	**3**	**3½**	**4**	**5**	**6**
Catalogue Number..	FE7	FE8	FE9	FE10	FE012	FE014
Standard Package...	5	5	5	5	5	5
Shipping Wt. Std. Pkg.	200 lbs.	200 lbs.	320 lbs.	320 lbs.	600 lbs.	600 lbs.
List Price, each	$11.70	$12.70	$26.60	$31.60	$90.00	$100.00

Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size, except that types F and FE Condulet bodies take Obround covers only.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a. Obround gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH23)

TYPES LB, LF, LL AND LR CONDULET BODIES

WITH OBROUND OPENINGS

Take Obround Covers and Obround Conduletto Fittings



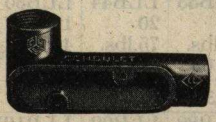
TYPE LB CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number ...	LB11	LB22	LB33	LB44	LB55
Standard Package	200	100	50	20	10
Shipping Wt. Std. Pkg.	175 lbs.	120 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each.....	$ .40	$ .45	$ .65	$1.04	$1.37
Size in inches.....	2	2½	3	3½	4
Catalogue Number ...	LB66	LB77	LB88	LB99	LB1010
Standard Package	5	5	5	5	5
Shipping Wt. Std. Pkg.	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each.....	$2.65	$6.55	$7.70	$17.10	$19.10



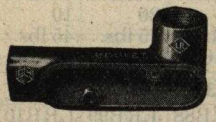
TYPE LF CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number ...	LF11	LF22	LF33	LF44	LF55
Standard Package	200	100	50	20	10
Shipping Wt. Std. Pkg.	175 lbs.	120 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each.....	$ .40	$ .45	$ .65	$1.04	$1.37
Size in inches.....	2	2½	3	3½	4
Catalogue Number ...	LF66	LF77	LF88	LF99	LF1010
Standard Package	5	5	5	5	5
Shipping Wt. Std. Pkg.	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each.....	$2.65	$6.55	$7.70	$17.10	$19.10



TYPE LL CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number ...	LL11	LL22	LL33	LL44	LL55
Standard Package	200	100	50	20	10
Shipping Wt. Std. Pkg.	175 lbs.	120 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each.....	$ .40	$ .45	$ .65	$1.04	$1.37
Size in inches.....	2	2½	3	3½	4
Catalogue Number ...	LL66	LL77	LL88	LL99	LL1010
Standard Package	5	5	5	5	5
Shipping Wt. Std. Pkg.	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each.....	$2.65	$6.55	$7.70	$17.10	$19.10



TYPE LR CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number ...	LR11	LR22	LR33	LR44	LR55
Standard Package	200	100	50	20	10
Shipping Wt. Std. Pkg.	175 lbs.	120 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each.....	$ .40	$ .45	$ .65	$1.04	$1.37
Size in inches.....	2	2½	3	3½	4
Catalogue Number ...	LR66	LR77	LR88	LR99	LR1010
Standard Package	5	5	5	5	5
Shipping Wt. Std. Pkg.	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each.....	$2.65	$6.55	$7.70	$17.10	$19.10

For finishes and other important information, see notes on page Cross Reference No. CH26.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. Black enameled and galvanized types LB, LF, LL and LR Condulet bodies of the same size may be assorted to make up a standard package. No other assortment is allowed.

Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a. Obround gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH24)

TYPES LBB, LFB, LLB AND LRB CONDULET BODIES

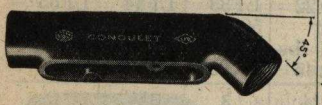
WITH OBROUND OPENINGS

Take Obround Covers and Obround Conduletto Fittings



TYPE LBB CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue No.....	LBB11	LBB22	LBB33	LBB44	LBB55
Standard Pkg.....	100	75	50	20	10
Weight Std. Pkg..	100 lbs.	95 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each...	$ .40	$ .45	$ .65	$1.04	$1.37
Size in inches.....	**2**	**2½**	**3**	**3½**	**4**
Catalogue No.....	LBB66	LBB77	LBB88	LBB99	LBB1010
Standard Pkg.....	5	5	5	5	5
Weight Std. Pkg..	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each...	$2.65	$6.55	$7.70	$17.10	$19.10



TYPE LFB CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue No.....	LFB11	LFB22	LFB33	LFB44	LFB55
Standard Pkg.....	100	75	50	20	10
Weight Std. Pkg..	100 lbs.	95 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each...	$ .40	$ .45	$ .65	$1.04	$1.37
Size in inches.....	**2**	**2½**	**3**	**3½**	**4**
Catalogue No.....	LFB66	LFB77	LFB88	LFB99	LFB1010
Standard Pkg.....	5	5	5	5	5
Weight Std. Pkg..	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each...	$2.65	$6.55	$7.70	$17.10	$19.10



TYPE LLB CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue No.....	LLB11	LLB22	LLB33	LLB44	LLB55
Standard Pkg.....	100	75	50	20	10
Weight Std. Pkg..	100 lbs.	95 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each...	$ .40	$ .45	$ .65	$1.04	$1.37
Size in inches.....	**2**	**2½**	**3**	**3½**	**4**
Catalogue No.....	LLB66	LLB77	LLB88	LLB99	LLB1010
Standard Pkg.....	5	5	5	5	5
Weight Std. Pkg..	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each...	$2.65	$6.55	$7.70	$17.10	$19.10



TYPE LRB CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue No.....	LRB11	LRB22	LRB33	LRB44	LRB55
Standard Pkg.....	100	75	50	20	10
Weight Std. Pkg..	100 lbs.	95 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each...	$ .40	$ .45	$ .65	$1.04	$1.37
Size in inches.....	**2**	**2½**	**3**	**3½**	**4**
Catalogue No.....	LRB66	LRB77	LRB88	LRB99	LRB1010
Standard Pkg.....	5	5	5	5	5
Weight Std. Pkg..	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each...	$2.65	$6.55	$7.70	$17.10	$19.10

For finishes and other important information, see notes on page Cross Reference No. CH26.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. Black enameled and galvanized types LBB, LFB, LLB and LRB Condulet bodies of the same size may be assorted to make up a standard package. No other assortment is allowed.

Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a. Obround gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH25)

TYPES LBL, LU, U AND UB CONDULET BODIES

WITH OBROUND OPENINGS

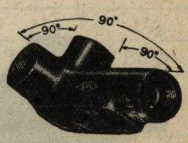
Take Obround Covers and Obround Conduletto Fittings



TYPE LBL CONDULET BODIES

Black Enamel Finish

Size in inches.....	½	¾	1
Catalogue Number....	LBL111	LBL222	LBL333
Standard Package.....	50	35	25
Ship. Wt. Std. Pkg....	60 lbs.	55 lbs.	55 lbs.
List Price, each.....	$ .65	$ .80	$ .95

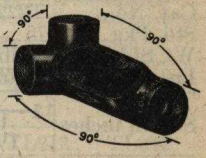


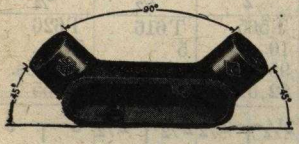


TYPE LU CONDULET BODIES

Black Enamel Finish

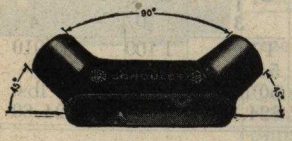
Size in inches.....	½	¾	1
Catalogue Number....	LU111	LU222	LU333
Standard Package.....	50	35	25
Ship. Wt. Std. Pkg....	70 lbs.	65 lbs.	60 lbs.
List Price, each.....	$ .65	$ .80	$ .95





TYPE U CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1	1¼	1½
Cat. No.....	U11	U22	U33	U44	U55
Std. Pkg.....	100	50	40	20	10
Wt. Std. Pkg.	100 lbs.	80 lbs.	80 lbs.	75 lbs.	45 lbs.
List Price, ea.	$ .52	$ .57	$ .85	$1.19	$1.52
Size in inches	**2**	**2½**	**3**	**3½**	**4**
Cat. No.....	U66	U77	U88	U99	U1010
Std. Pkg.....	5	5	5	5	5
Wt. Std. Pkg.	40 lbs.	70 lbs.	75 lbs.	90 lbs.	100 lbs.
List Price, ea.	$2.90	$7.10	$8.10	$18.60	$20.60



TYPE UB CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1	1¼	1½
Cat. No.....	UB11	UB22	UB33	UB44	UB55
Std. Pkg.....	100	50	40	20	10
Wt. Std. Pkg.	100 lbs.	80 lbs.	80 lbs.	75 lbs.	45 lbs.
List Price, ea.	$ .52	$ .57	$ .85	$1.19	$1.52
Size in inches	**2**	**2½**	**3**	**3½**	**4**
Cat. No.....	UB66	UB77	UB88	UB99	UB1010
Std. Pkg.....	5	5	5	5	5
Wt. Std. Pkg.	40 lbs.	70 lbs.	75 lbs.	90 lbs.	100 lbs.
List Price, ea.	$2.90	$7.10	$8.10	$18.60	$20.60

Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

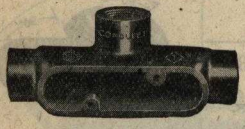
Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a. Obround gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH26)

TYPE T CONDULET BODIES

WITH OBROUND OPENINGS

Takes Obround Covers and Obround Conduletto Fittings



TYPE T CONDULET BODIES—Black Enamel Finish

Size in inches	½ — ½	½ — ½	½ — 1	¾ — ¾
	½	¾	1	½
Cat. No.	T111*	T121*	T131	T212*
Std. Pkg.	100	100	100	75
Wt. Std. Pkg.	120 lbs.	120 lbs.	90 lbs.	75 lbs.
List Price, each	$ .48	$ .56	$ .63	$ .57

Size in inches	¾ — ¾	¾ — ¾	¾ — ¾	¾ — ¾	1 — 1	1 — 1	1 — 1	1 — 1
	¾	1	1¼	1½	½	¾	1	1¼
Cat. No.	T222*	T232	T242	T252	T313	T323	T333*	T343
Std. Pkg.	75	75	75	75	50	50	50	50
Wt. Std. Pkg.	85 lbs.	95 lbs.	100 lbs.	120 lbs.	95 lbs.	100 lbs.	105 lbs.	115 lbs.
List Price, ea.	$ .57	$ .65	$ .77	$ .90	$ .80	$ .80	$ .80	$ .97

Size in inches	1 — 1	1 — 1	1¼ — 1¼	1¼ — 1¼	1¼ — 1¼	1¼ — 1¼	1¼ — 1¼	1¼ — 1¼
	1½	2	½	¾	1	1¼	1½	2
Cat. No.	T353*	T363*	T414	T424	T434	T444	T454	T464
Std. Pkg.	50	50	20	20	20	20	20	20
Wt. Std. Pkg.	125 lbs.	135 lbs.	70 lbs.	75 lbs.	80 lbs.	85 lbs.	90 lbs.	95 lbs.
List Price, ea.	$1.15	$1.45	$1.22	$1.22	$1.22	$1.22	$1.50	$1.96

Size in inches	1½ — 1½	1½ — 1½	1½ — 1½	1½ — 1½	1½ — 1½	1½ — 1½	2 — 2	2 — 2
	½	¾	1	1¼	1½	2	½	¾
Cat. No.	T515	T525	T535	T545	T555	T565	T616	T626
Std. Pkg.	10	10	10	10	10	10	5	5
Wt. Std. Pkg.	45 lbs.	45 lbs.	50 lbs.	50 lbs.	50 lbs.	95 lbs.	95 lbs.	100 lbs.
List Price, ea.	$1.69	$1.69	$1.69	$1.69	$1.69	$2.52	$2.55	$2.55

Size in inches	2 — 2	2 — 2	2 — 2	2 — 2	2½ — 2½	2½ — 2½	2½ — 2½	3 — 3
	1	1¼	1½	2	1½	2	2½	2
Cat. No.	T636	T646	T656	T666	T757	T767	T777	T868
Std. Pkg.	5	5	5	5	5	5	5	5
Wt. Std. Pkg.	105 lbs.	115 lbs.	125 lbs.	135 lbs.	95 lbs.	100 lbs.	105 lbs.	115 lbs.
List Price, ea.	$2.55	$2.55	$2.55	$2.55	$7.45	$7.45	$7.45	$8.15

Size in inches	3 — 3	3 — 3	3½ — 3½	3½ — 3½	3½ — 3½	4 — 4	4 — 4	4 — 4
	2½	3	2½	3	3½	3	3½	4
Cat. No.	T878	T888	T979	T989	T999	T108	T109	T1010
Std. Pkg.	5	5	5	5	5	5	5	5
Wt. Std. Pkg.	125 lbs.	135 lbs.	45 lbs.	45 lbs.	50 lbs.	50 lbs.	50 lbs.	55 lbs.
List Price, ea.	$8.15	$8.15	$22.60	$22.60	$22.60	$24.60	$24.60	$24.60

The size of cover required for type T Condulet body is the same size as the conduit hubs at the ends of the cover opening.

Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

For finishes, see page Cross Reference No. CH26.

Black enameled and galvanized Condulet bodies of the same type and with the same size cover openings may be assorted to make a standard package. No other assortment is allowed.

*½, ¾ and 1-inch types T, TB and X Condulet bodies are regularly furnished with larger wiring chamber than other Obround Condulet bodies of corresponding size. These Condulet bodies will be furnished with wiring chamber of the same size as other Obround Condulet bodies, if specifically ordered, using regular catalogue numbers and specifying "Smaller Wiring Chamber."

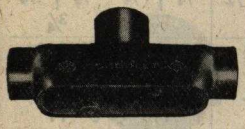
Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a. Obround gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH27)

TYPES TB, TL AND TR CONDULET BODIES

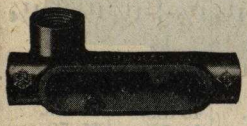
WITH OBROUND OPENINGS

Take Obround Covers and Obround Conduletto Fittings



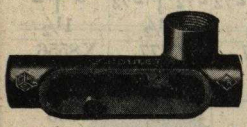
TYPE TB CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1	1¼	1½
Catalogue No.....	TB111*	TB222*	TB333*	TB444	TB555
Standard Package.	200	100	50	20	10
Ship. Wt. Std. Pkg.	175 lbs.	120 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each ..	$ .48	$ .57	$ .80	$1.22	$1.69
Size in inches	**2**	**2½**	**3**	**3½**	**4**
Catalogue No.....	TB666	TB777	TB888	TB999	TB1010
Standard Package.	5	5	5	5	5
Ship. Wt. Std. Pkg.	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each ..	$2.55	$7.45	$8.15	$22.60	$24.60



TYPE TL CONDULET BODIES—Black Enamel Finish

Size in inches	½ — ½ / ½	½ — ½ / ¾	½ — ½ / 1	¾ — ¾ / ½	¾ — ¾ / ¾
Catalogue No.....	TL111	TL121	TL131	TL212	TL222
Standard Package.	100	100	100	50	50
Ship. Wt. Std. Pkg.	95 lbs.	100 lbs.	105 lbs.	115 lbs.	125 lbs.
List Price, each ..	$ .48	$ .56	$ .63	$ .57	$ .57
Size in inches	**¾ — ¾ / 1**	**1 — 1 / ½**	**1 — 1 / ¾**	**1 — 1 / 1**	**1¼ — 1¼ / 1¼**
Catalogue No.....	TL232	TL313	TL323	TL333	TL444
Standard Package.	50	40	40	40	20
Ship. Wt. Std. Pkg.	135 lbs.	100 lbs.	100 lbs.	100 lbs.	75 lbs.
List Price, each ..	$ .65	$ .80	$ .80	$ .80	$1.22



TYPE TR CONDULET BODIES—Black Enamel Finish

Size in inches	½ — ½ / ½	½ — ½ / ¾	½ — ½ / 1	¾ — ¾ / ½	¾ — ¾ / ¾
Catalogue No.....	TR111	TR121	TR131	TR212	TR222
Standard Package.	100	100	100	50	50
Ship. Wt. Std. Pkg.	95 lbs.	100 lbs.	105 lbs.	115 lbs.	125 lbs.
List Price, each ..	$ .48	$ .56	$ .63	$ .57	$ .57
Size in inches	**¾ — ¾ / 1**	**1 — 1 / ½**	**1 — 1 / ¾**	**1 — 1 / 1**	**1¼ — 1¼ / 1¼**
Catalogue No.....	TR232	TR313	TR323	TR333	TR444
Standard Package.	50	40	40	40	20
Ship. Wt. Std. Pkg.	135 lbs.	100 lbs.	100 lbs.	100 lbs.	75 lbs.
List Price, each ..	$ .65	$ .80	$ .80	$ .80	$1.22

The size of cover required for a type TL or TR Condulet body is the same size as the conduit hubs at the ends of the cover opening.

Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

Assortments: Black enameled and galvanized Condulet bodies of the same type and with the same size cover openings may be assorted to make up a standard package. Black enameled and galvanized types TL and TR Condulet bodies with the same size cover openings may be assorted to make up a standard package. No other assortment is allowed.

*½, ¾ and 1-inch types T, TB and X Condulet bodies are regularly furnished with larger wiring chamber than other Obround Condulet bodies of corresponding size. These Condulet bodies will be furnished with wiring chamber of the same size as other Obround Condulet bodies, if specifically ordered, using regular catalogue numbers and specifying "Smaller Wiring Chamber."

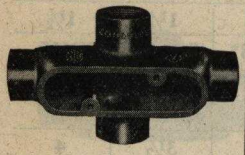
For finishes, see note on page Cross Reference No. CH26. Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184A. Obround gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH28)

TYPE X CONDULET BODIES

WITH OBROUND OPENINGS

Takes Obround Covers and Obround Conduletto Fittings



TYPE X CONDULET BODIES—Black Enamel Finish

Size in inches	½ × ½ × ½	½ × ¾ × ½	½ × ¾ × ¾	¾ × ¾ × ¾
Catalogue Number	X1111*	X2111	X2112*	X2222*
Standard Package	75	50	50	50
Shipping Weight Std. Pkg.	95 lbs.	65 lbs.	70 lbs.	85 lbs.
List Price, each	$ .60	$ .77	$ .77	$ .77
Size in inches	½ × 1 × ½	¾ × 1 × ¾	½ × 1 × 1	¾ × 1 × 1
Catalogue Number	X3112	X3222	X3113	X3223
Standard Package	35	35	35	35
Weight Std. Pkg.	50 lbs.	45 lbs.	50 lbs.	60 lbs.
List Price, each	$1.05	$1.05	$1.05	$1.05
Size in inches	¾ × 1¼ × ¾	1 × 1¼ × 1	½ × 1¼ × 1¼	¾ × 1¼ × 1¼
Catalogue Number	X4223	X4333	X4114	X4224
Standard Package	20	20	20	20
Weight Std. Pkg.	65 lbs.	70 lbs.	75 lbs.	80 lbs.
List Price, each	$1.24	$1.24	$1.24	$1.24
Size in inches	¾ × 1½ × ¾	1 × 1½ × 1	1 × 1½ × 1¼	1 × 1½ × 1½
Catalogue Number	X5225	X5333	X5334	X5335
Standard Package	10	10	10	10
Weight Std. Pkg.	50 lbs.	50 lbs.	55 lbs.	55 lbs.
List Price, each	$1.78	$1.78	$1.78	$1.78

Size in inches	1 × 2 × 1	1 × 2 × 1½	1 × 2 × 1	2 × 2 × 2	1 × 2½ × 1	1½ × 2½ × 1½	1½ × 2½ × 1½	2½ × 2½ × 2½	1½ × 3 × 1½
Cat. No.	X6335	X6336	X6666	X7335	X7555	X7557	X7777	X8556	
Std. Pkg.	5	5	5	5	5	5	5	5	
Wt. Std. Pkg.	40 lbs.	40 lbs.	45 lbs.	70 lbs.	75 lbs.	75 lbs.	75 lbs.	80 lbs.	
List Price, ea.	$2.85	$2.85	$2.85	$8.95	$8.95	$8.95	$8.95	$9.95	
Size in inches	2 × 3 × 2	2 × 3 × 2½	3 × 3 × 3	2 × 3½ × 2	2½ × 3½ × 2½	2½ × 3½ × 3	2½ × 3½ × 2½	3 × 4 × 3½	4 × 4 × 4
Cat. No.	X8667	X8888	X9667	X9778	X9999	X1078	X1089	X1010	
Std. Pkg.	5	5	5	5	5	5	5	5	
Wt. Std. Pkg.	85 lbs.	90 lbs.	95 lbs.	100 lbs.	105 lbs.	105 lbs.	110 lbs.	115 lbs.	
List Price, ea.	$9.95	$9.95	$25.00	$25.00	$25.00	$27.00	$27.00	$27.00	

The size of cover required for type X Condulet body is the same size as the largest conduit hub.

Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size.

For finishes, see page Cross Reference No. CH26.

Black enameled and galvanized type X Condulet bodies with the same size cover openings may be assorted to make up a standard package. No other assortment is allowed.

*½, ¾ and 1-inch types T, TB and X Condulet bodies are regularly furnished with larger wiring chamber than other Obround Condulet bodies of corresponding size. These Condulet bodies will be furnished with wiring chamber of the same size as other Obround Condulet bodies, if specifically ordered, using regular catalogue numbers and specifying "Smaller Wiring Chamber."

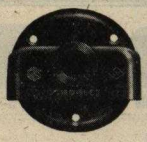
Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a. Obround gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH29)

TYPES DF, LFM, LFN, TM AND TMD CONDULET BODIES

WITH OBROUND OPENINGS

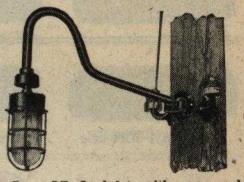
Condulets for Gooseneck Brackets and Similar Installations
Types DF and TM Condulet Bodies Take Obround Covers only
Types LFM, LFN and TMD Condulet Bodies Take Obround Covers and Obround Conduletto Fittings



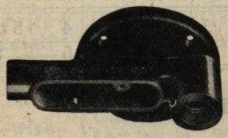
TYPE DF CONDULET BODIES

Black Enamel Finish

Size in inches.	½	¾	1
Cat. No.	DF1	DF2	DF3
Std. Pkg.	35	35	35
Wt. Std. Pkg.	100 lbs.	120 lbs.	160 lbs.
List, each	$1.15	$1.30	$1.55



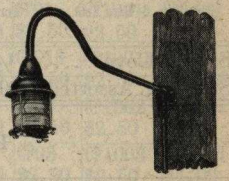
Type DF Condulet with gooseneck bracket and type VA Condulet.



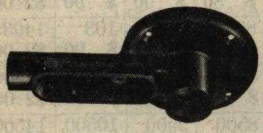
TYPE LFM CONDULET BODIES

Black Enamel Finish

Size in inches.	½	¾	1
Cat. No.	LFM11	LFM22	LFM33
Std. Pkg.	35	35	35
Wt. Std. Pkg.	90 lbs.	100 lbs.	110 lbs.
List, each	$1.15	$1.30	$1.55



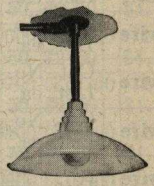
Type LFM Condulet with gooseneck bracket and type WV Condulet.



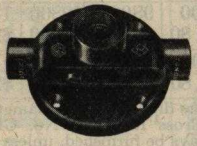
TYPE LFN CONDULET BODIES

Black Enamel Finish

Size in inches.	½	¾	1
Cat. No.	LFN11	LFN22	LFN33
Std. Pkg.	35	35	35
Wt. Std. Pkg.	90 lbs.	100 lbs.	110 lbs.
List, each	$1.15	$1.30	$1.55



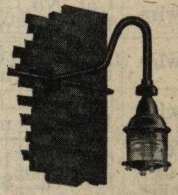
Type LFN Condulet with lighting fixture.



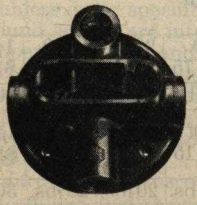
TYPE TM CONDULET BODIES

Black Enamel Finish

Size in inches.	½	¾	1
Cat. No.	TM111	TM222	TM333
Std. Pkg.	35	35	35
Wt. Std. Pkg.	100 lbs.	110 lbs.	125 lbs.
List, each	$1.30	$1.45	$1.70



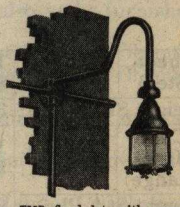
Type TM Condulet with gooseneck bracket and type WV Condulet.



TYPE TMD CONDULET BODIES

Black Enamel Finish

Size in ins.	½	¾	1
Cat. No.	TMD111	TMD222	TMD333
Std. Pkg.	35	35	35
Wt. Pkg.	105 lbs.	115 lbs.	130 lbs.
List, each	$1.55	$1.70	$1.95



Type TMD Condulet with gooseneck bracket and type WV Condulet.

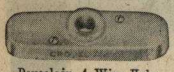
Obround Covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a. Obround Gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH29a)

CONDULET OBROUND COVERS

For Types A, B, BE, C, CO, D, DF, E, F, FE, LB, LBA, LBB, LBL, LBV, LF, LFB, LFM, LL, LLB, LR, LRB, LU, T, TB, TJD, TL, TM, TR, U, UB AND X Condulet Bodies

Furnished with Fastening Screws

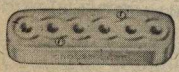

Porcelain, 1-Wire Hole


Porcelain, 2-Wire Hole


Porcelain, 3-Wire Hole


Porcelain, 4-Wire Hole


Porcelain, 5-Wire Hole


Porcelain, 6-Wire Hole


Porcelain, 7-Wire Hole


Porcelain, 8-Wire Hole


Porcelain, for Weather-Proof Socket


Blank Metal

Size of Cover.....	½	¾	1	1¼	1½	2	2½	3	3½	4	5 or 6
Std. Pkg. Assorted	200	100	50	20	10	5	5	5	5	5	5

PORCELAIN COVERS WITH WIRE HOLES*

1-wire Standard†	Cat. No.	11	21	31	41	51	61	71	81	91	101	1401
	List, ea..	$ .10	$ .15	$ .25	$ .36	$ .48	$ .60	$ .80	$ .80	$ .90	$ .90	$2.00
1-wire Special†	Cat. No.	11S	21S	31S	41S	51S	61S	71S	81S	91S	101S	Not
	List, ea..	$ .10	$ .15	$ .25	$ .36	$ .48	$ .60	$ .80	$ .80	$ .90	$ .90	made
2-wire	Cat. No.	12	22	32	42	52	62	72	82	92	102	1402
	List, ea..	$ .10	$ .15	$ .25	$ .36	$ .48	$ .60	$ .80	$ .80	$ .90	$ .90	$2.00
3-wire	Cat. No.	13	23	33	43	53	63	73	83	93	103	1403
	List, ea..	$ .10	$ .15	$ .25	$ .36	$ .48	$ .60	$ .80	$ .80	$ .90	$ .90	$2.00
4-wire	Cat. No.	1400	2400	3400	4400	5400	6400	7400	8400	9400	10400	14400
	List, ea..	$ .10	$ .15	$ .25	$ .36	$ .48	$ .60	$ .80	$ .80	$ .90	$ .90	$2.00
5-wire	Cat. No.	Not	2500	3500	4500	5500	6500	7500	8500	9500	10500	14500
	List, ea..	made	$ .15	$ .25	$ .36	$ .48	$ .60	$ .80	$ .80	$ .90	$ .90	$2.00
6-wire	Cat. No.	Not	2600	3600	4600	5600	6600	7600	8600	9600	10600	14600
	List, ea..	made	$ .15	$ .25	$ .36	$ .48	$ .60	$ .80	$ .80	$ .90	$ .90	$2.00
7-wire	Cat. No.	Not	Not	3700	4700	5700	6700	7700	8700	9700	10700	14700
	List, ea..	made	made	$ .25	$ .36	$ .48	$ .60	$ .80	$ .80	$ .90	$ .90	$2.00
8-wire	Cat. No.	Not	Not	3800	4800	5800	6800	7800	8800	9800	10800	14800
	List, ea..	made	made	$ .25	$ .36	$ .48	$ .60	$ .80	$ .80	$ .90	$ .90	$2.00
9-wire	Cat. No.	Not	Not	3900	4900	5900	6900	7900	8900	9900	10900	14900
	List, ea..	made	made	$ .25	$ .36	$ .48	$ .60	$ .80	$ .80	$ .90	$ .90	$2.00
For W. P. Socket	Cat. No.	14	24	34								
	List, ea..	$ .16	$ .25	$ .40								
Weight Std. Pkg...		50 lbs.	35 lbs.	25 lbs.	25 lbs.	20 lbs.	15 lbs.	20 lbs.	20 lbs.	30 lbs.	30 lbs.	40 lbs.

†Standard and special 1-wire hole covers differ only in diameter of wire hole; see schedule on page Cross Reference No. CH172. Standard 1-wire hole covers will always be furnished, unless order specifically calls for special 1-wire hole covers.

BLANK METAL COVERS—Black Enamel Finish

Sheet Steel	Cat. No.	100	200	300	400	500	600	700	800	900	1000	14000
	List, ea..	$ .08	$ .11	$ .23	$ .32	$ .45	$ .56	$ .75	$ .75	$ .80	$ .80	$1.25
Weight Std. Pkg...		30 lbs.	15 lbs.	10 lbs.	10 lbs.	10 lbs.	5 lbs.	10 lbs.	10 lbs.	15 lbs.	15 lbs.	20 lbs.
Cast Iron (Flange)	Cat. No.	100f	200f	300f	400f	500f	600f	700f	800f	900f	1000f	14000f
	List, ea..	$ .16	$ .22	$ .35	$ .50	$ .70	$ .90	$1.15	$1.15	$1.25	$1.25	$1.75
Weight Std. Pkg...		90 lbs.	60 lbs.	35 lbs.	25 lbs.	15 lbs.	10 lbs.	10 lbs.	15 lbs.	20 lbs.	25 lbs.	30 lbs.

*For diameter of wire holes in covers, see page Cross Reference No. CH172. For finishes, assortments, and other important information, see notes on page Cross Reference No. CH32. Obround gaskets are listed on page Cross Reference No. CH176.

OBROUND CONDULET COVERS

For Types A, B, BE, C, CO, D, DF, E, F, FE, LB, LBA, LBB, LBL, LBV, LF, LFB, LFM LL, LLB, LR, LRB, LU, T, TB, TJD, TL, TM, TR, U, UB and X Condulet Bodies

Furnished with Fastening Screws

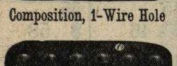

Composition, 1-Wire Hole

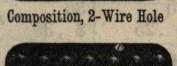

Composition, 2-Wire Hole

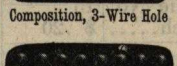

Composition, 3-Wire Hole

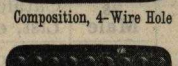

Composition, 4-Wire Hole

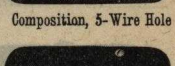

Composition, 5-Wire Hole


Composition, 6-Wire Hole


Composition, 7-Wire Hole

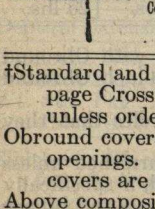

Composition, 8-Wire Hole


Composition, 9-Wire Hole

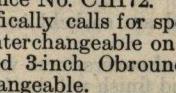

Composition, Blank

COMPOSITION COVERS WITH WIRE HOLES*

Size of Cover.....		½	¾	1	1¼	1½	2	2½	3	3½	4	5 or 6
Std. Pkg. Assorted.		200	100	50	20	10	5	5	5	5	5	5
1-wire Standard†	Cat. No.	CF11	CF21	CF31	CF41	CF51	CF61	CF71	CF81	CF91	CF1001	CF1401
	List, ea.	$ .20	$ .30	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	$4.00
1-wire Special†	Cat. No.	CF11S	CF21S	CF31S	CF41S	CF51S	CF61S	CF71S	CF81S	CF91S	CF1001S	Not
	List, ea.	$ .20	$ .30	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	made
2-wire	Cat. No.	CF12	CF22	CF32	CF42	CF52	CF62	CF72	CF82	CF92	CF1002	CF1402
	List, ea.	$ .20	$ .30	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	$4.00
3-wire	Cat. No.	CF13	CF23	CF33	CF43	CF53	CF63	CF73	CF83	CF93	CF1003	CF1403
	List, ea.	$ .20	$ .30	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	$4.00
4-wire	Cat. No.	CF1400	CF2400	CF3400	CF4400	CF5400	CF6400	CF7400	CF8400	CF9400	CF10400	CF14400
	List, ea.	$ .20	$ .30	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	$4.00
5-wire	Cat. No.	Not	CF2500	CF3500	CF4500	CF5500	CF6500	CF7500	CF8500	CF9500	CF10500	CF14500
	List, ea.	made	$ .30	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	$4.00
6-wire	Cat. No.	Not	CF2600	CF3600	CF4600	CF5600	CF6600	CF7600	CF8600	CF9600	CF10600	CF14600
	List, ea.	made	$ .30	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	$4.00
7-wire	Cat. No.	Not	Not	CF3700	CF4700	CF5700	CF6700	CF7700	CF8700	CF9700	CF10700	CF14700
	List, ea.	made	made	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	$4.00
8-wire	Cat. No.	Not	Not	CF3800	CF4800	CF5800	CF6800	CF7800	CF8800	CF9800	CF10800	CF14800
	List, ea.	made	made	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	$4.00
9-wire	Cat. No.	Not	Not	CF3900	CF4900	CF5900	CF6900	CF7900	CF8900	CF9900	CF10900	CF14900
	List, ea.	made	made	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	$4.00
Blank	Cat. No.	CF100	CF200	CF300	CF400	CF500	CF600	CF700	CF800	CF900	CF1000	CF14000
	List, ea.	$ .20	$ .30	$ .50	$1.00	$1.10	$1.20	$1.60	$1.60	$2.50	$2.50	$4.00
Weight Std. Pkg....		40 lbs.	30 lbs.	20 lbs.	20 lbs.	18 lbs.	12 lbs.	18 lbs.	25 lbs.	30 lbs.	40 lbs.	50 lbs.


Illustrating Use of 1-Wire Hole, ⅛ Male Nipple Cover

OBROUND PORCELAIN COVERS WITH 1-WIRE HOLE AND ⅛ MALE NIPPLE



	Size of Cover.....	½	¾	1
For Drop Cord and Fixture Pull Switches	Catalogue No.	191	291	391
	Standard Pkg.....	200	100	50
	Weight Std. Pkg...	55 lbs.	40 lbs.	30 lbs.
	List Price, each ...	$ .35	$ .40	$ .50

†Standard and special 1-wire hole covers differ only in diameter of wire hole; see schedule on page Cross Reference No. CH172. Standard 1-wire hole covers will always be furnished, unless order specifically calls for special 1-wire hole covers.

Obround covers are interchangeable on corresponding sizes of Condulet bodies with Obround openings. 2½ and 3-inch Obround covers are interchangeable. 3½ and 4-inch Obround covers are interchangeable.

Above composition Obround covers of the same size may be assorted to make up a standard package, regardless of style of cover.

Assortment specified on second page following applies to above Obround porcelain covers 191, 291 and 391.

Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies; but on an order for covers alone, standard package discount is allowed, only, on the specified standard package quantity of covers.

*For diameter of wire holes in covers, see page Cross Reference No. CH172. Obround gaskets are listed on page Cross Reference No. CH176.

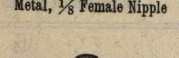
OBROUND COVERS



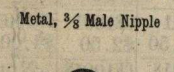
Metal, ⅛ Male Nipple



Metal, ⅛ Female Nipple



Metal, ⅜ Male Nipple



Metal, ⅜ Female Nipple

Size of Cover.....	½	¾	1	1¼	1½
Std. Pkg. Assorted.....	200	100	50	20	10

METAL COVERS WITH NIPPLES—Black Enamel Finish

⅛ Male	Catalogue No.	15	25	35	45	55
	List, each.....	$ .20	$ .25	$ .35	$ .46	$ .58
⅛ Female	Catalogue No.	16	26	36	46	56
	List, each.....	$ .20	$ .25	$ .35	$ .46	$ .58
¼ Male	Catalogue No.	113	213	313	413	513
	List, each.....	$ .23	$ .28	$ .38	$ .49	$ .61
¼ Female	Catalogue No.	114	214	314	414	514
	List, each.....	$ .23	$ .28	$ .38	$ .49	$ .61
⅜ Male	Catalogue No.	17	27	37	47	57
	List, each.....	$ .25	$ .30	$ .40	$ .51	$ .63
⅜ Female	Catalogue No.	18	28	38	48	58
	List, each.....	$ .25	$ .30	$ .40	$. 51	$ .63
½ Male	Catalogue No.	Not	215	315	415	515
	List, each.....	made	$ .35	$ .45	$ .56	$ .68
½ Female	Catalogue No.	Not	216	316	416	516
	List, each.....	made	$ .35	$ .45	$ .56	$ .68
Ship. Weight Std. Pkg.		40 lbs.	25 lbs.	20 lbs.	10 lbs.	10 lbs.



Porcelain, ⅛ Male Nipple



Porcelain, ⅛ Female Nipple



Porcelain, ⅜ Male Nipple



Porcelain, ⅜ Female Nipple

PORCELAIN COVERS WITH NIPPLES

⅛ Male	Catalogue No.	19	29	39	49	59
	List, each.....	$ .25	$ .30	$ .43	$ .58	$ .72
⅛ Female	Catalogue No.	110	210	310	410	510
	List, each.....	$ .25	$ .30	$ .43	$ .58	$ .72
¼ Male	Catalogue No.	119	219	319	419	519
	List, each.....	$ .30	$ .35	$ .48	$ .63	$ .77
¼ Female	Catalogue No.	120	220	320	420	520
	List, each.....	$ .30	$ .35	$ .48	$ .63	$ .77
⅜ Male	Catalogue No.	111	211	311	411	511
	List, each.....	$ .35	$ .41	$ .53	$ .68	$ .82
⅜ Female	Catalogue No.	112	212	312	412	512
	List, each.....	$ .35	$ .41	$ .53	$ .68	$ .82
½ Male	Catalogue No.	121	221	321	421	521
	List, each.....	$ .40	$ .46	$ .58	$ .73	$ .87
½ Female	Catalogue No.	122	222	322	422	522
	List, each.....	$ .40	$ .46	$ .58	$ .73	$ .87
Ship. Weight Std. Pkg.		60 lbs.	40 lbs.	30 lbs.	30 lbs.	25 lbs.

Obround covers are interchangeable on corresponding sizes of Condulet bodies with Obround openings. 2½ and 3-inch Obround covers are interchangeable. 3½ and 4-inch Obround covers are interchangeable.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at same price as black enamel finish. For special plated finishes, brass and bronze covers with plain and special finishes, aluminum covers with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled, galvanized and porcelain Obround covers of the same size may be assorted to make up a standard package, regardless of style of cover. No other assortment is allowed.

Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies; but on an order for covers alone, standard package discount is allowed, only, on the specified standard package quantity of covers.

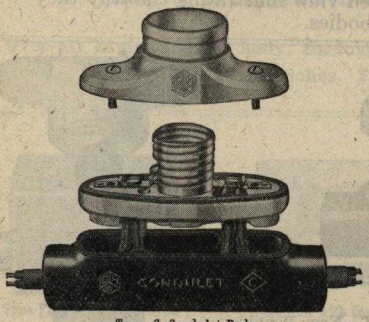
Obround gaskets are listed on page Cross Reference No. CH176.

CROUSE-HINDS CONDULET FITTINGS

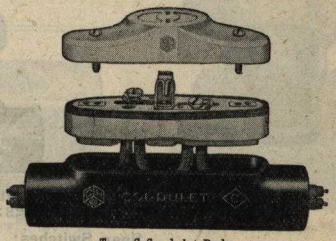
FOR OBROUND CONDULET BODIES

For Types A, B, C, CO, D, E, LB, LBA, LBB, LBL, LBV, LF, LFB, LFM, LL, LLB, LR, LRB, LU, T, TB, TL, TR, U, UB and X Condulet Bodies

Obround Conduletto Fittings are listed on page Cross Reference No. CH184a and are as follows: Receptacle with Shade Holder Groove, Receptacle without Shade Holder Groove, Cord Rosette, Fixture Rosette with 1-8 Male Nipple, Fixture Rosette with 1-8 Female Nipple, Hubbell Attachment Plug Receptacle and Hubbell Polarity Plug Receptacle



Type C Condulet Body and Obround Conduletto Receptacle with Shade Holder Groove (Exploded View)



Type C Condulet Body and Obround Conduletto Hubbell Attachment Plug Receptacle (Exploded View)

CONDULET BODY EXTENSIONS

For Condulet Bodies with Obround Openings, Except Types BE, F, FE, DF and TM

Take Obround Covers and Obround Conduletto Fittings

Furnished with Mat (White Enameled) and Necessary Fastening Screws



Condulet Body Extension Mat

Condulet body extensions deepen the wiring chamber of Obround Condulet bodies and bring the cover opening flush with the plaster line.

An Obround Condulet cover or an Obround Conduletto fitting is fastened direct to the Condulet body extension.

The mat serves as a finish and is held in position by the fastening screws of the Condulet cover or Conduletto fitting.

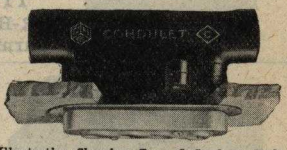


Illustration Showing Type C Condulet Body with Condulet Body Extension Installed Back of Plaster Line and Mat and Obround Porcelain 4-Wire Hole Cover Installed on Surface of Wall

Size in inches	½			¾			1		
Depth of Extension	⅞	1½	2	⅞	1½	2	⅞	1½	2
Catalogue No.....	Ex12	Ex15	Ex16	Ex22	Ex25	Ex26	Ex32	Ex35	Ex36
Standard Pkg.....	50	50	50	35	35	35	25	25	25
Wt. Std. Pkg.....	40 lbs.	45 lbs.	60 lbs.	45 lbs.	50 lbs.	65 lbs.	35 lbs.	40 lbs.	50 lbs.
List Price, each ..	$ .50	$ .55	$ .60	$ .60	$ .65	$ .70	$ .70	$ .75	$ .80

Size in inches	1¼			1½			2	2½ or 3	3½ or 4
Depth of Extension	⅞	1½	2	⅞	1½	2	2	2½	3
Catalogue No.....	Ex42	Ex45	Ex46	Ex52	Ex55	Ex56	Ex66	Ex77	Ex98
Standard Pkg.....	20	20	20	10	10	10	5	5	5
Wt. Std. Pkg.....	35 lbs.	45 lbs.	55 lbs.	25 lbs.	30 lbs.	35 lbs.	25 lbs.	40 lbs.	55 lbs.
List Price, each ..	$ .85	$ .95	$1.05	$1.00	$1.10	$1.20	$1.75	$2.70	$3.70

Finishes: Black enamel is the standard finish for Condulet body extensions, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet body extensions will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet body extensions with plain and special finishes, aluminum Condulet body extensions with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet body extensions of the same size may be assorted to make up a standard package. No other assortment is allowed.

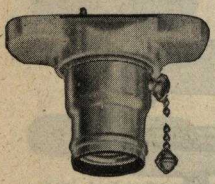
Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a. Obround gaskets are listed on page Cross Reference No. CH176.

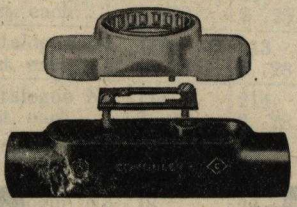
CONDULETS

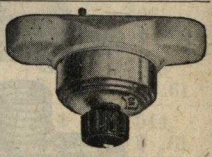
FITTINGS FOR OBROUND CONDULET BODIES

The Arrow Electric Company, Bryant Electric Company, General Electric Company, Hart & Hegeman Manufacturing Company, Pass & Seymour, and the Perkins Electric Switch Manufacturing Company each make a special base for mounting fittings of their own manufacture on any ½-inch Obround Condulet Body.

Below are shown a few of these fittings and an exploded view illustrating the way they are mounted on Condulet bodies.







1-2-inch Obround Condulet bodies take the following fittings:

Snap Switches: ARROW E. BRYANT—New Wrinkle. **G. E. CO. HART & HEGEMAN. PERKINS**—New Wrinkle.

Switch Rosettes: ARROW E—Arrow Forty and Arrow Twenty. **BRYANT**—New Wrinkle. **PASS & SEYMOUR**—Fluto.

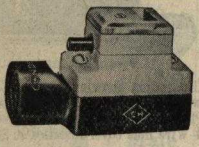
Sockets and Receptacles: ARROW E—Arrow Forty and Arrow Twenty. **BRYANT**—New Wrinkle. **G. E. CO.**—Fluted Catch. **PASS & SEYMOUR**—Fluto. **PERKINS**—New Wrinkle.



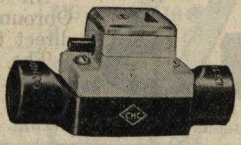


TYPES CH AND CHC CONDULETS

FOR CUTLER-HAMMER PUSH BUTTON SWITCHES—7102 AND 7103
Furnished with Fastening Screws for Switches



Type CH with Switch



Type CHC with Switch

TYPE CH CONDULETS—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	CH1	CH2	CH3
Standard Package	50	35	25
Shipping Weight Std. Pkg.	40 lbs.	35 lbs.	30 lbs.
List Price, each	$ .35	$ .40	$ .45

TYPE CHC CONDULETS—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	CHC1	CHC2	CHC3
Standard Package	50	35	25
Shipping Weight Std. Pkg.	50 lbs.	45 lbs.	40 lbs.
List Price, each	$ .45	$ .50	$ .55

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulets with plain and special finishes, see page Cross Reference No. CH182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.
(Cross Reference No. CH33)

TYPES FD, FDA, FDC, FDL, FDR, FDLA, FDD, FDCC, FDCA, FDCT, FDT AND FDX CONDULETS

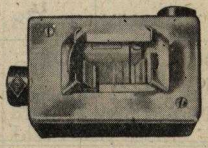
DEEP TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Deep or Shallow); Flush Plug Receptacles (Deep or Shallow), and Porcelain or Metal Covers

Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 9-32 Inches; Width, 2 3-4 Inches; Depth, 2 11-16 Inches. Furnished with Fastening Screws for Fittings



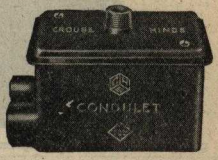
Type FD with Female Nipple Metal Cover



Type FDR with Cover for Rectangular Plug Receptacle



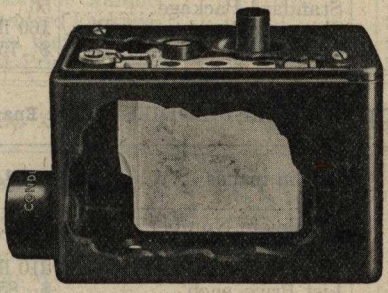
Type FDA with Cover for Flush Rotary Switch



Type FDD with Male Nipple Metal Cover



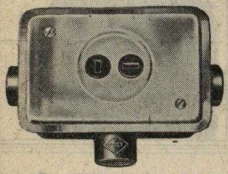
Type FDC with Male Nipple Porcelain Cover



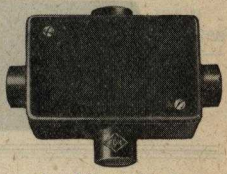
Type FD Condulet with Cover for Double Push Button Switch (Broken-away View, Showing Switch Mounted)



Type FDCA with 4-Wire Hole Porcelain Cover



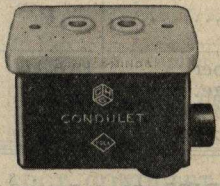
Type FDCT with Cover for Hubbell Polarity Plug Receptacle 5552



Type FDX with Blank Metal Cover



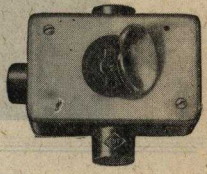
Type FDL with Cover for Double Push Button Switch



Type FDLA with 2-Wire Hole Porcelain Cover



Type FDCC with Cover for Single Push Button Switch



Type FDT with Cover for Round Plug Receptacle

There is ample room around the mounted fitting for the passage of extra wires.

The rim of the Condulet body forms a rabbet, over which the cover fits, making a dust-proof joint.

There are two lines of metal covers for Condulet bodies of the FD series—one for surface mounting and the other for flush mounting. Porcelain covers for these Condulet bodies are suitable for either flush or surface mounting.

Switches and receptacles for above Condulets are enumerated on page Cross Reference No. CH37.

Condulet bodies of the FD series are listed on pages Cross Reference Nos. CH35, CH36, and CH37. Covers for Condulet bodies of the FD series are listed on pages Cross Reference Nos. CH46 and CH47. Gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

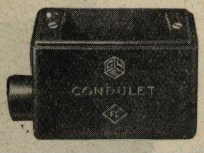
FD, FDA, FDC, FDL AND FDR CONDULET BODIES

DEEP TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Deep or Shallow); Flush Plug Receptacles (Deep or Shallow), and Porcelain or Metal Covers

Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 9-32 Inches; Width, 2 3-4 Inches; Depth, 2 11-16 Inches. Furnished with Fastening Screws for Fittings

TYPE FD CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FD1	FD2	FD3
Standard Package	75	50	25
Shipping Weight Std. Pkg.	200 lbs.	140 lbs.	80 lbs.
List Price, each	$ .75	$ .85	$1.00

TYPE FDA CONDULET BODIES—Black Enamel Finish



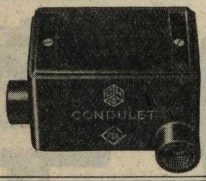
Size in inches	½	¾	1
Catalogue Number	FDA1	FDA2	FDA3
Standard Package	50	30	20
Shipping Weight Std. Pkg.	160 lbs.	90 lbs.	80 lbs.
List Price, each	$ .75	$ .85	$1.00

TYPE FDC CONDULET BODIES—Black Enamel Finish



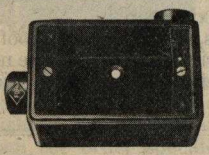
Size in inches	½	¾	1
Catalogue Number	FDC11	FDC22	FDC33
Standard Package	75	50	25
Shipping Weight Std. Pkg.	210 lbs.	170 lbs.	110 lbs.
List Price, each	$ .85	$1.05	$1.25

TYPE FDL CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FDL11	FDL22	FDL33
Standard Package	50	30	20
Shipping Weight Std. Pkg.	150 lbs.	95 lbs.	75 lbs.
List Price, each	$ .85	$1.05	$1.25

TYPE FDR CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FDR11	FDR22	FDR33
Standard Package	50	30	20
Shipping Weight Std. Pkg.	150 lbs.	95 lbs.	75 lbs.
List Price, each	$ .85	$1.05	$1.25

Covers for above Condulet bodies are listed on pages Cross Reference Nos. CH46 and CH47. Switches or receptacles for above Condulet bodies are enumerated on page Cross Reference No. CH37. For finishes and assortments, see note on page Cross Reference No. CH37. Gasket is listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH35)

FDLA, FDD, FDCC, FDCA AND FDCT CONDULET BODIES

DEEP TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Deep or Shallow); Flush Plug Receptacles (Deep or Shallow), and Porcelain or Metal Covers

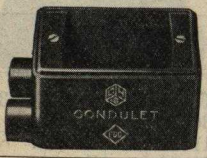
Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 9-32 Inches; Width, 2 3-4 Inches; Depth, 2 11-16 Inches. Furnished with Fastening Screws for Fittings

TYPE FDLA CONDULET BODIES—Black Enamel Finish



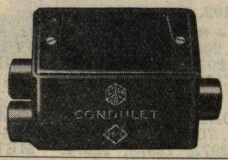
Size in inches	½	¾	1
Catalogue Number	FDLA11	FDLA22	FDLA33
Standard Package	50	30	20
Ship. Weight Std. Pkg.	150 lbs.	95 lbs.	75 lbs.
List Price, each	$ .85	$1.05	$1.25

TYPE FDD CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FDD11	FDD22	FDD33
Standard Package	50	30	20
Ship. Weight Std. Pkg.	150 lbs.	95 lbs.	75 lbs.
List Price, each	$ .85	$1.05	$1.25

TYPE FDCC CONDULET BODIES—Black Enamel Finish



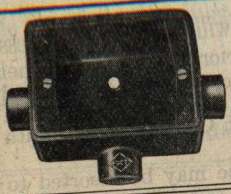
Size in inches	½ in. main ½ in. branches	¾ in. main ½ in. branches	1 in. main ½ in. branches
Catalogue Number	FDCC111	FDCC211	FDCC311
Standard Package	50	30	20
Ship. Weight Std. Pkg.	165 lbs.	105 lbs.	85 lbs.
List Price, each	$1.10	$1.30	$1.55

TYPE FDCA CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FDCA111	FDCA222	FDCA333
Standard Package	50	30	20
Ship. Weight Std. Pkg.	160 lbs.	105 lbs.	85 lbs.
List Price, each	$1.10	$1.35	$1.55

TYPE FDCT CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FDCT111	FDCT222	FDCT333
Standard Package	50	30	20
Ship. Weight Std. Pkg.	160 lbs.	105 lbs.	85 lbs.
List Price, each	$1.10	$1.35	$1.55

Covers for above Condulet bodies are listed on pages Cross Reference Nos. CH46 and CH47. Switches or Receptacles for above Condulet bodies are enumerated on page Cross Reference No. CH37. For finishes and assortments see note on page Cross Reference No. CH37. Gasket is listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH36)

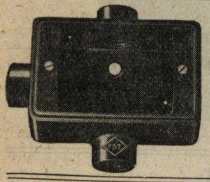
TYPES FDT AND FDX CONDULET BODIES

DEEP TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Deep or Shallow); Flush Plug Receptacles (Deep or Shallow), and Porcelain or Metal Covers

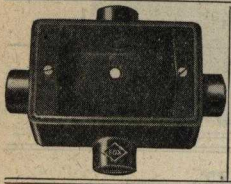
Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 9-32 Inches; Width, 2 3-4 Inches; Depth, 2 11-16 Inches. Furnished with Fastening Screws for Fittings

TYPE FDT CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FDT111	FDT222	FDT333
Standard Package	50	30	20
Shipping Weight Std. Pkg.	160 lbs.	105 lbs.	85 lbs.
List Price, each	$1.10	$1.35	$1.55

TYPE FDX CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FDX1111	FDX2222	FDX3333
Standard Package	50	30	20
Shipping Weight Std. Pkg.	180 lbs.	115 lbs.	90 lbs.
List Price, each	$1.30	$1.60	$1.80

Switches and receptacles suitable for the FD series of Condulet bodies are as follows:

Single Push Button Switches: PERKINS—2457, 2458, 2459, 2460, 2461, 2462, 2491, 2492, 2493, 2494.

Double Push Button Switches: ARROW E—6500, 6501, 6502, 6503. DIAMOND H— 050, 060, 070, 080. G. E. CO.—68247, 68248, 68249, 68250. HART & HEGEMAN—701, 702, 703, 704, 2081, 2082, 2083, 2084. CUTTER—"S-F." MACHEN & MAYER— 2000, 2001, 2002, 2003. KNOWLES—2971, 2972, 2973, 2974. MET. SWITCHBOARD CO.—1111, 1112, 1113, 1114. PERKINS—2201, 2202, 2203, 2204. CUTLER-HAMMER CO.—7201, 7202, 7203.

Double Push Button Lock Switches: ARROW E—6504, 6505, 6506, 6507. DIAMOND H—055, 065, 075, 085. G. E. CO.—GE688, GE689, GE690, GE691. HART & HEGEMAN—701, 702, 703, 704, 2081, 2082, 2083, 2084. MACHEN & MAYER—2004, 2005, 2006, 2007, 2008. KNOWLES—12971, 12972, 12973, 12974. MET. SWITCHBOARD CO.—1131, 1132, 1133, 1134. PERKINS—2295, 2296, 2297, 2298.

Double Push Button, Removable Mechanism, Switches: G. E. CO.—GE731, GE732, GE733. PERKINS—2519, 2520, 2521, 2522, 2523, 2524.

Double Push Button, Removable Mechanism, Lock Switches: G. E. CO.—GE684, GE685, GE686. PERKINS—2519, 2520, 2521, 2525, 2526, 2527.

Double Push Button, Momentary Contact Switch: HART & HEGEMAN—2061.

Flush Rotary Switches: ARROW E—6250, 6251, 6252, 6253, 6254, 6255, 6256, 6257. DIAMOND H—0105, 0110, 0120, 0130, 0140, 0150, 0160. G. E. CO.—60468, 60469, 60470, 60473, 60475, 60476, 60477, 60478, 60479, 60480. HART & HEGEMAN—600, 601, 602, 603, 604, 2263. PERKINS—2205, 2206, 2207, 2208, 2209, 2210, 2224, 2325.

Flush Plug Receptacles: ARROW E—1064. MACHEN & MAYER—2042, 4355. MET. SWITCHBOARD CO.—1043. PERKINS—281, 1363, 1708. HUBBELL—5547, 5552, 5579. TRUMBULL—1005, 1008. G. E. CO.—36817.

Removable Flush Wall Receptacles: G. E. CO.—GE692. PERKINS—2520, 2528.

Double Door Flush Receptacle: G. E. CO.—GE287.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

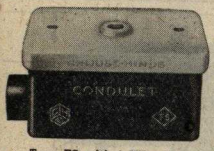
Covers for above Condulet bodies are listed on pages Cross Reference Nos. CH46 and CH47. Gasket is listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

TYPES FS, FSA, FSC, FSL, FSR, FSLA, FSS, FSCC, FSCA, FSCT, FST AND FSX CONDULETS

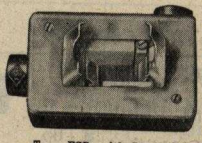
SHALLOW TYPE

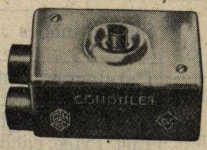
For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow); Flush Plug Receptacles (Shallow), and Porcelain or Metal Covers

Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 9-32 Inches; Width, 2 3-4 Inches; Depth, 1 7-8 Inches. Furnished with Fastening Screws for Fittings

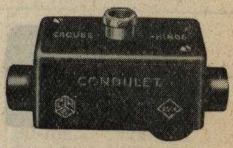


Type FS with 1-Wire Hole Porcelain Cover


Type FSR with Cover for Rectangular Plug Receptacle



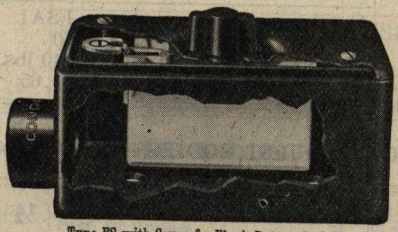
Type FSS with Cover for Single Push Button Switch

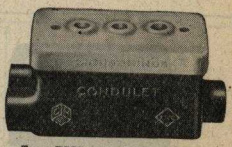


Type FSCA with Female Nipple Metal Cover

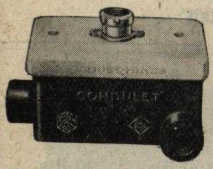


Type FSC with Male Nipple Metal Cover

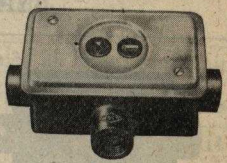

Type FS with Cover for Flush Rotary Switch (Broken-away View, Showing Switch Mounted)

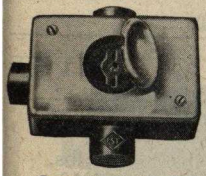


Type FSCC with 3-Wire Hole Porcelain Cover



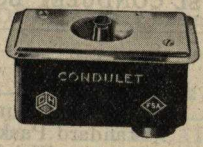
Type FSL with Female Nipple Porcelain Cover


Type FSCT with Cover for Hubbell Polarity Plug Receptacle 5552

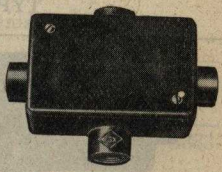

Type FST with Cover for Round Plug Receptacle



Type FSLA with Cover for Double Push Button Switch



Type FSA with Cover for Flush Rotary Switch


Type FSX with Blank Metal Cover

There is ample room around the mounted fitting for the passage of extra wires.

The rim of the Condulet body forms a rabbet, over which the cover fits, making a dust-proof joint.

There are two lines of metal covers for Condulet bodies of the FS series—one for surface mounting and the other for flush mounting. Porcelain covers for these Condulet bodies are suitable for either flush or surface mounting.

Switches and receptacles for above Condulets are enumerated on page Cross Reference No. CH41. Condulet bodies of the FS series are listed on pages Cross Reference Nos. CH39, CH40 and CH41. Covers for Condulet bodies of the FS series are listed on pages Cross Reference Nos. CH46 and CH47. Gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

TYPES FS, FSA, FSC, FSL AND FSR CONDULET BODIES

SHALLOW TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow); Flush Plug Receptacles (Shallow), and Porcelain or Metal Covers

Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 9-32 Inches; Width, 2 3-4 Inches; Depth, 1 7-8 Inches. Furnished with Fastening Screws for Fittings

TYPE FS CONDULET BODIES—Black Enamel Finish



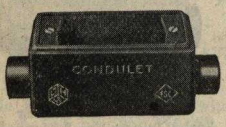
Size in inches	½	¾	1
Catalogue Number	FS1	FS2	FS3
Standard Package	75	50	25
Shipping Weight Std. Pkg.	165 lbs.	120 lbs.	65 lbs.
List Price, each	$ .65	$ .75	$ .85

TYPE FSA CONDULET BODIES—Black Enamel Finish



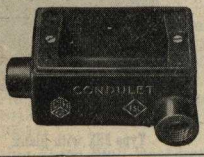
Size in inches	½	¾	1
Catalogue Number	FSA1	FSA2	FSA3
Standard Package	50	30	20
Shipping Weight Std. Pkg.	140 lbs.	75 lbs.	60 lbs.
List Price, each	$ .65	$ .75	$ .85

TYPE FSC CONDULET BODIES—Black Enamel Finish



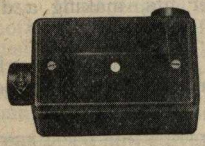
Size in inches	½	¾	1
Catalogue Number	FSC11	FSC22	FSC33
Standard Package	75	50	25
Shipping Weight Std. Pkg.	175 lbs.	150 lbs.	90 lbs.
List Price, each	$ .75	$ .90	$1.10

TYPE FSL CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FSL11	FSL22	FSL33
Standard Package	50	30	20
Shipping Weight Std. Pkg.	130 lbs.	80 lbs.	60 lbs.
List Price, each	$ .75	$ .90	$1.10

TYPE FSR CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FSR11	FSR22	FSR33
Standard Package	50	30	20
Shipping Weight Std. Pkg.	130 lbs.	80 lbs.	60 lbs.
List Price, each	$ .75	$ .90	$1.10

Covers for above Condulet bodies are listed on pages Cross Reference Nos. CH46 and CH47.

Switches or receptacles for above Condulet bodies are enumerated on page Cross Reference No. CH41. For finishes and assortments see note on page Cross Reference No. CH41. Gasket is listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH39)

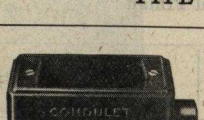
FSLA, FSS, FSCC, FSCA AND FSCT CONDULET BODIES

SHALLOW TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow); Flush Plug Receptacles (Shallow), and Porcelain or Metal Covers

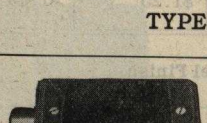
Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 9-32 Inches; Width, 2 3-4 Inches; Depth, 1 7-8 Inches. Furnished with Fastening Screws for Fittings

TYPE FSLA CONDULET BODIES—Black Enamel Finish



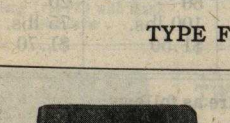
Size in inches	½	¾	1
Catalogue Number	FSLA11	FSLA22	FSLA33
Standard Package	50	30	20
Ship. Weight Std. Pkg.	130 lbs.	80 lbs.	60 lbs.
List Price, each	$ .75	$ .90	$1.10

TYPE FSS CONDULET BODIES—Black Enamel Finish



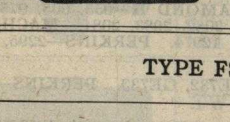
Size in inches	½	¾	1
Catalogue Number	FSS11	FSS22	FSS33
Standard Package	50	30	20
Ship. Weight Std. Pkg.	130 lbs.	80 lbs.	60 lbs.
List Price, each	$ .75	$ .90	$1.10

TYPE FSCC CONDULET BODIES—Black Enamel Finish



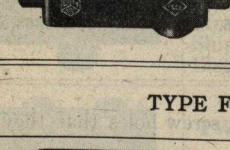
Size in inches	½ in. main ½ inch branches	¾ in. main ½ inch branches	1 in. main ½ inch branches
Catalogue Number	FSCC111	FSCC211	FSCC311
Standard Package	50	30	20
Ship. Weight Std. Pkg.	140 lbs.	90 lbs.	70 lbs.
List Price, each	$1.00	$1.20	1.45

TYPE FSCA CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FSCA111	FSCA222	FSCA333
Standard Package	50	30	20
Ship. Weight Std. Pkg.	140 lbs.	90 lbs.	70 lbs.
List Price, each	$1.00	$1.25	$1.45

TYPE FSCT CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FSCT111	FSCT222	FSCT333
Standard Package	50	30	20
Ship. Weight Std. Pkg.	140 lbs.	90 lbs.	70 lbs.
List Price, each	$1.00	$1.25	$1.45

Covers for above Condulet bodies are listed on pages Cross Reference Nos. CH46 and CH47. Switches or receptacles for above Condulet bodies are enumerated on page Cross Reference No. CH41. For finishes and assortments see note on page Cross Reference No. CH41. Gasket is listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH40)

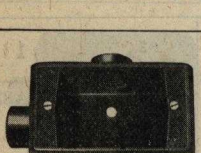
TYPES FST AND FSX CONDULET BODIES

SHALLOW TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow); Flush Plug Receptacles (Shallow), and Porcelain or Metal Covers

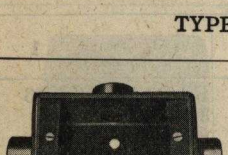
Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 9-32 Inches; Width, 2 3-4 Inches; Depth, 1 7-8 Inches. Furnished with Fastening Screws for Fittings

TYPE FST CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FST111	FST222	FST333
Standard Package	50	30	20
Shipping Weight Std. Pkg.	140 lbs.	90 lbs.	70 lbs.
List Price, each	$1.00	$1.25	$1.45

TYPE FSX CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾	1
Catalogue Number	FSX1111	FSX2222	FSX3333
Standard Package	50	30	20
Shipping Weight Std. Pkg.	160 lbs.	100 lbs.	75 lbs.
List Price, each	$1.20	$1.50	$1.70

Switches and receptacles suitable for the FS series of Condulet bodies are as follows:

Single Push Button Switches: PERKINS—2457, 2458, 2459, 2460, 2461, 2462, 2491, 2492, 2493, 2494.

Double Push Button Switches: ARROW E—6500, 6501, 6502, 6503. DIAMOND H—050, 060, 070, 080. G. E. CO.—68247, 68248, 68249, 68250. HART & HEGEMAN—2081, 2082, 2083, 2084. CUTTER—"S-F." MACHEN & MAYER—2000, 2001, 2002, 2003. KNOWLES—2971, 2972, 2973, 2974. PERKINS—2201, 2202, 2203, 2204. CUTLER-HAMMER CO.—7201, 7202, 7203.

Double Push Button Lock Switches: ARROW E—6504, 6505, 6506, 6507. DIAMOND H—055, 065, 075, 085. G. E. CO.—GE688, GE689, GE690, GE691. HART & HEGEMAN—2081, 2082, 2083, 2084. MACHEN & MAYER—2004, 2005, 2006, 2007, 2008. KNOWLES—12971, 12972, 12973, 12974. PERKINS—2295, 2296, 2297, 2298.

Double Push Button, Removable Mechanism, Switches: G. E. CO.—GE731, GE732, GE733. PERKINS—2519, 2520, 2521, 2522, 2523, 2524.

Double Push Button, Removable Mechanism, Lock Switches: G. E. CO.—GE684, GE685, GE686. PERKINS—2519, 2520, 2521, 2525, 2526, 2527.

Flush Rotary Switches: ARROW E—6250, 6251, 6252, 6253, 6254, 6255, 6256, 6257. DIAMOND H—0105, 0110, 0120, 0130, 0140, 0150, 0160. G. E. CO.—60468, 60469, 60470, 60473, 60475, 60476, 60477, 60478, 60479, 60480. HART & HEGEMAN—600, 601, 602, 603, 604, 2263. PERKINS—2205, 2206, 2207, 2208, 2209, 2210, 2224, 2325.

Flush Plug Receptacles: ARROW E—1064. MACHEN & MAYER—2042, 4355. PERKINS—281, 1363, 1708. HUBBELL—5547, 5552, 5579. TRUMBULL—1005, 1008. G. E. CO.—36817.

Removable Flush Wall Receptacles: G. E. CO.—GE692. PERKINS—2520, 2528.

Double Door Flush Receptacle: G. E. CO.—GE287.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Covers for above Condulet bodies are listed on pages Cross Reference Nos. CH46 and CH47. Gasket is listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

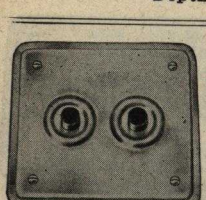
(Cross Reference No. CH41)

TYPES FS, FSC AND FSD CONDULET BODIES

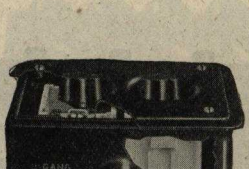
TWO-GANG, SHALLOW TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow), and Blank Metal Covers

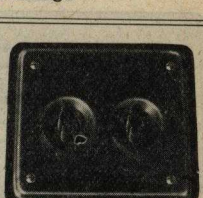
Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 5-8 Inches; Width, 4 9-32 Inches; Depth, 1 7-8 Inches. Furnished with Fastening Screws for Fittings



Two-Gang Type FS with Cover for Single Push Button Switches



Two-Gang Type FS with Cover for Flush Rotary Switches (Broken-away View, Showing Switches Mounted)



Two-Gang Type FS with Cover for Flush Rotary Switches



Two-Gang Type FSD with Blank Metal Cover

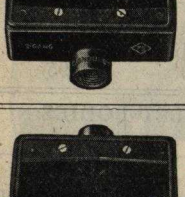


Two-Gang Type FSC with Cover for Double Push Button Switches



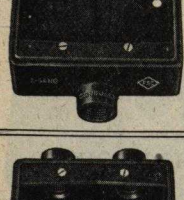
TWO-GANG TYPE FS CONDULET BODIES—Black Enamel Finish

Size in inches	½ in. main	¾ in. main	1 in. main
Catalogue Number	FS12	FS22	FS32
Standard Package	50	25	15
Shipping Weight Std. Pkg.	140 lbs.	90 lbs.	50 lbs.
List Price, each	$1.20	$1.30	$1.40



TWO-GANG TYPE FSC CONDULET BODIES—Black Enamel Finish

Size in inches	½ in. mains	¾ in. mains	1 in. mains
Catalogue Number	FSC112	FSC222	FSC332
Standard Package	50	25	15
Shipping Weight Std. Pkg.	150 lbs.	100 lbs.	60 lbs.
List Price, each	$1.30	$1.40	$1.55



TWO-GANG TYPE FSD CONDULET BODIES—Black Enamel Finish

Size in inches	½ in. main ½ in. branches	¾ in. main ½ in. branches	1 in. main ½ in. branches
Catalogue Number	FSD1112	FSD2112	FSD3112
Standard Package	50	25	15
Shipping Weight Std. Pkg.	160 lbs.	110 lbs.	70 lbs.
List Price, each	$1.45	$1.55	$1.65

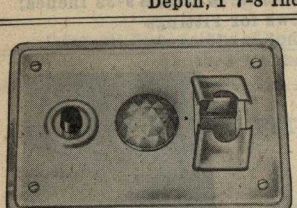
Covers for above Condulet bodies are listed on page Cross Reference No. CH48. Switches for above Condulet bodies are enumerated on page Cross Reference No. CH41. For finishes and assortments, see note on page Cross Reference No. CH45. Condulet reducers are listed on page Cross Reference No. CH171.

TYPES FS, FSC AND FSD CONDULET BODIES

THREE-GANG, SHALLOW TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow); Bryant Heater Control Combination 398 (less Plate), and Blank Metal Covers

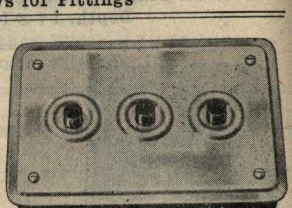
Over-all Dimensions of Body, Exclusive of Hubs: Length, 6 1-2 Inches; Width, 4 9-32 Inches; Depth, 1 7-8 Inches. Furnished with Fastening Screws for Fittings



Three-Gang Type FS with Crouse-Hinds Cover for Bryant Heater Control Combination 398



Three-Gang Type FS with Cover for Single Push Button Switches (Broken-away View, Showing Switches Mounted)



Three-Gang Type FS with Cover for Single Push Button Switches



Three-Gang Type FSC with Cover for Flush Rotary Switches



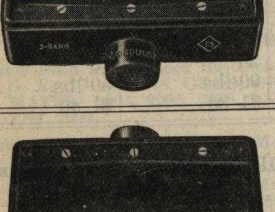
Three-Gang Type FSD with Cover for Double Push Button Switches



THREE-GANG TYPE FS CONDULET BODIES

Black Enamel Finish

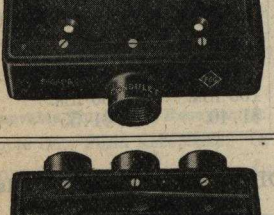
Size in inches	½ in. main	¾ in. main	1 in. main
Catalogue Number	Not Practical	FS23	FS33
Standard Package		20	10
Ship. Wt. Std. Pkg.		110 lbs.	60 lbs.
List Price, each		$1.80	$1.95



THREE-GANG TYPE FSC CONDULET BODIES

Black Enamel Finish

Size in inches	½ in. mains	¾ in. mains	1 in. mains
Catalogue Number	Not Practical	FSC223	FSC333
Standard Package		20	10
Ship. Wt. Std. Pkg.		115 lbs.	65 lbs.
List Price, each		$1.90	$2.05



THREE-GANG TYPE FSD CONDULET BODIES

Black Enamel Finish

Size in inches	½ in. main ½ in. branches	¾ in. main ½ in. branches	1 in. main ½ in. branches
Catalogue Number	FSD11113	FSD21113	FSD31113
Standard Package	35	20	10
Ship. Wt. Std. Pkg.	190 lbs.	120 lbs.	65 lbs.
List Price, each	$1.95	$2.15	$2.30

Covers for above Condulet bodies are listed on page Cross Reference No. CH48. Switches for above Condulet bodies are enumerated on page Cross Reference No. CH41. For finishes and assortments, see note on page Cross Reference No. CH45. Condulet reducers are listed on page Cross Reference No. CH171.

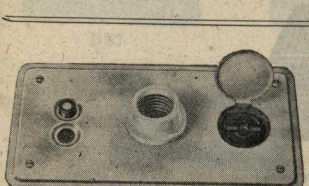
(Cross Reference No. CH43)

TYPES FS, FSC AND FSD CONDULETS

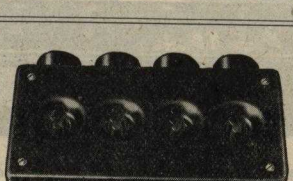
FOUR-GANG, SHALLOW TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow), or Combinations for Heater Unit Service, Consisting of Clamp Receptacles and Switches and Plug Receptacles—Shallow

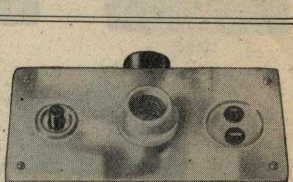
Over-all Dimensions of Body, Exclusive of Hubs: Length, 8 3-8 Inches; Width, 4 9-32 Inches; Depth, 1 7-8 Inches. Furnished with Fastening Screws for Fittings



Four-Gang Type FS with Cover for Double Push Button Switch, Clamp Receptacle and Round Plug Receptacle



Four-Gang Type FSD with Cover for Flush Rotary Switches



Four-Gang Type FSC with Cover for Single Push Button Switch, Clamp Receptacle and Hubbell Polarity Plug Receptacle 5552



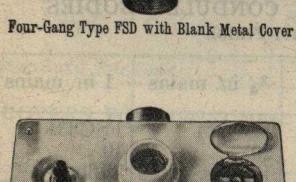
Four-Gang Type FSD with Blank Metal Cover



Four-Gang Type FSC with Cover for Double Push Button Switch, Clamp Receptacle and Rectangular Plug Receptacle



Four-Gang Type FSC with Cover for Single Push Button Switch, Clamp Receptacle and Round Plug Receptacle



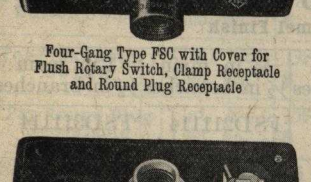
Four-Gang Type FSC with Cover for Flush Rotary Switch, Clamp Receptacle and Round Plug Receptacle



Four-Gang Type FS with Cover for Double Push Button Switch, Clamp Receptacle and Hubbell Polarity Plug Receptacle 5552



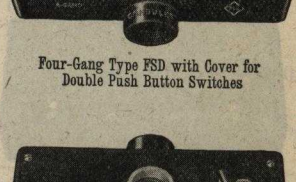
Four-Gang Type FSD with Cover for Double Push Button Switches



Four-Gang Type FS with Cover for Single Push Button Switch, Clamp Receptacle and Rectangular Plug Receptacle



Four-Gang Type FSC with Cover for Flush Rotary Switch, Clamp Receptacle and Hubbell Polarity Plug Receptacle 5552



Four-Gang Type FSC with Cover for Flush Rotary Switch, Clamp Receptacle and Rectangular Plug Receptacle

Four-gang FS series Condulet bodies are listed on page Cross Reference No. CH45. Covers are listed on page Cross Reference No. CH49. Crouse-Hinds clamp receptacle C337, listed on page Cross Reference No. CH190, is used with heater combinations illustrated above. Other suitable clamp receptacles are enumerated on page Cross Reference No. CH95. Plug receptacles and switches for above Condulets are enumerated on page Cross Reference No. CH41. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH44)

TYPES FS, FSC AND FSD CONDULET BODIES

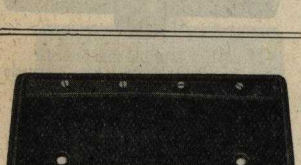
FOUR-GANG, SHALLOW TYPE

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow), or Combinations for Heater Unit Service, Consisting of Clamp Receptacles and Switches and Plug Receptacles—Shallow

Over-all Dimensions of Body, Exclusive of Hubs: Length, 8 3-8 Inches; Width, 4 9-32 Inches; Depth, 1 7-8 Inches. Furnished with Fastening Screws for Fittings

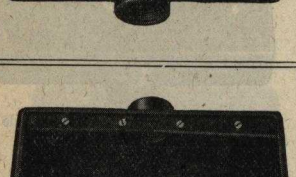


Four-Gang Type FS with Cover for Double Push Button Switches
(Broken-away View, Showing Switches Mounted)



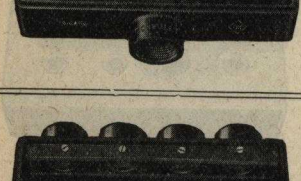
FOUR-GANG TYPE FS CONDULET BODIES
Black Enamel Finish

Size in inches.....	½ in. main	¾ in. main	1 in. main
Catalogue Number		FS24	FS34
Standard Package.	Not	20	10
Weight Std. Pkg..	Practical	125 lbs.	70 lbs.
List Price, each...		$2.20	$2.40



FOUR-GANG TYPE FSC CONDULET BODIES
Black Enamel Finish

Size in inches.....	½ in. mains	¾ in. mains	1 in. mains
Catalogue Number		FSC224	FSC334
Standard Package.	Not	20	10
Weight Std. Pkg..	Practical	130 lbs.	75 lbs.
List Price, each...		$2.35	$2.50



FOUR-GANG TYPE FSD CONDULET BODIES
Black Enamel Finish

Size in inches.....	½ in. main ½ in. branches	¾ in. main ½ in. branches	1 in. main ½ in. branches
Catalogue Number	FSD111114	FSD211114	FSD311114
Standard Package.	25	20	10
Weight Std. Pkg..	180 lbs.	150 lbs.	85 lbs.
List Price, each...	$2.60	$2.85	$3.10

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Covers for above Condulet bodies are listed on page Cross Reference No. CH49. Crouse-Hinds clamp receptacle C337, listed on page Cross Reference No. CH190, can be used with the above Condulet bodies. Other suitable clamp receptacles are enumerated on page Cross Reference No. CH95. Plug receptacles and switches for above Condulet bodies are enumerated on page Cross Reference No. CH41. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH45)

CONDULET COVERS

FOR FD AND FS SERIES OF CONDULET BODIES

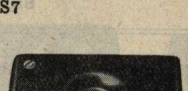
Furnished with Fastening Screws


DS7


DSS7


DS8


DSS8

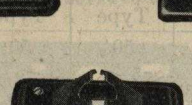

DS9

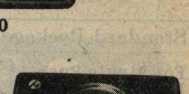

DSS9

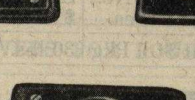

DS10

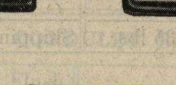

DSS10

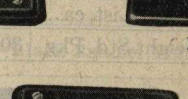

DS11


DSS11


DS12


DSS12


DS100


DSS100

Style of Cover	Surface Type	Flush Type	Style of Cover	Surface Type	Flush Type
Standard Package.....	75	75	Standard Package.....	75	75

COVERS FOR SWITCHES AND PLUG RECEPTACLES, AND BLANK METAL COVERS

Black Enamel Finish

For Single Push Button Switch	Cat. No.. List, ea...	DS7 $ .10	DSS7 $ .10	For Rectangular Plug Receptacle	Cat. No.. List, ea...	DS11 $ .80	DSS11 $ .80
For Double Push Button Switch	Cat. No.. List, ea...	DS8 $ .10	DSS8 $ .10	For Hubbell Polarity Plug Receptacle 5552	Cat. No.. List, ea...	DS12 $ .20	DSS12 $ .20
For FlushRotary Switch	Cat. No.. List, ea...	DS9 $ .10	DSS9 $ .10	Blank Metal	Cat. No.. List, ea...	DS100 $ .10	DSS100 $ .10
For Round Plug Receptacle	Cat. No.. List, ea...	DS10 $ .60	DSS10 $ .60	Cast Iron	Cat. No.. List, ea...	DS100g $ .25	DSS100g $ .25
Shipping Weight Std. Pkg.		30 lbs.	35 lbs.	Shipping Weight Std. Pkg.		35 lbs.	40 lbs.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at the same price as black enamel finish. For special plated finishes, brass and bronze covers with plain and special finishes, see page Cross Reference No. CH182.

White enamel finish will be furnished on metal covers, if specifically ordered, at 50% increase over list price of black enamel finish.

All black enameled, galvanized and porcelain covers, listed on this and the following page, may be assorted to make up a standard package.

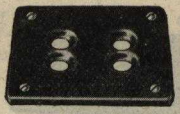
Condulet bodies that take above covers are listed on pages Cross Reference Nos. CH35, CH36, CH37, CH39, CH40 and CH41.

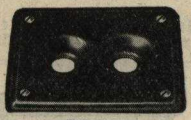
CONDULET GANG COVERS

FOR TWO AND THREE-GANG TYPES FS, FSC AND FSD CONDULET BODIES

Furnished with Fastening Screws


S72


S82


SS92


SS1002

COVERS FOR TWO-GANG CONDULET BODIES—Black Enamel Finish

Style of Cover		Surface Type	Flush Type
Standard Package.....		50	50
For Single Push Button Switches	Cat. No..	S72	SS72
	List, ea...	$ .20	$ .20
For Double Push Button Switches	Cat. No..	S82	SS82
	List, ea...	$ .20	$ .20
Shipping Weight Std. Pkg.		30 lbs.	35 lbs.

Style of Cover		Surface Type	Flush Type
Standard Package		50	50
For Flush Rotary Switches	Cat. No..	S92	SS92
	List, ea...	$ .20	$ .20
Blank Metal	Cat. No..	S1002	SS1002
	List, ea...	$ .20	$ .20
Shipping Weight Std. Pkg.		30 lbs.	35 lbs.


SS73


SS83


S93


SS7113


S1003

COVERS FOR THREE-GANG CONDULET BODIES—Black Enamel Finish

Style of Cover		Surface Type	Flush Type
Standard Package		35	35
For Single Push Button Switches	Cat. No..	S73	SS73
	List, ea...	$ .40	$ .40
For Double Push Button Switches	Cat. No..	S83	SS83
	List, ea...	$ .40	$ .40
For Flush Rotary Switches	Cat. No..	S93	SS93
	List ea...	$ .40	$ .40
Shipping Weight Std. Pkg.		30 lbs.	35 lbs.

Style of Cover		Surface Type	Flush Type
Standard Package		35	35
Crouse-Hinds Cover for Bryant Heater Control Combination 398 less Bryant Plate	Cat. No.. List, ea...	S7113 $1.45	SS7113 $1.45
Blank Metal	Cat. No..	S1003	SS1003
	List, ea...	$ .40	$ .40
Shipping Weight Std. Pkg.		40 lbs.	45 lbs.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at same price as black enamel finish. For special plated finishes, brass and bronze covers with plain and special finishes, see page Cross Reference No. CH182.

White enamel finish will be furnished on metal covers, if specifically ordered, at 50% increase over list price of black enamel finish.

All black enameled and galvanized covers for Two-Gang FS series Condulet bodies may be assorted to make up a standard package.

All black enameled and galvanized covers for Three-Gang FS series Condulet bodies may be assorted to make up a standard package.

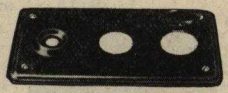
Condulet bodies that take Three-gang Covers are listed on page Cross Reference No. CH43.

CONDULET GANG COVERS

FOR FOUR-GANG TYPES FS, FSC AND FSD CONDULET BODIES

Furnished with Fastening Screws


S74


SS7104


SS7114


S7124


SS84


S8104


S8114


SS8124


S94


SS9104


SS9114


S9124

COVERS FOR FOUR-GANG CONDULET BODIES—Black Enamel Finish

	Style of Cover		Surface Type	Flush Type
	Standard Package		25	25
For Flush Switches	Single Push Button	Cat. No..	S74	SS74
		List, ea..	$ .60	$ .60
	Double Push Button	Cat. No..	S84	SS84
		List, ea..	$ .60	$ .60
	Flush Rotary	Cat. No..	S94	SS94
		List, ea..	$ .60	$ .60
For Clamp Receptacle, Round Attachment Plug Receptacle	And Single Push Button Switch	Cat. No..	S7104	SS7104
		List, ea..	$ .85	$ .85
	And Double Push Button Switch	Cat. No..	S8104	SS8104
		List, ea..	$ .85	$ .85
	And Flush Rotary Switch	Cat. No.	S9104	SS9104
		List, ea..	$ .85	$ .85
	Weight Std. Pkg.		35 lbs.	45 lbs.

	Style of Cover		Surface Type	Flush Type
	Standard Package		25	25
For Clamp Recept. Rectang. Attach. Plug Receptacle	And Single Push Button Switch	Cat. No..	S7114	SS7114
		List, ea..	$1.10	$1.10
	And Double Push Button Switch	Cat. No..	S8114	SS8114
		List, ea..	$1.10	$1.10
	And Flush Rotary Switch	Cat. No..	S9114	SS9114
		List, ea..	$1.10	$1.10
For Clamp Recept. Hubbell Plug Receptacle 5552	And Single Push Button Switch	Cat. No..	S7124	SS7124
		List, ea..	$ .70	$ .70
	And Double Push Button Switch	Cat. No..	S8124	SS8124
		List, ea .	$ .70	$ .70
	And Flush Rotary Switch	Cat. No..	S9124	SS9124
		List, ea..	$ .70	$ .70
	Blank Metal	Cat. No..	S1004	SS1004
		List, ea..	$ .60	$ .60
	Weight Std. Pkg		40 lbs.	50 lbs.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at same price as black enamel finish. For special plated finishes, brass and bronze covers with plain and special finishes, aluminum covers with plain and black enamel finish, see page Cross Reference No. CH182.

All black enameled and galvanized covers for Four-Gang FS series of Condulet bodies may be assorted to make up a standard package regardless of style of cover. No other assortment of covers only is allowed.

Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies. This note also applies to covers listed on pages, Cross Reference Nos. CH46, CH47 and CH48.

White enamel finish will be furnished on metal covers, if specifically ordered, at 50% increase over list price of black enamel finish.

Condulet bodies that take above covers are listed on page Cross Reference No. CH45.

(Cross Reference No. CH49)

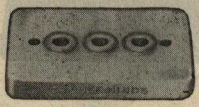
CONDULET COVERS

FOR FD AND FS SERIES OF CONDULET BODIES

Furnished with Fastening Screws


DS1


DS2


DS3


DS400


DS17


DSS18


DS111


DS112

PORCELAIN COVERS WITH WIRE HOLES

Style of Cover		Surface* Type	Flush* Type
Standard Pkg.		75	75
1-wire	Cat. No..	DS1	
	List, ea...	$ .20	
2-wire	Cat. No..	DS2	
	List, ea...	$ .20	
3-wire	Cat. No..	DS3	
	List, ea...	$ .20	
Shipping Weight Std. Pkg.		70 lbs.	

Style of Cover		Surface* Type	Flush* Type
Standard Pkg.		75	75
4-wire	Cat. No..	DS400	
	List, ea...	$ .20	
5-wire	Cat. No..	DS500	
	List, ea...	$ .20	
Shipping Weight Std. Pkg.		70 lbs.	

METAL COVERS WITH NIPPLES—Black Enamel Finish

⅛ Male	Cat. No..	DS15	DSS15
	List, ea...	$ .35	$ .35
⅛ Female	Cat. No..	DS16	DSS16
	List, ea...	$ .35	$ .35
¼ Male	Cat. No..	DS113	DSS113
	List, ea...	$ .38	$ .38
¼ Female	Cat. No..	DS114	DSS114
	List, ea...	$ .38	$ .38
Shipping Weight Std. Pkg.		30 lbs.	35 lbs.

⅜ Male	Cat. No..	DS17	DSS17
	List, ea...	$ .40	$ .40
⅜ Female	Cat. No..	DS18	DSS18
	List, ea...	$ .40	$ .40
½ Male	Cat. No..	DS115	DSS115
	List, ea...	$ .45	$ .45
½ Female	Cat. No..	DS116	DSS116
	List, ea...	$ .45	$ .45
Shipping Weight Std. Pkg.		30 lbs.	35 lbs.

PORCELAIN COVERS WITH NIPPLES

⅛ Male	Cat. No..	DS19
	List, ea...	$ .40
⅛ Female	Cat. No..	DS110
	List, ea...	$ .40
¼ Male	Cat. No..	DS119
	List, ea...	$ .45
¼ Female	Cat. No..	DS120
	List, ea...	$ .45
Shipping Weight Std. Pkg.		80 lbs.

⅜ Male	Cat. No..	DS111
	List, ea...	$ .50
⅜ Female	Cat. No..	DS112
	List, ea...	$ .50
½ Male	Cat. No..	DS121
	List, ea...	$ .55
½ Female	Cat. No..	DS122
	List, ea...	$ .55
Shipping Weight Std. Pkg.		80 lbs.

*Porcelain covers are suitable for both surface and flush mounting.

Condulet bodies that take above covers are listed on pages Cross Reference Nos. CH35, CH36, CH37, CH39, CH40 and CH41.

For other important information concerning covers listed on this page, see note on preceding page.

(Cross Reference No. CH47)

CONDULET COVERS

FOR FD AND FS SERIES OF CONDULET BODIES

Furnished with Fastening Screws

COVERS FOR FLUSH PLUG RECEPTACLES

Black Enameled	Surface Type	Flush Type	Style of Cover	Surface Type	Flush Type	Black Enameled
	75	75	Standard Package	75	75	
	For Hubbell "Duplex" Flush Plug Receptacle 6257		For Hubbell Flush Plug Receptacle 5547, 5802 or 6051*			
	DS13 30 lbs. $ .30	DSS13 35 lbs. $ .30	Catalogue Number Ship. Wt. Std. Pkg. . List Price, each .	DS21 30 lbs. $ .25	DSS21 35 lbs. $ .25	
	For Hubbell Flush Plug Receptacle 5566					
	Catalogue Number Ship. Wt. Std. Pkg. List Price, each .	DS22 30 lbs. $ .40	DSS22 35 lbs. $ .40	Condulets of the FD and FS series are listed on pages Cross References Nos. CH34 to CH41, inclusive.		

CONDULET GANG COVERS

FOR TWO-GANG FS SERIES OF CONDULET BODIES

Furnished with Fastening Screws

COVERS FOR FLUSH SWITCHES AND PLUG RECEPTACLES

Black Enameled	Surface Type	Flush Type	Style of Cover	Surface Type	Flush Type	Black Enameled
	50	50	Standard Package	50	50	
	For Round Flush Plug Receptacles		For Rectangular Flush Plug Receptacles			
	S102 $1.20	SS102 $1.20	Catalogue Number . List Price, each .	S112 $1.60	SS112 $1.60	
	For Hubbell Polarity Plug Receptacle 5552		For Hubbell "Duplex" Receptacle 6257			
	S122 $ .50	SS122 $ .50	Catalogue Number . List Price, each .	S132 $ .60	SS132 $ .60	
	For Hubbell Flush Plug Receptacle 5547, 5802 or 6051*		For Hubbell Flush Plug Receptacle 5566			
	S212 $ .50	SS212 $ .50	Catalogue Number . List Price, each .	S222 $ .80	SS222 $ .80	
	For Single Push Switch and Round Flush Plug Receptacles		For Single Push Switch and Rectangular Flush Plug Recept.			
	S7102 $ .80	SS7102 $ .80	Catalogue Number . List Price, each .	S7112 $1.20	SS7112 $1.20	
	For Single Push Switch and Hubbell Polarity Receptacle 5552		For Single Push Switch and Hubbell "Duplex" Recept. 6257			
	S7122 $ .50	SS7122 $ .50	Catalogue Number . List Price, each .	S7132 $ .50	SS7132 $ .50	
	For Single Push Switch and Hubbell Recept. 5547, 5802 or 6051*		For Single Push Switch and Hubbell Plug Receptacle 5566			
	S7212 $ .50	SS7212 $ .50	Catalogue Number . List Price, each .	S7222 $ .50	SS7222 $ .50	

*Or Bryant "Spartan" receptacle No. 120.

For important information, see notes on the following page.

CONDULET GANG COVERS—Continued

FOR TWO-GANG FS SERIES OF CONDULET BODIES

Furnished with Fastening Screws

COVERS FOR FLUSH SWITCHES AND PLUG RECEPTACLES—Continued

Black Enameled	Surface Type	Flush Type	Style of Cover	Surface Type	Flush Type	Black Enameled
	50	50	Standard Package	50	50	
	For Double Push Switch and Round Flush Plug Receptacle		For Double Push Switch and Rectangular Flush Plug Receptacle			
	S8102 $ .80	SS8102 $ .80	Catalogue Number . List Price, each .	S8112 $1.20	SS8112 $1.20	
	For Double Push Switch and Hubbell Polarity Receptacle 5552		For Double Push Switch and Hubbell "Duplex" Receptacle 6257			
	S8122 $ .50	SS8122 $ .50	Catalogue Number . List Price, each .	S8132 $ .50	SS8132 $ .50	
	For Double Switch and Hubbell Receptacle 5547, 5802 or 6051*		For Double Switch and Hubbell Plug Receptacle 5566			
	S8212 $ .50	SS8212 $ .50	Catalogue Number . List Price, each .	S8222 $ .50	SS8222 $ .50	
	For Rotary Switch and Round Flush Plug Receptacle		For Rotary Switch and Rectangular Flush Plug Receptacle			
	S9102 $ .80	SS9102 $ .80	Catalogue Number . List Price, each .	S9112 $1.20	SS9112 $1.20	
	For Rotary Switch and Hubbell Polarity Receptacle 5552		For Rotary Switch and Hubbell "Duplex" Receptacle 6257			
	S9122 $ .50	SS9122 $ .50	Catalogue Number . List Price, each .	S9132 $ .50	SS9132 $ .50	
	For Rotary Switch and Hubbell Receptacle 5547, 5802 or 6051*		For Rotary Switch and Hubbell Plug Receptacle 5566			
	S9212 $ .50	SS9212 $ .50	Catalogue Number . List Price, each .	S9222 $ .50	SS9222 $ .50	
	For Hubbell Receptacles 6257 and one of 5547, 5802 or 6051*		For Hubbell "Duplex" Receptacles 6257 and 5566			
	S13212 $ .50	SS13212 $ .50	Catalogue Number . List Price, each .	S13222 $ .50	SS13222 $ .50	
	For Hubbell Receptacles 5566 and one of 5547, 5802 or 6051*		For Round Plug Receptacle and Rectangular Plug Receptacle			
	S21222 $ .50	SS21222 $ .50	Catalogue Number . List Price, each .	S10112 $1.75	SS10112 $1.75	
	For Hubbell Polarity Recept. 5552 and one of 5547, 5802 or 6051*		For Hubbell Polarity Recept. 5552 and Hubbell Recept. 5566			
	S12212 $ .50	SS12212 $ .50	Catalogue Number . List Price, each .	S12222 $ .50	SS12222 $ .50	

*Or Bryant "Spartan" receptacle No. 120.

Two-gang FS series of Condulets are listed on page Cross Reference No. CH42.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at the same price as black enamel finish. For special metals and finishes, see page Cross Reference No. CH182.

White enamel finish will be furnished on metal covers, if specifically ordered, at 50% increase over list price of black enamel finish.

All black enameled and galvanized covers for Condulet bodies of the FD and FS series may be assorted to make up a standard package, also all black enameled and galvanized covers for two-gang FS series of Condulet bodies.

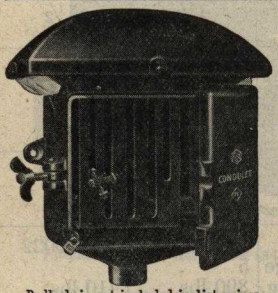
TYPE FF CONDULETS

SERVICE ENTRANCE, FUSED AND WEATHER-PROOF

For 250 Volt Cartridge or 125 Volt Plug Fuse Cut-outs

Furnished with Universal Cut-out Fastening Plate, Porcelain Bushings and all necessary Bolts and Screws, but without Cut-out

For 30 Ampere, 250 Volt Cartridge or 125 Volt Plug Fuse, N. E. C. Main Line Cut-outs—Cut-outs not Furnished



Padlock is not included in list prices

Style of Cut-out	Size in inches	½	¾	1
2-wire or 3-wire	Catalogue Number	FF13022	FF23022	FF33022
	Standard Package	20	20	10
	Weight Std. Pkg.	200 lbs.	230 lbs.	140 lbs.
	List Price, each	$3.90	$4.00	$4.10

Style of Cut-out	Size in inches	¾	1	1¼
4-wire	Catalogue Number	FF23042	FF33042	FF43042
	Standard Package	20	10	10
	Weight Std. Pkg.	280 lbs.	180 lbs.	195 lbs.
	List Price, each	$4.75	$4.90	$5.10

For 60 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	1	1¼	Size in inches	Style of Cut-out	1	1¼
2-wire or 3-wire	FF36022	FF46022	...Cat. No....	4-wire	FF36042	FF46042
	10	10	...Std. Pkg...		10	10
	170 lbs.	185 lbs.	.Wt. Std. Pkg.		195 lbs.	210 lbs.
	$5.00	$5.10	..List, each...		$6.85	$7.00

For 100 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	1	1½	2	Size in inches	Style of Cut-out	1¼	1½	2
2-wire or 3-wire	FF310022	FF510022	FF610022	...Cat. No....	4-wire	FF410042	FF510042	FF610042
	10	5	5	...Std. Pkg...		10	5	5
	250 lbs.	145 lbs.	150 lbs.	.Wt. Std. Pkg.		300 lbs.	175 lbs.	170 lbs.
	$9.90	$10.30	$10.50	..List, each...		$12.10	$12.30	$12.50

The universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 125 Volt, Plug Fuse Cut-outs

2-Wire: **BRYANT**—(Cartridge) 1917, (Plug) 62965. **D. & W.**—(Cartridge) 91102. **G. E. CO.**—(Cartridge) 34367, (Plug) 62965. **NOARK**—(Cartridge) 3327. **PAISTE**—(Cartridge) 72965, (Plug) 2965. **SHAWMUT**—(Cartridge) 2077. **TRUMBULL**—(Cartridge) 29653, (Plug) 2965. **WEBER**—(Plug) 62965. **UNION**—(Cartridge) 2010.
3-Wire: **BRYANT**—(Cartridge) 1924, (Plug) 62165. **D. & W.**—(Cartridge) 91103. **G. E. CO.**—(Cartridge) 34372, (Plug) 62165. **NOARK**—(Cartridge) 3328. **PAISTE**—(Cartridge) 72165, (Plug) 2165. **SHAWMUT**—(Cartridge) 2079. **TRUMBULL**—(Cartridge) 21653, (Plug) 2165. **WEBER**—(Plug) 62165. **UNION**—(Cartridge) 2012.
4-Wire: Mount two 2-wire cut-outs side by side.

60 Ampere, 250 Volt, Cut-outs

2-Wire: **BRYANT**—(Cartridge) 1918. **D. & W.**—(Cartridge) 91108. **G. E. CO.**—(Cartridge) 34376. **NOARK**—(Cartridge) 3329. **PAISTE**—(Cartridge) 82965. **SHAWMUT**—(Cartridge) 2078. **TRUMBULL**—(Cartridge) 29656. **UNION**—(Cartridge) 2011.
3-Wire: **BRYANT**—(Cartridge) 1925. **D. & W.**—(Cartridge) 91109. **G. E. CO.**—(Cartridge) 34377. **NOARK**—(Cartridge) 3330. **PAISTE**—(Cartridge) 82165. **SHAWMUT**—(Cartridge) 2080. **TRUMBULL**—(Cartridge) 21656. **UNION**—(Cartridge) 2013.
4-Wire: Mount two 2-wire cut-outs side by side.

100 Ampere, 250 Volt, Cut-outs

2-Wire: **BRYANT**—(Cartridge) 271. **D. & W.**—(Cartridge) 91119. **G. E. CO.**—(Cartridge) 36801. **NOARK**—(Cartridge) 3331. **SHAWMUT**—(Cartridge) 2101. **UNION**—(Cartridge) 2014.
3-Wire: **BRYANT**—(Cartridge) 272. **D. & W.**—(Cartridge) 91120. **G. E. CO.**—(Cartridge) 36800. **NOARK**—(Cartridge) 3332. **SHAWMUT**—(Cartridge) 2102. **UNION**—(Cartridge) 2015.
4-Wire: Mount two 2-wire cut-outs side by side.

Padlock is not included in prices for Condulets.

For finishes and assortments, see note on page Cross Reference No. CH57.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH51)

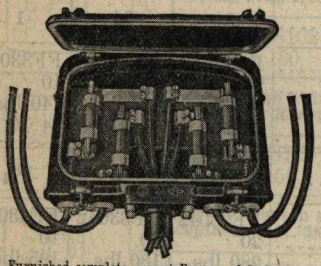
TYPE FF CONDULETS

SERVICE ENTRANCE

Fused and Weather-Proof—For 250 Volt Cartridge Fuse Cut-outs

Furnished Complete with Crouse-Hinds Slate Base Cut-outs, but without Fuses

Complete with 200 Ampere, 250 Volt, N. E. C. Main Line Cartridge Fuse Cut-outs



Furnished complete, except Fuses and Padlock

Style of Cut-out	Size in inches....	1¼	1½
2-wire	Catalog No.....	FF420022	FF520022
	Standard Package	5	5
	Ship.Wt. Std. Pkg.	370 lbs.	380 lbs.
	List Price, each...	$39.25	$39.50

Style of Cut-out	Size in inches....	2	2½
2-wire	Catalog No.....	FF620022	FF720022
	Standard Package	5	5
	Ship.Wt. Std. Pkg.	390 lbs.	410 lbs.
	List Price, each...	$39.75	$40.00

Style of Cut-out	Size in inches.....	1¼	1½	2	2½
3-wire	Catalog Number.....	FF420032	FF520032	FF620032	FF720032
	Standard Package.....	5	5	5	5
	Shipping Weight Std. Pkg....	510 lbs.	520 lbs.	530 lbs.	540 lbs.
	List Price, each.....	$57.25	$57.50	$57.75	$58.00

Style of Cut-out	Size in inches.....	1½	2	2½	3
4-wire	Catalog Number.....	FF520042	FF620042	FF720042	FF820042
	Standard Package.....	5	5	5	5
	Shipping Weight Std. Pkg....	540 lbs.	550 lbs.	570 lbs.	590 lbs.
	List Price, each.....	$65.50	$65.75	$66.00	$66.25

Complete with 400 Ampere, 250 Volt, N. E. C. Main Line Cartridge Fuse Cut-outs

Style of Cut-out	Size in inches.....	2	2½	3	3½
2-wire	Catalog Number.....	FF640022	FF740022	FF840022	FF940022
	Standard Package.....	5	5	5	5
	Shipping Weight Std. Pkg....	550 lbs.	570 lbs.	600 lbs.	610 lbs.
	List Price, each.....	$70.75	$71.00	$71.25	$71.50

Style of Cut-out	Size in inches.....	2	2½	3	3½
3-wire	Catalog Number.....	FF640032	FF740032	FF840032	FF940032
	Standard Package.....	5	5	5	5
	Shipping Weight Std. Pkg....	1030 lbs.	1040 lbs.	1060 lbs.	1065 lbs.
	List Price, each.....	$121.50	$121.75	$122.00	$122.25

Style of Cut-out	Size in inches.....	2½	3	3½	4
4-wire	Catalog Number.....	FF740042	FF840042	FF940042	FF1040042
	Standard Package.....	5	5	5	5
	Shipping Weight Std. Pkg....	1060 lbs.	1070 lbs.	1080 lbs.	1090 lbs.
	List Price, each.....	$140.75	$141.00	$141.25	$141.50

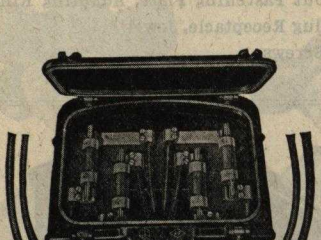
Padlock is not included in prices for Condulets.
For finishes and assortments, see note on page Cross Reference No. CH57.
Condulet reducers are listed on page Cross Reference No. CH171.
Slate base cut-outs, without fuses, are included in above list prices.

TYPE FF CONDULETS

SERVICE ENTRANCE

Fused and Weather-Proof—For 250 Volt Cartridge Fuse Cut-outs
Furnished Complete with Crouse-Hinds Slate Base Cut-outs, but without Fuses

Complete with 600 Ampere, 250 Volt, N. E. C. Main Line Cartridge Fuse Cut-outs



Furnished complete, except Fuses and Padlock

Style of Cut-out	Size in inches..	3	3½	4
2-wire	Catalog No....	FF860022	FF960022	FF1060022
	Std. Pkg.....	5	5	5
	Wt. Std. Pkg..	600 lbs.	610 lbs.	620 lbs.
	List Price, ea..	$84.50	$84.75	$85.00
Style of Cut-out	Size in inches..	3	3½	4
3-wire	Catalog No....	FF860032	FF960032	FF1060032
	Std. Pkg.....	5	5	5
	Wt. Std. Pkg..	1050 lbs.	1060 lbs.	1070 lbs.
	List Price, ea..	$145.00	$145.25	$145.50
Style of Cut-out	Size in inches..	3	3½	4
4-wire	Catalog No....	FF860042	FF960042	FF1060042
	Std. Pkg.....	5	5	5
	Wt. Std. Pkg..	1060 lbs.	1070 lbs.	1080 lbs.
	List Price, ea..	$174.00	$174.25	$174.50

Slate base cut-outs, without fuses, are included in prices for Condulets that take 600 ampere, 250 volt cut-outs.

Fused and Weather-Proof—Type FF—For 600 Volt Cartridge Fuse Cut-outs
Furnished with Universal Cut-out Fastening Plates, Porcelain Bushings and all necessary Bolts and Screws, but without Cut-outs

For 30 Ampere, 600 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished



Padlock is not included in list prices

Style of Cut-out	Size in inches..	½	¾	1
2-wire	Catalog No....	FF13026	FF23026	FF33026
	Std. Pkg.....	20	20	10
	Wt. Std. Pkg..	320 lbs.	330 lbs.	180 lbs.
	List Price, ea..	$4.65	$4.75	$4.85
Style of Cut-out	Size in inches..	½	¾	1
3-wire or 4-wire	Catalog No....	FF13036	FF23036	FF33036
	Std. Pkg.....	20	20	10
	Wt. Std. Pkg..	400 lbs.	410 lbs.	220 lbs.
	List Price, ea..	$6.20	$8.50	$8.60

For 60 Ampere, 600 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	1	1¼	Size in inches..	Style of Cut-out	1	1¼	1½
2-wire	FF36026	FF46026	Catalog No....	3-wire or 4-wire	FF36036	FF46036	FF56036
	10	10	Std. Pkg.....		10	10	5
	210 lbs.	220 lbs.	Wt. Std. Pkg..		320 lbs.	330 lbs.	340 lbs.
	$8.70	$9.00	List Price, ea..		$12.75	$13.00	$13.25

In listing 2, 3, or 4-wire, 600 volt, type FF Condulets, it is intended that two, three or four 1-wire cut-outs, respectively, be mounted side by side.

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

1-Wire, 30 Ampere, 600 Volt Cut-outs: BRYANT—(Cartridge) 1937. **D. & W.**—(Cartridge) 28076. **G. E. CO.**—(Cartridge) 34991. **NOARK**—(Cartridge) 5600. **SHAWMUT**—(Cartridge) 20735. **UNION**—(Cartridge) 4003.

1-Wire, 60 Ampere, 600 Volt Cut-outs: BRYANT—(Cartridge) 1938. **D. & W.**—(Cartridge) 28077. **G. E. CO.**—(Cartridge) 35101. **NOARK**—(Cartridge) 5601. **SHAWMUT**—(Cartridge) 20745. **UNION**—(Cartridge) 4004.

Padlock is not included in prices for Condulets.

For finishes and assortments, see note on page Cross Reference No. CH57.

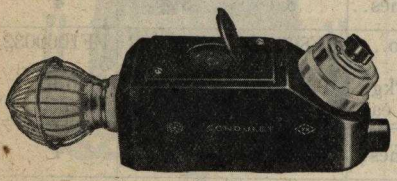
(Cross Reference No. CH53)

TYPES FH AND FHF CONDULET BODIES

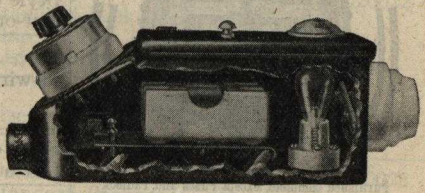
FOR CONTROL OF HEATING DEVICES

Type FH is Furnished with Crouse-Hinds Receptacle C337G, Adjustable Bar for Round Base Switch or Plug Receptacle and all necessary Fastening Screws

Type FHF is furnished with Pilot Lamp Receptacle, Universal Cut-out Fastening Plate, Adapting Rings and Adjustable Bars for Switch and Attachment Plug Receptacle, Jewel in Cover and all necessary Bolts and Screws

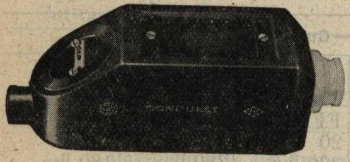


Type FH
Showing Snap Switch, Flush Plug Receptacle, Cover DS10, Crouse-Hinds Receptacle C337G with Guard and Incandescent Lamp Mounted



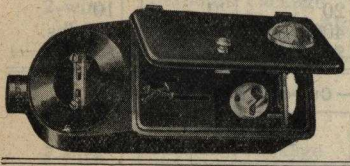
Type FHF
Showing Snap Switch, Cut-out, Incandescent Lamp and Attachment Plug Receptacle Mounted (Broken-away View)

TYPE FH CONDULET BODIES—Black Enamel Finish



	Size in inches.....	½	¾	1
Form 10	Catalogue Number..	FH110	FH210	FH310
	Standard Package...	15	15	10
	Ship. Wt. Std. Pkg..	95 lbs.	100 lbs.	75 lbs.
	List Price, each	$2.50	$2.60	$2.70
	Size in inches.....	½	¾	1
Form 20	Catalogue Number..	FH120	FH220	FH320
	Standard Package...	15	15	10
	Ship. Wt. Std. Pkg..	120 lbs.	125 lbs.	90 lbs.
	List Price, each	$3.00	$3.10	$3.20

TYPE FHF CONDULET BODIES—Black Enamel Finish



Size in inches	½	¾
Catalogue Number.....	FHF120	FHF220
Standard Package.....	15	15
Ship. Wt. Std. Pkg.....	130 lbs.	130 lbs.
List Price, each	$4.65	$4.75

The adjustable bars and adapting rings furnished with each Condulet permit the proper mounting of any switch or Form 5 or Form 10, (or in case of type FHF Condulet, any Form 20) attachment plug receptacle enumerated on pages Cross Reference Nos. CH62 and CH63.

The universal cut-out fastening plate, furnished with each type FHF Condulet, takes any of the following 2-wire, 30 ampere, 250 volt cartridge, or 2-wire, 30 ampere, 125 volt, plug fuse cut-outs:

BRYANT—(Cartridge) 1917, (Plug) 62965. **D. & W.**—(Cartridge) 91102. **G. E. CO.**—(Cartridge) 34367, (Plug) 62965. **NOARK**—(Cartridge) 3327. **PAISTE**—(Cartridge) 72965, (Plug) 2965. **SHAWMUT**—(Cartridge) 2077. **TRUMBULL**—(Cartridge) 29653, (Plug) 2965. **WEBER**—(Plug) 62965. **UNION**—(Cartridge) 2010.

Type FHF Condulets are designed to take style H (bulb S9) lamp.

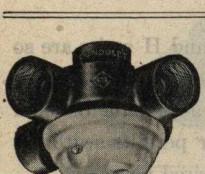
Type FH Condulet bodies take covers DS7, DS8, DS9, DS10, DS11 and DS12, listed on page Cross Reference No. CH46. Receptacle C337G is listed separately on page Cross Reference No. CH190. Condulet reducers are listed on page Cross Reference No. CH171.

For finishes and assortments, see note on page Cross Reference No. CH57.

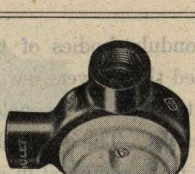
TYPES G, GA, GL, GLA, GT, GTA, GX, GXA, GXB, H, HA, HH, HHC AND HLA CONDULETS

Take Round Covers; 5, 10 or 20 Ampere Round Base Switches, or Round Base Fittings

Furnished with Adjustable Bar and all necessary Fastening Screws



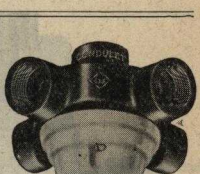
Type GTA
Showing 2-Wire Hole
Porcelain Cover Mounted



Type GL
Showing Female Nipple
Porcelain Cover Mounted



Type HA
Showing 3-Wire Hole
Porcelain Cover Mounted

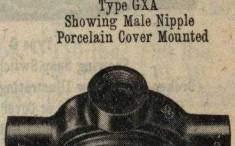


Type GXA
Showing Male Nipple
Porcelain Cover Mounted



Type H
Showing Female Nipple
Metal Cover Mounted

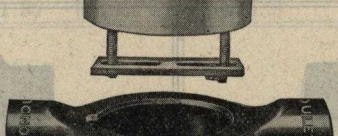




Type GX
Showing Male Nipple
Metal Cover Mounted



Type HHC
Showing Snap Switch
Mounted



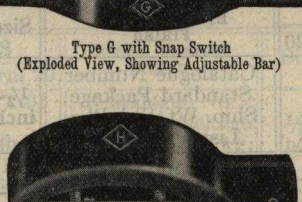
Type G with Snap Switch
(Exploded View, Showing Adjustable Bar)



Type HLA
Showing 1-Wire Hole
Porcelain Cover Mounted



Type GT
Showing Receptacle Mounted



Dimensional Drawing for G and H Series of Condulet Bodies



Type HH
Showing Snap Switch
Mounted



Type GA
Showing Snap Switch
Mounted

Size	Dimen.	Form 5	Form 10	Form 20
$\frac{1}{2}$″	A	$\frac{7}{8}$″	1″	$\frac{7}{8}$″
$\frac{3}{4}$″	A	$1\frac{1}{32}$″	$1\frac{5}{32}$″	$1\frac{3}{16}$″
1″	A	$1\frac{3}{16}$″	$1\frac{9}{32}$″	$1\frac{1}{4}$″
$\frac{1}{2}$, $\frac{3}{4}$, 1″	B	$2\frac{5}{8}$″	3″	$3\frac{3}{4}$″
$\frac{1}{2}$, $\frac{3}{4}$, 1″	C	$1\frac{3}{4}$″	$2\frac{1}{16}$″	$2\frac{21}{32}$″
$\frac{1}{2}$, $\frac{3}{4}$, 1″	D	$\frac{1}{2}$ to $1\frac{1}{2}$″	$\frac{1}{2}$ to $1\frac{7}{8}$″	$\frac{1}{2}$ to $2\frac{3}{8}$″



Type GLA
Showing Female Nipple
Porcelain Cover Mounted

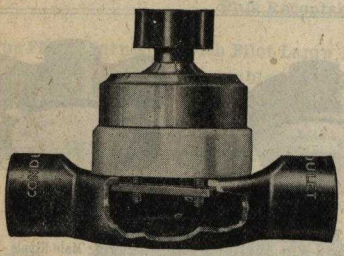
Switches and fittings for above Condulet bodies are enumerated on pages Cross Reference Nos. CH62 and CH63. Gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.
Covers for Condulet bodies of the G and H series are listed on page Cross Reference No. CH61.
Condulet bodies of the G and H series are listed on pages Cross Reference Nos. CH57 to CH60, inclusive.

(Cross Reference No. CH56)

TYPES G AND GA CONDULET BODIES

Take Round Covers; 5, 10 or 20 Ampere Round Base Switches, or Round Base Fittings

Furnished with Adjustable Bar and all necessary Fastening Screws



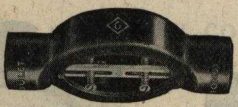
Type G
Showing Snap Switch Mounted
(Broken-away View Illustrating use of Adjustable Bar in Fastening Fitting or Cover to a Condulet Body of the G and H Series)

Condulet bodies of the G and H series are so designed that covers, switches or fittings are fastened to them by means of an adjustable bar and two screws. The adjustable bar permits switch or fitting to be mounted in any desired position.

A gasket may be used between cover or fitting and Condulet body.

Gaskets are not furnished with Condulet bodies, and if desired must be ordered separately.

Form 5, Form 10 and Form 20 are designations to indicate sizes of Condulet bodies which take fittings correspondingly classified on two of the following pages.



Type G



Type GA

Size	TYPE G BODIES			Black Enamel Finish	Size	TYPE GA BODIES		
	Form 5	Form 10	Form 20			Form 5	Form 10	Form 20
½-inch	G151 100 110 lbs. $ .55	G1101 75 90 lbs. $ .65	G1201 50 75 lbs. $ .90	.Catalogue Number. ..Standard Package.. .Ship. Wt. Std. Pkg.. ...List Price, each...	½-inch	GA151 100 120 lbs. $ .75	GA1101 75 100 lbs. $ .85	GA1201 50 80 lbs. $1.10
¾-inch	G252 50 75 lbs. $ .65	G2102 25 55 lbs. $ .80	G2202 25 60 lbs. $ .95	.Catalogue Number. ..Standard Package.. .Ship. Wt. Std. Pkg.. ...List Price, each...	¾-inch	GA252 50 80 lbs. $ .85	GA2102 25 60 lbs. $1.00	GA2202 25 65 lbs. $1.20
1-inch	G353 25 60 lbs. $ .90	G3103 25 65 lbs. $1.00	G3203 25 70 lbs. $1.20	.Catalogue Number. ..Standard Package.. .Ship. Wt. Std. Pkg.. ...List Price, each...	1-inch	GA353 25 65 lbs. $1.10	GA3103 25 70 lbs. $1.20	GA3203 25 75 lbs. $1.50

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type, size and form may be assorted to make up a standard package. No other assortment is allowed.

Switches and fittings for above Condulet bodies are enumerated on pages Cross Reference Nos. CH62 and CH63.

Gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

Covers for Condulet bodies of the G and H series are listed on page Cross Reference No. CH61.

(Cross Reference No. CH57)

TYPES GL, GLA, GT AND GTA CONDULET BODIES

Take Round Covers; 5, 10 or 20 Ampere Round Base Switches, or Round Base Fittings

Furnished with Adjustable Bar and all necessary Fastening Screws

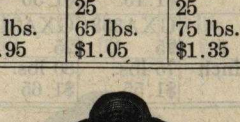


Type GL

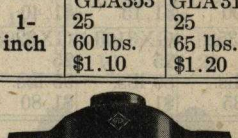


Type GLA

Size	TYPE GL BODIES			Black Enamel Finish	Size	TYPE GLA BODIES		
	Form 5	Form 10	Form 20			Form 5	Form 10	Form 20
½-inch	GL151	GL1101	GL1201	...Catalogue No...	½-inch	GLA151	GLA1101	GLA1201
	100	75	50	.Standard Package.		100	75	50
	110 lbs.	100 lbs.	80 lbs.	.Weight Std. Pkg.		130 lbs.	110 lbs.	90 lbs.
	$ .60	$ .70	$ .95	..List Price, each..		$ .75	$ .85	$1.10
¾-inch	GL252	GL2102	GL2202	...Catalogue No...	¾-inch	GLA252	GLA2102	GLA2202
	50	25	25	.Standard Package.		50	25	25
	75 lbs.	55 lbs.	60 lbs.	.Weight Std. Pkg.		95 lbs.	60 lbs.	65 lbs.
	$ .70	$ .85	$1.05	..List Price, each..		$ .85	$1.00	$1.20
1-inch	GL353	GL3103	GL3203	...Catalogue No...	1-inch	GLA353	GLA3103	GLA3203
	25	25	25	.Standard Package.		25	25	25
	60 lbs.	65 lbs.	75 lbs.	.Weight Std. Pkg.		60 lbs.	65 lbs.	60 lbs.
	$ .95	$1.05	$1.35	..List Price, each..		$1.10	$1.20	$1.50



Type GT



Type GTA

Size	TYPE GT BODIES			Black Enamel Finish	Size	TYPE GTA BODIES		
	Form 5	Form 10	Form 20			Form 5	Form 10	Form 20
½-inch	GT151	GT1101	GT1201	...Catalogue No...	½-inch	GTA151	GTA1101	GTA1201
	100	75	50	.Standard Package.		100	75	50
	110 lbs	100 lbs.	80 lbs.	.Weight Std. Pkg.		160 lbs.	120 lbs.	100 lbs.
	$ .75	$ .85	$1.10	..List Price, each..		$ .90	$1.00	$1.25
¾-inch	GT252	GT2102	GT2202	...Catalogue No...	¾-inch	GTA252	GTA2102	GTA2202
	50	25	25	.Standard Package.		50	25	25
	75 lbs.	55 lbs.	60 lbs.	.Weight Std. Pkg.		100 lbs.	60 lbs.	65 lbs.
	$ .85	$1.00	$1.20	..List Price, each..		$1.00	$1.15	$1.40
1-inch	GT353	GT3103	GT3203	...Catalogue No...	1-inch	GTA353	GTA3103	GTA3203
	25	25	25	.Standard Package.		25	25	25
	60 lbs.	65 lbs.	75 lbs.	.Weight Std. Pkg.		60 lbs.	65 lbs.	75 lbs.
	$1.10	$1.20	$1.50	..List Price, each..		$1.35	$1.45	$1.80

Form 5, Form 10 and Form 20 are designations to indicate sizes of Condulet bodies which take fittings correspondingly classified on pages Cross Reference Nos. CH62 and CH63.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type, size and form may be assorted to make up a standard package. No other assortment is allowed.

Switches or fittings for above Condulet bodies, are enumerated on pages Cross Reference Nos. CH62 and CH63.

Gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

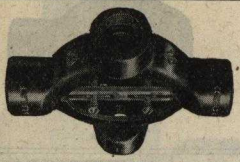
Covers for Condulet bodies of the G and H series are listed on page Cross Reference No. CH61.

(Cross Reference No. CH58)

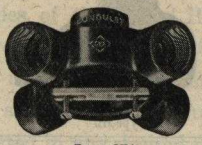
TYPES GX, GXA, H AND HA CONDULET BODIES

Take Round Covers; 5, 10 or 20 Ampere Round Base Switches, or Round Base Fittings

Furnished with Adjustable Bar and all necessary Fastening Screws

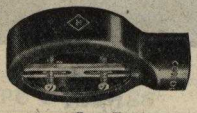


Type GX



Type GXA

Size	TYPE GX BODIES			Black Enamel Finish	Size	TYPE GXA BODIES		
	Form 5	Form 10	Form 20			Form 5	Form 10	Form 20
½-inch	GX151	GX1101	GX1201	...Catalogue No...	½-inch	GXA151	GXA1101	GXA1201
	100	75	50	...Standard Pkg...		100	75	50
	130 lbs.	120 lbs.	100 lbs.	Ship. Wt. Std. Pkg.		180 lbs.	150 lbs.	110 lbs.
	$ .90	$1.00	$1.25	..List Price, each..		$1.05	$1.15	$1.40
¾-inch	GX252	GX2102	GX2202	...Catalogue No...	¾-inch	GXA252	GXA2102	GXA2202
	50	25	25	...Standard Pkg...		50	25	25
	85 lbs.	70 lbs.	80 lbs.	Ship. Wt. Std. Pkg.		110 lbs.	75 lbs.	80 lbs.
	$1.00	$1.15	$1.40	..List Price, each..		$1.15	$1.30	$1.60
1-inch	GX353	GX3103	GX3203	...Catalogue No...	1-inch	GXA353	GXA3103	GXA3203
	25	25	25	...Standard Pkg...		25	25	25
	70 lbs.	80 lbs.	95 lbs.	Ship. Wt. Std. Pkg.		75 lbs.	80 lbs.	85 lbs.
	$1.35	$1.45	$1.80	..List Price, each..		$1.55	$1.65	$2.00



Type H



Type HA

Size	TYPE H BODIES			Black Enamel Finish	Size	TYPE HA BODIES		
	Form 5	Form 10	Form 20			Form 5	Form 10	Form 20
½-inch	H15	H110	H120	...Catalogue No...	½-inch	HA15	HA110	HA120
	100	75	50	...Standard Pkg...		100	75	50
	100 lbs.	85 lbs.	80 lbs.	Ship. Wt. Std. Pkg.		110 lbs.	95 lbs.	95 lbs.
	$ .45	$ .55	$ .80	..List Price, each..		$ .50	$ .60	$ .85
¾-inch	H25	H210	H220	...Catalogue No...	¾-inch	HA25	HA210	HA220
	50	25	25	...Standard Pkg...		50	25	25
	70 lbs.	50 lbs.	60 lbs.	Ship. Wt. Std. Pkg.		80 lbs.	60 lbs.	65 lbs.
	$ .55	$ .70	$ .85	..List Price, each..		$ .60	$ .75	$ .90
1-inch	H35	H310	H320	...Catalogue No...	1-inch	HA35	HA310	HA320
	25	25	25	...Standard Pkg...		25	25	25
	50 lbs.	60 lbs.	70 lbs.	Ship. Wt. Std. Pkg.		60 lbs.	65 lbs.	75 lbs.
	$ .80	$ .90	$1.10	..List Price, each..		$ .85	$ .95	$1.20

Form 5, Form 10 and Form 20 are designations to indicate sizes of Condulet bodies which take fittings correspondingly classified on pages Cross Reference Nos. CH62 and CH63.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type, size and form may be assorted to make up a standard package. No other assortment is allowed.

Switches and fittings for above Condulet bodies are enumerated on pages Cross Reference Nos. CH62 and CH63.

Gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

Covers for Condulet bodies of the G and H series are listed on page Cross Reference No. CH61.

(Cross Reference No. CH59)

TYPES HH, HHC, HLA AND GXB CONDULET BODIES

Take Round Covers; 5, 10 or 20 Ampere Round Base Switches, or Round Base Fittings—Except Type GXB which is made in Form 10 Only

Furnished with Adjustable Bar and all necessary Fastening Screws

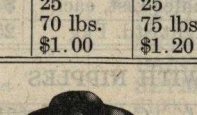


Type HH

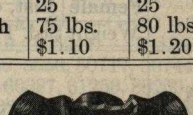


Type HHC

Size	TYPE HH BODIES			Black Enamel Finish	Size	TYPE HHC BODIES		
	Form 5	Form 10	Form 20			Form 5	Form 10	Form 20
½-inch	HH151	HH1101	HH1201	...Catalogue No...	½-inch	HHC151	HHC1101	HHC1201
	100	75	50	...Standard Pkg...		100	75	50
	130 lbs.	110 lbs.	100 lbs.	Ship. Wt. Std. Pkg.		160 lbs.	140 lbs.	110 lbs.
	$ .55	$ .65	$ .90	..List Price, each..		$ .75	$ .85	$1.10
¾-inch	HH252	HH2102	HH2202	...Catalogue No...	¾-inch	HHC252	HHC2102	HHC2202
	50	25	25	...Standard Pkg...		50	25	25
	95 lbs.	65 lbs.	75 lbs.	Ship. Wt. Std. Pkg.		100 lbs.	70 lbs.	85 lbs.
	$ .65	$ .80	$ .95	..List Price, each..		$ .85	$1.00	$1.20
1-inch	HH353	HH3103	HH3203	...Catalogue No...	1-inch	HHC353	HHC3103	HHC3203
	25	25	25	...Standard Pkg...		25	25	25
	65 lbs.	70 lbs.	75 lbs.	Ship. Wt. Std. Pkg.		75 lbs.	80 lbs.	90 lbs.
	$ .90	$1.00	$1.20	..List Price, each..		$1.10	$1.20	$1.50



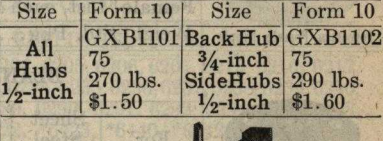
Type HLA



Type GXB

Size	TYPE HLA BODIES			Black Enamel Finish
	Form 5	Form 10	Form 20	
½-inch	HLA151	HLA1101	HLA1201	...Catalogue No...
	100	75	50	...Standard Pkg...
	130 lbs.	110 lbs.	100 lbs.	Ship. Wt. Std. Pkg.
	$ .60	$ .70	$ .95	..List Price, each..
¾-inch	HLA252	HLA2102	HLA2202	...Catalogue No...
	50	25	25	...Standard Pkg...
	95 lbs.	65 lbs.	75 lbs.	Ship. Wt. Std. Pkg.
	$ .70	$ .85	$1.05	..List Price, each..
1-inch	HLA353	HLA3103	HLA3203	...Catalogue No...
	25	25	25	...Standard Pkg...
	65 lbs.	70 lbs.	75 lbs.	Ship. Wt. Std. Pkg.
	$ .95	$1.05	$1.35	..List Price, each..

TYPE GXB BODIES			
Size	Form 10	Size	Form 10
All Hubs ½-inch	GXB1101	Back Hub ¾-inch	GXB1102
	75		75
	270 lbs.	SideHubs ½-inch	290 lbs.
	$1.50		$1.60



Combination of type GXB and type K Condulets, forming an Electrolier

Form 5, Form 10 and Form 20 are designations to indicate sizes of Condulet bodies which take fittings correspondingly classified on pages Cross Reference Nos. CH62 and CH63.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type, size and form may be assorted to make up a standard package. No other assortment is allowed.

Switches or fittings for above Condulet bodies are enumerated on pages Cross Reference Nos. CH62 and CH63.

Gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

Covers for Condulet bodies of the G and H series are listed on page Cross Reference No. CH61.

(Cross Reference No CH60)

CONDULET COVERS

FOR G AND H SERIES OF CONDULET BODIES

Furnished with Fastening Screws



Porcelain, 1-Wire Hole



Porcelain, 4-Wire Hole

Size of Cover.....	For Form 5 or Form 10 Bodies	For Form 20 Bodies	Size of Cover.....	For Form 5 or Form 10 Bodies	For Form 20 Bodies
Std. Pkg. Assorted..	100	50	Std. Pkg. Assorted..	100	50

PORCELAIN COVERS WITH WIRE HOLES

1-wire	Cat. No....	5101	201	3-wire	Cat. No....	5103	203
	List, each..	$ .10	$ .25		List, each..	$ .10	$ .25
2-wire	Cat. No....	5102	202	4-wire	Cat. No....	510400	20400
	List, each..	$ .10	$ .25		List, each..	$ .10	$ .25
Weight Std. Pkg....		45 lbs.	60 lbs.	Weight Std. Pkg....		45 lbs.	60 lbs.



Metal, Male Nipple



Metal, Female Nipple

METAL COVERS WITH NIPPLES—Black Enamel Finish

1/8" Male	Cat. No....	5105	205	3/8" Male	Cat. No....	5107	207
	List, each..	$ .20	$ .35		List, each..	$ .25	$ .40
1/8" Female	Cat. No....	5106	206	3/8" Female	Cat. No....	5108	208
	List, each..	$ .20	$ .35		List, each..	$ .25	$ .40
1/4" Male	Cat. No....	51013	2013	1/2" Male	Cat. No....	51015	2015
	List, each..	$ .23	$ .38		List, each..	$ .30	$ .45
1/4" Female	Cat. No....	51014	2014	1/2" Female	Cat. No....	51016	2016
	List, each..	$ .23	$ .38		List, each..	$ .30	$ .45
Weight Std. Pkg....		30 lbs.	35 lbs.	Weight Std. Pkg....		25 lbs.	30 lbs.



Porcelain, Male Nipple



Porcelain, Female Nipple

PORCELAIN COVERS WITH NIPPLES

1/8" Male	Cat. No....	5109	209	3/8" Male	Cat. No....	51011	2011
	List, each..	$ .25	$ .43		List, each..	$ .35	$ .53
1/8" Female	Cat. No....	51010	2010	3/8" Female	Cat. No....	51012	2012
	List, each..	$ .25	$ .43		List, each..	$ .35	$ .53
1/4" Male	Cat. No....	51019	2019	1/2" Male	Cat. No....	51021	2021
	List, each..	$ .30	$ .48		List, each..	$ .40	$ .58
1/4" Female	Cat. No....	51020	2020	1/2" Female	Cat. No....	51022	2022
	List, each..	$ .30	$ .48		List, each..	$ .40	$ .58
Weight Std. Pkg....		60 lbs.	55 lbs.	Weight Std. Pkg....		60 lbs.	55 lbs.



Blank Metal

BLANK METAL COVERS—Black Enamel Finish

For Form 5 or Form 10 Bodies	Sheet Steel	Cast Iron	Style of Cover	For Form 20 Bodies	Sheet Steel	Cast Iron
	51000	51000g	. Catalogue Number .		2000	2000g
	100	100	..Standard Package..		50	50
	20 lbs.	20 lbs.	.. Weight Std. Pkg ..		20 lbs.	20 lbs.
	$ .08	$ .16	..... List, each		$ .23	$ .30

The same covers fit both Form 5 and Form 10 Condulet bodies, and these covers are interchangeable on any Form 5 or Form 10 Condulet body of the G and H series.

Covers for Form 20 Condulet bodies are interchangeable on any Form 20 Condulet body of the G and H series.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at same price as black enamel finish. For special plated finishes, brass and bronze covers with plain and special finishes, aluminum covers with plain and black enamel finish, see page Cross Reference No. CH182.

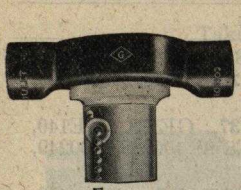
Black enameled, galvanized and porcelain covers of the same size may be assorted to make up a standard package, regardless of style of cover. No other assortment of covers only is allowed.

Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies.

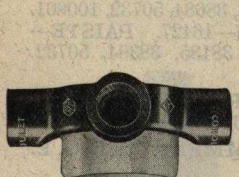
Gaskets are listed on page Cross Reference No. CH176. For sizes of wire holes in covers, see page Cross Reference No. CH172.

CONDULET FITTINGS

For G and H Series of Condulet Bodies, FH Condulet Bodies and QH, QK and Z Series of Condulets



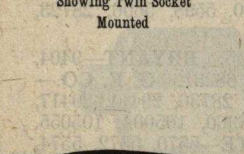
Type G Condulet Showing Pull Switch Mounted



Type GT Condulet Showing Hubbell Plug Receptacle Mounted



Type H Condulet Showing Twin Socket Mounted



Type G Condulet Showing Two-Light Cluster Mounted

FORM 5 FITTINGS

Snap Switches: **ARROW E**—6100, 6101, 6102, 6103, 6106, 6107, 6200, 6201, 6202, 6203, 6208, 6209, 6210, 6211, 6223, 6224, 6225, 6226, *6400, *6401, *6402, *6403, *6420, *6421. **CUTLER-HAMMER**—7107, 7108. **DIAMOND H**—122, D-122, 123, 124, 125, D-125, 126, D-126, 220, D-220, 1220, D-1220, 1230, 1240, 1250, D-1250, 1260, D-1260, 2200, D-2200. **G. E. CO.**—59873, 59874, 59875, 60294, 60295, 60296, 60447, 60448, 60449, 60450, 60451, 60452, 60453, 60454, 60455, 60456, 60458, 60459, 60460, 60461, 60462, 60463, 60464, 60465, 60466, 60467, 60950, 60951, 60952, 60953, 60954, 60955, 62410, 62411, 62412, 100809, 100810, 100811, 100812, 104239, 104240, 104241, 104242, 114832, 114833, 114834, 114835, 114836, 114837, 114838, 114839, 114840, 114841, *114908, *114909, *114910, *114911, *114912, *114913, *114914, *114915, *114916, *114917. **H. & H.**—20, 120, 220, 320, 2085, 2086, 2087, 2088, 2089, 2090, 2148, 2161, 2162, 2163, *2311, *2312 *2313, *2314. **PERKINS**—2000, 2002, *2003, 2027, 2035, 2047, 2170, *2171, 2175, 2220, *2225, *2226, *2231, *2232, 2254, 2255, 2391, 2392, 2393, 2394, 2429, 2430, 2455, 2456. **TRUMBULL**—300, 301, 302, 303, 310, 311, 312, 313, 340, 341, 342, 343, 360, 361.

Pull Switches: **HUBBELL**—5027, 5795. **PERKINS**—372, 395.

Receptacles, Key: **ARROW E**—4009, 8025, 9184, 66609. **BRYANT**—4484, 66609. **G. E. CO.**—GE324, 27742, 29404, 105005, 105043. **HUBBELL**—3732. **PAISTE**—5406, 5408, 5410, 5545, 5547, 5549. **P. & S.**—132, 61237, 61387. **WEBER**—61462, 61672, 61673.

Receptacles, Keyless: **ARROW E**—4010, 8026, 9185, 50717, 66610. **BRYANT**—50717, 50744, 66610. **G. E. CO.**—GE325, 49355, 50717 50744, 88258, 100411, 105006, 105019, 105044. **HUBBELL**—3733. **PAISTE**—5407, 5409, 5411, 5546, 5548, 5550, 50717, 50744. **PASS & SEYMOUR**—108, 146, 50717, 60237, 60387, 61250, 88259. **WEBER**—61000, 61230, 61329, 61491, 61674, 61675.

Receptacles, Pull: **ARROW E**—8515, 66611. **BRYANT**—66611. **G. E. CO.**—GE326, 88961. **HUBBELL**—3731. **PAISTE**—5575, 5576, 5577, 61126. **PASS & SEYMOUR**—98, 129.

Receptacles, Attachment Plug: **CUTLER-HAMMER**—7618. **G. E. CO.**—49489. **HUBBELL**—5617, 5621.

Rosettes: **G. E. CO.**—39236, 39237, 40496, 59807, 60124. **PASS & SEYMOUR**—79, 390. **WEBER**—378, 378-A, 385.

Abolites: **ADAMS-BAGNALL CO.**—G-400.

FORM 10 FITTINGS

Snap Switches: **ARROW E**—6204, 6205, 6206, 6207, 6215, 6216, 6217, 6218, 6229, 6230, 6231, 6232, 6233, 6234, 6235, 6236, 6237, 6238, 6239, 6240, 6280, 6282, 6284, 6286, 6288, 6289, 6290, 6291, 6292, 6294, 6296, 6298, *6410, *6411, *6412, *6413, *6422, *6423, *6440, *6442, *6450, *6451, **DIAMOND H**—221, D-221, 222, D-222, 223, 224, 225, D-225, 226, D-226, *501, *D-501, *503, *506, *D-506, *507, *D-507, 2210, D-2210. 2220, D-2220, 2230, 2240, 2250, D-2250, 2260, D-2260, *5010, *D-5010, *5030, *5060, *D-5060, *5070, *D-5070. **G. E. CO.**—60451, 60452, 60453, 60454, 60460, 60461, 60462, 60463, 60464, 60465, 60466, 60467, 100809, 100810, 100811, 100812, 114832, 114833, 114834, 114835, 114836, 114837, 114838, 114839, 114840, 114841, 114842, 114843, 114844, 114845, 114846, 114847, 114848, 114849, 114850, 114851, *114908, *114909, *114910, *114911, *114912, *114913, *114914, *114915, *114916, *114917. **H. & H.**—*20½, 21, 22, 23, *23½, 24, 25, *27, 29, *50½, *53½, *57, *120½, 121, 122, 123, *123½, 124, 125, *127, 129, *150½, *157 *220½, 221, 222, 225, *227, 229, *250½, *257, *320½, 321, 322, 325, *327, 329, *350½, *357, 429, 529, 629, 729, 2205, 2206, 2207, 2208, 2209, 2210, 2231, 2232, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249. **PERKINS**—2001, 2002, *2003, 2009, 2017, *2028, 2030, 2033, 2036, 2038, 2048, *2049, 2050, *2062, *2068, 2070, 2072, 2074, *2100, *2103, 2139, 2140, 2141, 2142, 2170, *2171, 2176, *2179, *2181, 2183, 2185, 2187, 2188, *2211, *2212, 2215, 2216, 2221, *2225, *2226, *2231, *2232, 2254, 2255, 2263, 2264, *2265, *2267, *2268, *2272, *2273, *2413, *2414, 2435, 2436, 2437, 2438, *2449, 2450, *2451, *2452, *2453. **TRUMBULL**—310, 311, 312, 313, 320, 321, 322, 323, 340, 341, 342, 343, 350, 351, 352, 353, 360, 361, 365, 366, 375, 376.

*600 Volt.

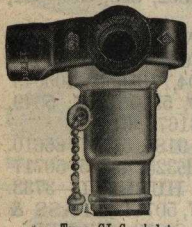
(Cross Reference No. CH62)

FITTINGS FOR CONDULETS

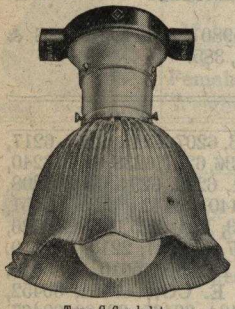
For G and H Series of Condulet Bodies, FH Condulet Bodies and QH, QK and Z Series of Condulets



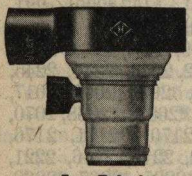
Type G Condulet Showing Snap Switch Mounted



Type GL Condulet Showing Pull Socket Mounted



Type G Condulet Showing Abolite and Shade Mounted



Type H Condulet Showing Key Socket Mounted

FORM 10 FITTINGS

Pull Switches: PERKINS—414, 2309, 2310, 2311, 2312, 2313, 2314, 2387, 2388, 2389, 2390, 2395, 2396, 2546, 2547, 2548, 2549, 2550, 2560, 2561, 2562, 2563, 2564, 2565, 2566.

Ceiling Switches: G. E. CO.—GE136, GE137, GE138, GE140, GE248, GE249, GE250, GE857, GE858, GE859, 100248, 100249, 100250.

Receptacles, Key: ARROW E—8050, 68226. BRYANT—4009, 4488, 24990, 50729, 68226. G. E. CO.—24990, 28723, 28733, 29408, 29414, 34193, 38672, 38680, 50729, 100600. HUBBELL—3719, 3568, 3738. PAISTE—5590, 5598, 5606, 28723, 29408, 50729.

Receptacles, Keyless: ARROW E—8051, 68231. BRYANT—4000, 4001, 4002, 4010, 9401, 9404, 9405, 9406, 9447, 24993, 25093, 25094, 50732, 68231. G. E. CO.—9404, 9405, 24993, 25093, 25094, 28728, 28736, 29411, 29417, 34196, 38135, 38394, 38676, 38684, 50732, 100601. HUBBELL—3571, 3720, 3739. MANHATTAN—16427. PAISTE—5594, 5602, 5610, 9404, 9405, 28728, 29411, 38135, 38394, 50732. WEBER—61230.

Receptacles, Pull: ARROW E—8525, 68237. BRYANT—4019, 68237. HUBBELL—3737, 35006, 35009. PAISTE—5614, 5618, 5622.

Receptacles, Attachment Plug: CUTLER-HAMMER—7618. G. E. Co.—49489. HUBBELL—5617, 5621.

Rosettes: ARROW E—298, 871, 1502. BRYANT—298, 871, 873, 1073, 1502. G. E. CO.—40496, 59807, 60124. PAISTE—811, 814, 871, 873, 885. PASS & SEYMOUR—79, 390. PERKINS—3415, 3418. TRUMBULL—753, 756, 763, 986, 993. WEBER—378, 378-A, 385.

Clusters: BENJAMIN—22, 23, 82.

Abolites: ADAMS-BAGNALL CO.—G-401.

FORM 20 FITTINGS

Snap Switches: ARROW E—6115, 6116, 6117, 6118, 6120, 6121, 6122, 6123, 6124, 6125. DIAMOND H—322, D-322, 3220, D-3220. G. E. CO.—GE150, *21644, *21645, 68385, 68386, 68387, 68388, *114918, *114919, *114920, *114921, *114922, *114923, *114924, *114925, *114926, *114927. H. & H.—26, 31, 32, 33, 40, 42, 43, *47, 126, 131, 132, 133, 140, 142, 143, *147, 226, 231, 240, *241½, *247, 326, 331, 340, *341½, *347, 432, *441½, 442, 532, *541½, 542, *2164, *2165, *2166, *2167, *2168, *2169, *2170, *2171, *2172, *2173, *2174, *2175, *2176, *2177, *2193, *2194, *2195, *2196. PERKINS—2011, 2019, 2025, 2040, 2046, 2052, *2060, *2066, *2227, *2228, *2397, *2398, *2409, *2410, *2411, *2412, *2415, *2416, *2445, *2446, *2447, *2448.

Receptacles, Key: ARROW E—7513, 8044. BRYANT—4488, 24990, 50729, 68226. G. E. CO.—GE336, 24990, 28723, 28733, 29408, 29414, 34193, 38672, 38680, 50729, 88959, 105052. HUBBELL—3546, 3568, 3738, 3752. PAISTE—5569, 5571, 5573, 5590, 5598, 5606, 28723, 29408, 50729.

Receptacles, Keyless: ARROW E—7514, 8045. BRYANT—9404, 9405, 9406, 24993, 25093, 25094, 50732, 60020, 68231. G. E. CO.—GE337, 9404, 9405, 24993, 25093, 25094, 28728, 28736, 29411, 29417, 34196, 38135, 38394, 38676, 38684, 50732, 88960, 105004, 105055. HUBBELL—3571, 3739, 3754, 35036. PAISTE—5570, 5572, 5574, 5594, 5602, 5610, 9404, 9405, 28728, 29411, 38135, 38394, 50732.

Receptacles, Pull: ARROW E—4515, 8522. BRYANT—68237. G. E. CO.—GE338, 88964. HUBBELL—3737, 3750, 35009, 35034. PAISTE—5587, 5588, 5589, 5614, 5618, 5622.

Rosettes: BRYANT—871, 873, 1073. PAISTE—811, 814, 871, 873, 885. PERKINS—3415, 3418, 3421, 3424.

Clusters: BENJAMIN—32, 32½, 33.

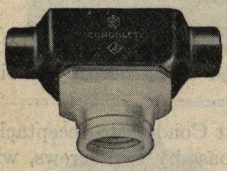
Abolites: ADAMS-BAGNALL CO.—G-402.

*600 Volt.

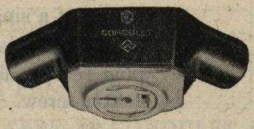
(Cross Reference No. CH63)

TYPES J, JA, JB, JL, JT, JU, JX, K, KA, KB, KC AND KD CONDULETS

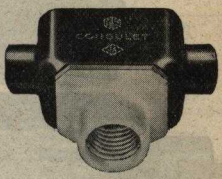
Take Norbitt Conduletto Fittings and Blank Metal Cover



Type J
Showing Receptacle with Shade Holder Groove Mounted



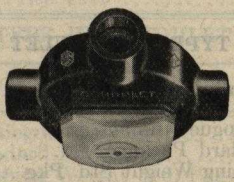
Type JU
Showing Hubbell Polarity Plug Receptacle Mounted



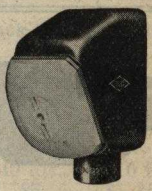
Type JA (Angular)
Showing Receptacle without Shade Holder Groove Mounted



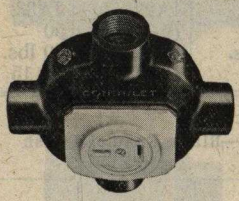
Type KC (Angular)
Showing Fixture Rosette with Male Nipple Mounted



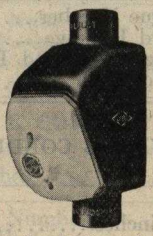
Type JT
Showing Hubbell Plug Receptacle Mounted



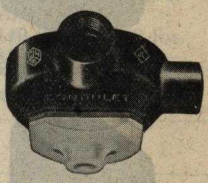
Type KD (Angular)
Showing Hubbell Plug Receptacle Mounted



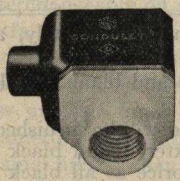
Type JX
Showing Hubbell Polarity Plug Receptacle Mounted



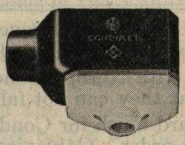
Type JB (Angular)
Showing Fixture Rosette with Female Nipple Mounted



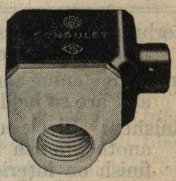
Type JL
Showing Cord Rosette Mounted



Type KA (Angular)
Showing Receptacle without Shade Holder Groove Mounted



Type K
Showing Fixture Rosette with Female Nipple Mounted



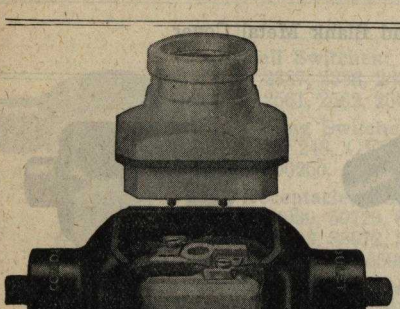
Type KB (Angular)
Showing Receptacle without Shade Holder Groove Mounted

Condulet bodies of the J and K Series are listed on pages Cross Reference Nos. CH65 to CH67, inclusive. Norbitt Conduletto fittings are listed on page CH186a. Blank metal cover is listed on page Cross Reference No. CH67. Gaskets are listed separately on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH64)

TYPES J, JA AND JB CONDULET BODIES

Take Norbitt Conduletto Fittings and Blank Metal Cover



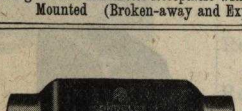
Type J
Showing Norbitt Conduletto Receptacle with Shade Holder Groove Mounted (Broken-away and Exploded View)

Condulet bodies of the J and K series are so designed that the bases of Norbitt Conduletto fittings or blank metal covers fasten to them by means of a single screw.

The cap of the Norbitt Conduletto Hubbell plug receptacle is secured to its base by a single center screw.

The cap of a Norbitt Conduletto receptacle or rosette is secured to its base by two screws, which also complete the electrical connection.

A gasket is furnished with each Norbitt Conduletto fitting and blank metal cover, and makes the installation weatherproof.



TYPE J CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	J11	J22	J33
Standard Package	200	100	50
Shipping Weight Std. Pkg.	240 lbs.	150 lbs.	80 lbs.
List Price, each	$ .60	$ .75	$1.05



TYPE JA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	JA11	JA22	JA33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	130 lbs.	110 lbs.	80 lbs.
List Price, each	$ .70	$ .85	$1.15



TYPE JB CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	JB11	JB22	JB33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	140 lbs.	120 lbs.	90 lbs.
List Price, each	$ .70	$ .85	$1.15

Norbitt Conduletto fittings and the blank metal cover are made in one size only, and are interchangeable on all Condulet bodies of the J and K series.

Proper fastening screws are furnished with Norbitt Conduletto fittings and blank metal cover, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

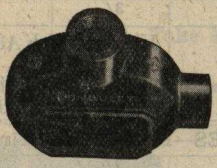
Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Norbitt Conduletto fittings are listed on page Cross Reference No. CH186a. Blank metal cover is listed on page Cross Reference No. CH67. Gasket for Norbitt Conduletto fittings and blank metal cover are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH65)

TYPES JL, JT, JU, JX AND K CONDULET BODIES

Take Norbitt Conduletto Fittings and Blank Metal Cover



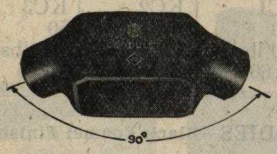
TYPE JL CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	JL11	JL22	JL33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	140 lbs.	120 lbs.	90 lbs.
List Price, each	$ .85	$ .95	$1.05



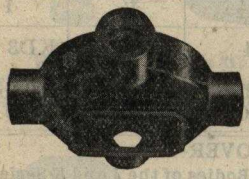
TYPE JT CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	JT111	JT222	JT333
Standard Package	100	75	50
Shipping Weight Std. Pkg.	150 lbs.	130 lbs.	100 lbs.
List Price, each	$ .95	$1.05	$1.15



TYPE JU CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	JU11	JU22	JU33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	160 lbs.	140 lbs.	110 lbs.
List Price, each	$ .70	$ .85	$1.15



TYPE JX CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	JX1111	JX2222	JX3333
Standard Package	100	75	50
Shipping Weight Std. Pkg.	180 lbs.	140 lbs.	120 lbs.
List Price, each	$1.05	$1.15	$1.30



TYPE K CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	K1	K2	K3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	100 lbs.	85 lbs.	70 lbs.
List Price, each	$ .50	$ .65	$ .95

Norbitt Conduletto fittings and the blank metal cover are made in one size only, and are interchangeable on all Condulet bodies of the J and K series.

Proper fastening screws are furnished with Norbitt Conduletto fittings and blank metal cover, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Norbitt Conduletto fittings are listed on page Cross Reference No. CH186a. Blank metal cover is listed on following page. Gasket for Norbitt Conduletto fittings and blank metal cover is listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

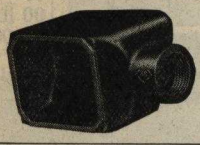
TYPES KA, KB, KC AND KD CONDULET BODIES

Take Norbitt Conduletto Fittings and Blank Metal Cover



TYPE KA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	KA1	KA2	KA3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	110 lbs.	90 lbs.	75 lbs.
List Price, each	$ .60	$ .75	$1.05



TYPE KB CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	KB1	KB2	KB3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	110 lbs.	90 lbs.	75 lbs.
List Price, each	$ .60	$ .75	$1.05



TYPE KC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	KC1	KC2	KC3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	160 lbs.	125 lbs.	100 lbs.
List Price, each	$ .60	$ .75	$1.05



TYPE KD CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	KD1	KD2	KD3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	160 lbs.	125 lbs.	100 lbs.
List Price, each	$ .60	$ .75	$1.05



BLANK METAL COVER—Cast Iron

For 1-2, 3-4 and 1-inch Condulet Bodies of the J and K Series

Catalogue Number	J100	This blank metal cover is furnished with gasket and fastening screw.
Standard Package	200	
Shipping Weight Std. Pkg.	90 lbs.	
List Price, each	$ .30	

Norbitt Conduletto fittings and the blank metal cover are made in one size only, and are interchangeable on all Condulet bodies of the J and K series.

Proper fastening screws are furnished with Norbitt Conduletto fittings and blank metal cover, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies and blank metal cover, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies and all galvanized finish on blank metal cover will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies and blank metal cover with plain and special finishes, aluminum Condulet bodies and blank metal cover with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment of Condulet bodies is allowed.

Black enameled and galvanized blank metal covers may be assorted to make up a standard package. No other assortment of covers is allowed.

Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies; but on an order for covers alone, standard package discount is allowed, only, on the specified standard package quantity of covers.

Norbitt Conduletto fittings are listed on page Cross Reference No. CH186a.

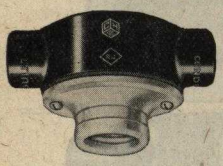
Gasket for Norbitt Conduletto fittings and blank metal cover is listed separately on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH67)

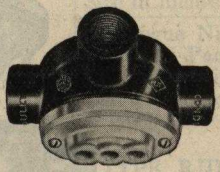
TYPES RJ, RJA, RJB, RJD, RJF, RJK, RJL, RJR, RJT, RJU, RJX, RK, RKA, RKB, RKC, RKD AND RKK CONDULETS

WITH ELLIPTICAL OPENINGS

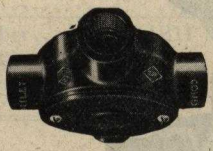
Take Elliptical Conduletto Fittings and Elliptical Covers



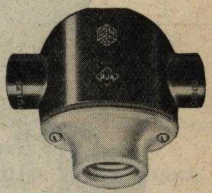
Type R
Showing Receptacle with Shade Holder Groove Mounted



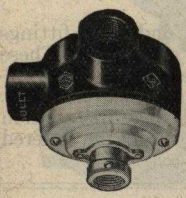
Type RJT
Showing 3-wire Hole Porcelain Cover Mounted



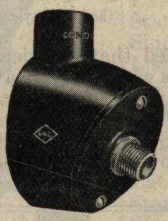
Type RJX
Showing Blank Metal Cover Mounted



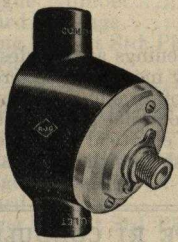
Type RJA (Angular)
Showing Receptacle without Shade Holder Groove Mounted



Type RJR
Showing Female Nipple Porcelain Cover Mounted



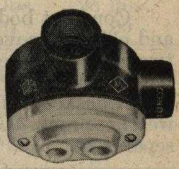
Type RKC (Angular)
Showing Male Nipple Metal Cover Mounted



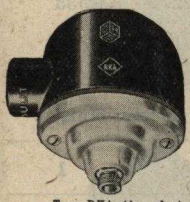
Type RJD (Angular)
Showing Male Nipple Porcelain Cover Mounted



Type RKD (Angular)
Showing Female Nipple Rosette Mounted



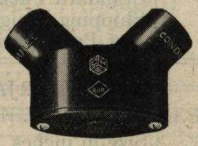
Type RJL
Showing 2-wire Hole Porcelain Cover Mounted



Type RKA (Angular)
Showing Male Nipple Rosette Mounted



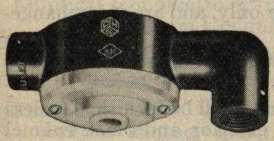
Type RJU
Showing Hubbell Plug Receptacle Mounted



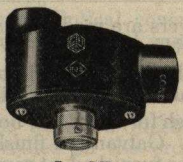
Type RJK
Showing Blank Metal Cover Mounted



Type RKB (Angular)
Showing Receptacle with Shade Holder Groove Mounted



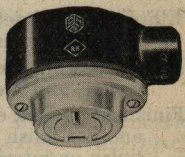
Type RJF
Showing 1-wire Hole Porcelain Cover Mounted



Type RJB
Showing Female Nipple Metal Cover Mounted



Type RKK
Showing Cord Rosette Mounted



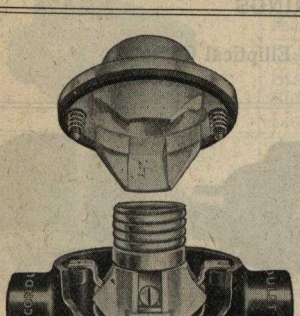
Type RK
Showing Hubbell Polarity Plug Receptacle Mounted

Condulet bodies of the RJ and RK series are listed on pages Cross Reference Nos. CH69 to CH72 inclusive. Elliptical Conduletto fittings are listed on page Cross Reference No. CH188a. Elliptical covers are listed on page Cross Reference No. CH73. Elliptical gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

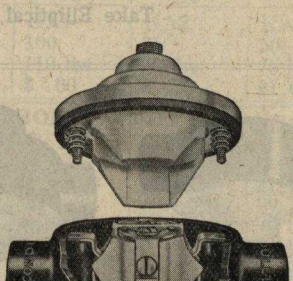
TYPES RJ AND RJA CONDULET BODIES

WITH ELLIPTICAL OPENINGS

Take Elliptical Conduletto Fittings and Elliptical Covers



Type RJ
Showing Elliptical Conduletto Receptacle
(Broken-away and Exploded View)

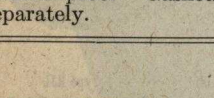


Type RJ
Showing Elliptical Conduletto Rosette
(Broken-away and Exploded View)

Condulet bodies with elliptical openings are so designed that elliptical Conduletto fittings and elliptical covers fasten to them by means of two screws which are always accessible. These two screws secure both cap and base of an elliptical Conduletto fitting to the Condulet body.

Ample space is provided in the Condulet body for the unobstructed passage of extra wires.

A gasket is furnished with each elliptical Conduletto fitting, and makes the installation weather-proof. Gaskets are not furnished with elliptical covers, and if desired must be ordered separately.



TYPE RJ CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJ11	RJ22	RJ33
Standard Package	200	100	50
Shipping Weight Std. Pkg.	240 lbs.	130 lbs.	80 lbs.
List Price, each	$ .50	$ .60	$ .90



TYPE RJA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJA11	RJA22	RJA33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	140 lbs.	110 lbs.	85 lbs.
List Price, each	$ .60	$ .70	$1.00

Elliptical Conduletto fittings and elliptical covers are made in one size only, and are interchangeable on Condulet bodies of the RJ and RK series.

Proper fastening screws are furnished with elliptical Conduletto fittings and elliptical Condulet covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

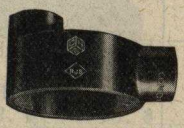
Elliptical Conduletto fittings are listed on page Cross Reference No. CH188a. Elliptical covers are listed on page Cross Reference No. CH73. Elliptical gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH69)

TYPES RJB, RJD, RJF, RJK AND RJL CONDULET BODIES

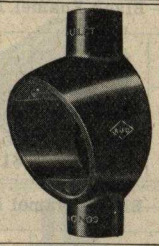
WITH ELLIPTICAL OPENINGS

Take Elliptical Conduletto Fittings and Elliptical Covers



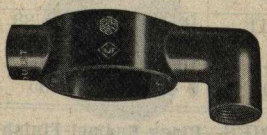
TYPE RJB CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJB11	RJB22	RJB33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	150 lbs.	120 lbs.	90 lbs.
List Price, each	$ .70	$ .80	$ .90



TYPE RJD CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJD11	RJD22	RJD33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	160 lbs.	130 lbs.	95 lbs.
List Price, each	$ .60	$ .70	$1.00



TYPE RJF CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJF11	RJF22	RJF33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	170 lbs.	140 lbs.	100 lbs.
List Price, each	$ .70	$ .80	$ .90



TYPE RJK CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJK11	RJK22	RJK33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	160 lbs.	130 lbs.	95 lbs.
List Price, each	$ .70	$ .80	$ .90



TYPE RJL CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJL11	RJL22	RJL33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	150 lbs.	120 lbs.	90 lbs.
List Price, each	$ .70	$ .80	$ .90

Elliptical Conduletto fittings and elliptical covers are made in one size only, and are interchangeable on Condulet bodies of the RJ and RK series.

Proper fastening screws are furnished with elliptical Conduletto fittings and elliptical Condulet covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

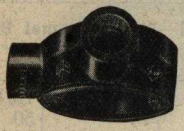
Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Elliptical Conduletto fittings are listed on page Cross Reference No. 188a. Elliptical covers are listed on page Cross Reference No. CH73. Elliptical gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

TYPES RJR, RJT, RJU, RJX AND RK CONDULET BODIES

WITH ELLIPTICAL OPENINGS

Take Elliptical Conduletto Fittings and Elliptical Covers



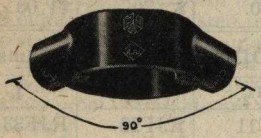
TYPE RJR CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJR11	RJR22	RJR33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	150 lbs.	120 lbs.	90 lbs.
List Price, each	$ .70	$ .80	$ .90



TYPE RJT CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJT111	RJT222	RJT333
Standard Package	100	75	50
Shipping Weight Std. Pkg.	160 lbs.	130 lbs.	95 lbs.
List Price, each	$ .80	$ .90	$1.00



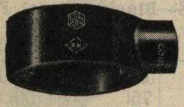
TYPE RJU CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJU11	RJU22	RJU33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	135 lbs.	100 lbs.	80 lbs.
List Price, each	$ .60	$ .70	$ .95



TYPE RJX CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RJX1111	RJX2222	RJX3333
Standard Package	100	75	50
Shipping Weight Std. Pkg.	160 lbs.	130 lbs.	95 lbs.
List Price, each	$ .90	$1.00	$1.10



TYPE RK CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RK1	RK2	RK3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	135 lbs.	100 lbs.	80 lbs.
List Price, each	$ .40	$ .55	$ .80

Elliptical Conduletto fittings and elliptical covers are made in one size only, and are interchangeable on Condulet bodies of the RJ and RK series.

Proper fastening screws are furnished with elliptical Conduletto fittings and elliptical Condulet covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Elliptical Conduletto fittings are listed on page Cross Reference No. CH188a. Elliptical covers are listed on page Cross Reference No. CH73. Elliptical gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

RKA, RKB, RKC, RKD AND RKK CONDULET BODIES

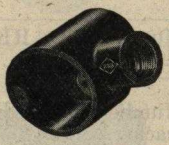
WITH ELLIPTICAL OPENINGS

Take Elliptical Conduletto Fittings and Elliptical Covers



TYPE RKA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RKA1	RKA2	RKA3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	135 lbs.	100 lbs.	80 lbs.
List Price, each	$ .50	$ .60	$ .90



TYPE RKB CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RKB1	RKB2	RKB3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	135 lbs.	100 lbs.	80 lbs.
List Price, each	$ .50	$ .60	$ .90



TYPE RKC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RKC1	RKC2	RKC3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	170 lbs.	140 lbs.	100 lbs.
List Price, each	$ .50	$ .60	$ .90



TYPE RKD CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RKD1	RKD2	RKD3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	170 lbs.	140 lbs.	100 lbs.
List Price, each	$ .50	$ .60	$ .90



TYPE RKK CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RKK1	RKK2	RKK3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	160 lbs.	130 lbs.	100 lbs.
List Price, each	$ .50	$ .60	$ .90

Elliptical Conduletto fittings and elliptical covers are made in one size only, and are interchangeable on Condulet bodies of the RJ and RK series.

Proper fastening screws are furnished with elliptical Conduletto fittings and elliptical Condulet covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

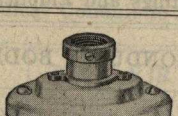
Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Elliptical Conduletto fittings are listed on page Cross Reference No. CH188a. Elliptical covers are listed on following page. Elliptical gaskets are listed on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

ELLIPTICAL COVERS FOR CONDULETS

For Condulet Bodies with Elliptical Openings—Types RJ and RK Series
Furnished with Fastening Screws


RK01


RK020


RK013


RK00

Standard Package Assorted.....	200	Standard Package Assorted.....	200

PORCELAIN WIRE HOLE AND BLANK METAL COVERS

1-wire	Catalogue Number.....	RK01	Sheet Steel	Catalogue Number.....	RK00
	List Price, each.....	$ .10		List Price, each.....	$ .08
2-wire	Catalogue Number.....	RK02	Cast Iron (Flange)	Catalogue Number.....	RK00f
	List Price, each.....	$ .10		List Price, each.....	$ .16
3-wire	Catalogue Number.....	RK03			
	List Price, each.....	$ .10			
Shipping Weight Std. Pkg.....		60 lbs.	Shipping Weight Std. Pkg.....		40 lbs.

METAL COVERS WITH NIPPLES—Black Enamel Finish

1/8" Male	Catalogue Number.....	RK05	3/8" Male	Catalogue Number.....	RK07
	List Price, each.....	$ .20		List Price, each.....	$ .25
1/8" Female	Catalogue Number.....	RK06	3/8" Female	Catalogue Number.....	RK08
	List Price, each.....	$ .20		List Price, each.....	$ .25
1/4" Male	Catalogue Number.....	RK013	1/2" Male	Catalogue Number.....	RK015
	List Price, each.....	$ .23		List Price, each.....	$ .30
1/4" Female	Catalogue Number.....	RK014	1/2" Female	Catalogue Number.....	RK016
	List Price, each.....	$ .23		List Price, each.....	$ .30
Shipping Weight Std. Pkg.....		50 lbs.	Shipping Weight Std. Pkg.....		60 lbs.

PORCELAIN COVERS WITH NIPPLES

1/8" Male	Catalogue Number.....	RK09	3/8" Male	Catalogue Number.....	RK011
	List Price, each.....	$ .25		List Price, each.....	$ .35
1/8" Female	Catalogue Number.....	RK010	3/8" Female	Catalogue Number.....	RK012
	List Price, each.....	$ .25		List Price, each.....	$ .35
1/4" Male	Catalogue Number.....	RK019	1/2" Male	Catalogue Number.....	RK021
	List Price, each.....	$ .30		List Price, each.....	$ .40
1/4" Female	Catalogue Number.....	RK020	1/2" Female	Catalogue Number.....	RK022
	List Price, each.....	$ .30		List Price, each.....	$ .40
Shipping Weight Std. Pkg.....		90 lbs.	Shipping Weight Std. Pkg.....		95 lbs.

Elliptical covers are made in one size only, and are interchangeable on all elliptical Condulet bodies—RJ and RK series.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish, when specifically ordered, will be furnished at same price as black enamel finish. For special plated finishes, brass and bronze covers with plain and special finishes, aluminum covers with plain and black enamel finish, see page Cross Reference No. CH 182.

Black enameled, galvanized and porcelain elliptical covers may be assorted to make up a standard package. No other assortment is allowed.

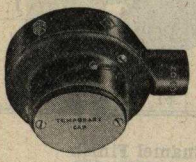
Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies; but on an order for covers alone, standard package discount is allowed, only, on the specified standard package quantity of covers.

For sizes of wire holes in covers, see page Cross Reference No. CH172. Elliptical gaskets are listed on page Cross Reference No. CH176.

TYPES N, NA, NC, NL, NT AND NX CONDULETS

For Stucco Work, Using Flush Pocket Receptacles—Crouse-Hinds, C9514; Bryant, 4033, 9514; G. E. Co., 9514; Paiste, 9514; P. & S., 9514, and Hubbell Flush Plug Receptacle, 5506

Furnished Complete with Telescopic Cover (⅝-inch Telescope,) Temporary Cap and all Necessary Fastening Screws, but without Receptacle



TYPE N CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	N1000	N2000	N3000
Standard Package	100	75	25
Shipping Weight Std. Pkg.	125 lbs.	110 lbs.	55 lbs.
List Price, each	$ .90	$ .95	$1.05



TYPE NA CONDULETS—Black Enamel Finish

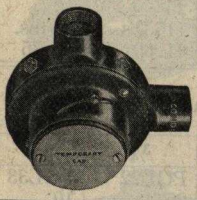
Size in inches	½	¾	1
Catalogue Number	NA1000	NA2000	NA3000
Standard package	100	75	25
Shipping Weight Std. Pkg.	130 lbs.	135 lbs.	60 lbs.
List Price, each	$ .90	$ .95	$1.05



Broken-away View Showing Receptacle Installed

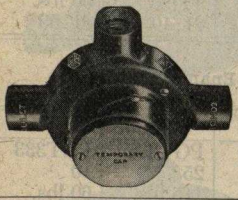
TYPE NC CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	NC11000	NC22000	NC33000
Standard Package	100	75	25
Shipping Weight Std. Pkg.	165 lbs.	130 lbs.	70 lbs.
List Price, each	$ .95	$1.05	$1.15



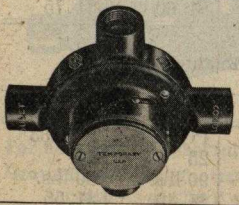
TYPE NL CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	NL11000	NL22000	NL33000
Standard Package	100	75	25
Shipping Weight Std. Pkg.	165 lbs.	130 lbs.	70 lbs.
List Price, each	$ .95	$1.05	$1.15



TYPE NT CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	NT111000	NT222000	NT333000
Standard Package	100	75	25
Shipping Weight Std. Pkg.	175 lbs.	150 lbs.	80 lbs.
List Price, each	$1.05	$1.15	$1.35



TYPE NX CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	NX1111000	NX2222000	NX3333000
Standard Package	100	75	25
Shipping Weight Std. Pkg.	190 lbs.	170 lbs.	85 lbs.
List Price, each	$1.15	$1.25	$1.50

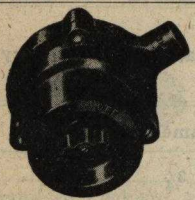
Prices for Condulets of the N series do not include receptacle.

(Cross Reference No. CH78a)

TYPES PG, PGB, PGC, PGCA, PGL, PGT AND PGG CONDULETS

Take General Electric 2 H. P., 250-Volt, 3-Phase, Snap Switch 151394 with Protective Cover for Textile Mill Installations

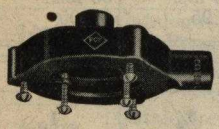
Furnished with All Necessary Fastening Screws



Showing Switch Installed
Prices do not Include Switch

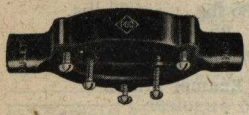
TYPE PG CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PG1	PG2	PG3
Standard Package	35	25	10
Shipping Weight Std. Pkg.	85 lbs.	70 lbs.	50 lbs.
List Price, each	$1.10	$1.25	$1.40



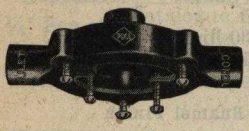
TYPE PGB CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PGB11	PGB22	PGB33
Standard Package	35	25	10
Shipping Weight Std. Pkg.	95 lbs.	90 lbs.	50 lbs.
List Price, each	$1.25	$1.40	$1.55



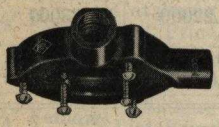
TYPE PGC CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PGC11	PGC22	PGC33
Standard Package	35	25	10
Shipping Weight Std. Pkg.	95 lbs.	90 lbs.	50 lbs.
List Price, each	$1.25	$1.40	$1.55



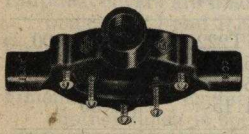
TYPE PGCA CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PGCA111	PGCA222	PGCA333
Standard Package	35	25	10
Shipping Weight Std. Pkg.	125 lbs.	115 lbs.	60 lbs.
List Price, each	$1.45	$1.60	$1.75



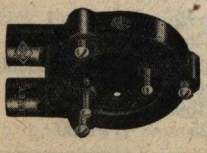
TYPE PGL CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PGL11	PGL22	PGL33
Standard Package	35	25	10
Shipping Weight Std. Pkg.	95 lbs.	90 lbs.	50 lbs.
List Price, each	$1.25	$1.40	$1.55



TYPE PGT CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PGT111	PGT222	PGT333
Standard Package	35	25	10
Shipping Weight Std. Pkg.	125 lbs.	115 lbs.	60 lbs.
List Price, each	$1.45	$1.60	$1.75



TYPE PGG CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PGG11	PGG22	PGG33
Standard Package	35	25	10
Shipping Weight Std. Pkg.	95 lbs.	90 lbs.	50 lbs.
List Price, each	$1.25	$1.40	$1.55

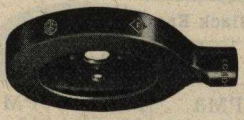
Above prices do not include switches.

(Cross Reference No. CH79a)

TYPES P, PA, PC, PL, PT AND PX CONDULETS

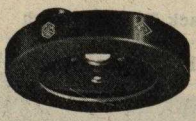
TAKE 4 TO 6-INCH CANOPIES

For Electroliers and Combination Gas and Electric Fixtures, also Abolite G404



TYPE P CONDULETS—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number.	P1	P2	P3	P4	P5
Standard Package..	35	25	10	10	10
Ship. Wt. Std. Pkg.	120 lbs.	110 lbs.	60 lbs.	85 lbs.	90 lbs.
List Price, each....	$1.40	$1.55	$1.70	$1.85	$2.00



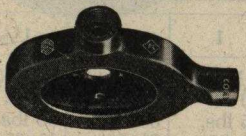
TYPE PA CONDULETS—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number.	PA1	PA2	PA3	PA4	PA5
Standard Package..	35	25	10	10	10
Ship. Wt. Std. Pkg..	130 lbs.	100 lbs.	50 lbs.	80 lbs.	85 lbs.
List Price, each....	$1.40	$1.55	$1.70	$1.85	$2.00



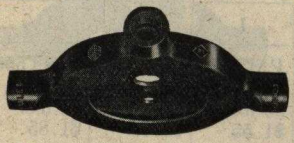
TYPE PC CONDULETS—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number.	PC11	PC22	PC33	PC44	PC55
Standard Package..	35	25	10	10	10
Ship. Wt. Std. Pkg..	160 lbs.	120 lbs.	70 lbs.	85 lbs.	90 lbs.
List Price, each....	$1.50	$1.65	$1.80	$1.95	$2.10



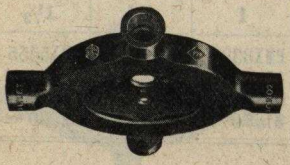
TYPE PL CONDULETS—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number.	PL11	PL22	PL33	PL44	PL55
Standard Package..	35	25	10	10	10
Ship. Wt. Std. Pkg..	160 lbs.	120 lbs.	70 lbs.	85 lbs.	90 lbs.
List Price, each....	$1.50	$1.65	$1.80	$1.95	$2.10



TYPE PT CONDULETS—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number.	PT111	PT222	PT333	PT444	PT555
Standard Package..	35	25	10	10	10
Ship. Wt. Std. Pkg..	170 lbs.	130 lbs.	75 lbs.	90 lbs.	95 lbs.
List Price, each....	$1.70	$1.90	$2.10	$2.30	$2.50



TYPE PX CONDULETS—Black Enamel Finish

Size in inches.....	½	¾	1	1¼	1½
Catalogue Number.	PX1111	PX2222	PX3333	PX4444	PX5555
Standard Package..	35	25	10	10	10
Ship. Wt. Std. Pkg..	180 lbs.	140 lbs.	80 lbs.	95 lbs.	100 lbs.
List Price, each....	$1.80	$2.00	$2.20	$2.40	$2.60

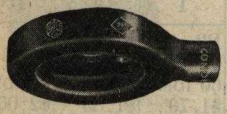
For finishes and assortments, see note on page Cross Reference No. CH89.

Grounding clamp, for use with combination gas and electric fixtures, is not included in prices for Condulets of the P series, but will be furnished, if specifically ordered. Condulet reducers are listed on page Cross Reference No. CH171.

TYPES PM, PMA, PMC, PML, PMT AND PMX CONDULETS

TAKE 3 TO 4-INCH CANOPIES

For Electroliers and Combination Gas and Electric Fixtures, also Abolite G403



TYPE PM CONDULETS—Black Enamel Finish

Size in inches..	½	¾	1	1¼	1½
Catalogue No..	PM1	PM2	PM3	PM4	PM5
Standard Pkg..	35	25	10	10	10
Wt. Std. Pkg..	80 lbs.	65 lbs.	45 lbs.	50 lbs.	55 lbs.
List Price, each	$ .90	$1.05	$1.20	$1.35	$1.50



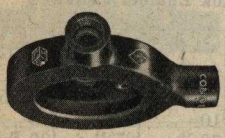
TYPE PMA CONDULETS—Black Enamel Finish

Size in inches..	½	¾	1	1¼	1½
Catalogue No..	PMA1	PMA2	PMA3	PMA4	PMA5
Standard Pkg..	35	25	10	10	10
Wt. Std. Pkg..	80 lbs.	65 lbs.	45 lbs.	50 lbs.	55 lbs.
List Price, each	$ .90	$1.05	$1.20	$1.35	$1.50



TYPE PMC CONDULETS—Black Enamel Finish

Size in inches..	½	¾	1	1¼	1½
Catalogue No..	PMC11	PMC22	PMC33	PMC44	PMC55
Standard Pkg..	35	25	10	10	10
Wt. Std. Pkg..	90 lbs.	85 lbs.	45 lbs.	50 lbs.	55 lbs.
List Price, each	$1.05	$1.20	$1.35	$1.50	$1.65



TYPE PML CONDULETS—Black Enamel Finish

Size in inches..	½	¾	1	1¼	1½
Catalogue No..	PML11	PML22	PML33	PML44	PML55
Standard Pkg..	35	25	10	10	10
Wt. Std. Pkg..	90 lbs.	85 lbs.	45 lbs.	50 lbs.	55 lbs.
List Price, each	$1.05	$1.20	$1.35	$1.50	$1.65



TYPE PMT CONDULETS—Black Enamel Finish

Size in inches..	½	¾	1	1¼	1½
Catalogue No..	PMT111	PMT222	PMT333	PMT444	PMT555
Standard Pkg..	35	25	10	10	10
Wt. Std. Pkg..	120 lbs.	110 lbs.	55 lbs.	60 lbs.	65 lbs.
List Price, each	$1.25	$1.40	$1.55	$1.70	$1.85



TYPE PMX CONDULETS—Black Enamel Finish

Size in inches..	½	¾	1	1¼	1½
Catalogue No..	PMX1111	PMX2222	PMX3333	PMX4444	PMX5555
Standard Pkg..	35	25	10	10	10
Wt. Std. Pkg..	140 lbs.	120 lbs.	60 lbs.	65 lbs.	70 lbs.
List Price, each	$1.40	$1.55	$1.70	$1.85	$2.00

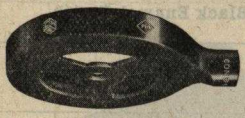
For finishes and assortments, see note on page Cross Reference No. CH89.

Grounding clamp, for use with combination gas and electric fixtures, is not included in prices for Condulets of the PM series, but will be furnished, if specifically ordered. Condulet reducers are listed on page Cross Reference No. CH171.

TYPES PH, PHC, PHL, PHT AND PHX CONDULETS

TAKE 4 TO 6-INCH CANOPIES

For Exposed Conduit Extensions from Concealed Wiring at Fixture Outlets
For Electroliers and Combination Gas and Electric Fixtures, also Abolite G404



TYPE PH CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PH1	PH2	PH3
Standard Package	35	25	10
Shipping Weight Std. Pkg.	165 lbs.	120 lbs.	65 lbs.
List Price, each	$1.50	$1.65	$1.80



TYPE PHC CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PHC11	PHC22	PHC33
Standard Package	35	25	10
Shipping Weight Std. Pkg.	180 lbs.	130 lbs.	70 lbs.
List Price, each	$1.65	$1.80	$1.95



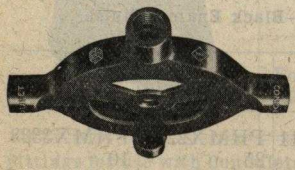
TYPE PHL CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PHL11	PHL22	PHL33
Standard Package	35	25	10
Shipping Weight Std. Pkg.	180 lbs.	130 lbs.	70 lbs.
List Price, each	$1.65	$1.80	$1.95



TYPE PHT CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PHT111	PHT222	PHT333
Standard Package	35	25	10
Shipping Weight Std. Pkg.	200 lbs.	145 lbs.	75 lbs.
List Price, each	$1.80	$1.95	$2.10



TYPE PHX CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PHX1111	PHX2222	PHX3333
Standard Package	35	25	10
Shipping Weight Std. Pkg.	215 lbs.	150 lbs.	80 lbs.
List Price, each	$1.95	$2.10	$2.25

For finishes and assortments, see note on page Cross Reference No. CH89.
Condulet reducers are listed on page Cross Reference No. CH171.
(Cross Reference No. CH84a)

TYPES PHM, PHMC, PHML, PHMT AND PHMX CONDULETS

TAKE 3 TO 4-INCH CANOPIES

For Exposed Conduit Extensions from Concealed Wiring at Fixture Outlets

For Electroliers and Combination Gas and Electric Fixtures, also Abolite G403



TYPE PHM CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PHM1	PHM2	PHM3
Standard Package	35	25	10
Shipping Weight Std. Pkg.	100 lbs.	75 lbs.	45 lbs.
List Price, each	$1.05	$1.20	$1.35



TYPE PHMC CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PHMC11	PHMC22	PHMC33
Standard Package	35	25	10
Shipping Weight Std. Pkg.	100 lbs.	75 lbs.	45 lbs.
List Price, each	$1.20	$1.35	$1.50



TYPE PHML CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PHML11	PHML22	PHML33
Standard Package	35	25	10
Shipping Weight Std. Pkg.	100 lbs.	75 lbs.	45 lbs.
List Price, each	$1.20	$1.35	$1.50



TYPE PHMT CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	PHMT111	PHMT222	PHMT333
Standard Package	35	25	10
Shipping Weight Std. Pkg.	125 lbs.	90 lbs.	50 lbs.
List Price, each	$1.40	$1.55	$1.70



TYPE PHMX CONDULETS—Black Enamel Finish

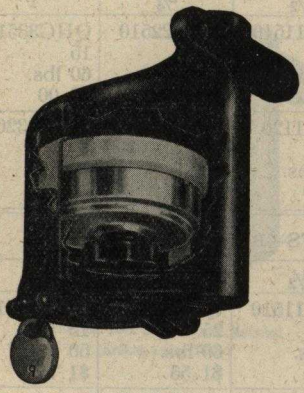
Size in inches	½	¾	1
Catalogue Number	PHMX1111	PHMX2222	PHMX3333
Standard Package	35	25	10
Shipping Weight Std. Pkg.	150 lbs.	110 lbs.	60 lbs.
List Price, each	$1.65	$1.80	$1.95

For finishes and assortments, see note on page Cross Reference No. CH89.
Condulet reducers are listed on page Cross Reference No. CH171.

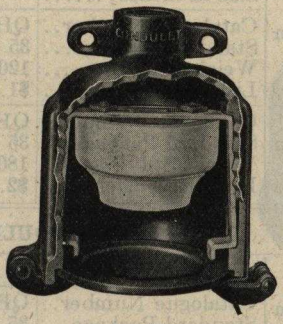
TYPES QHA AND QHB CONDULETS

Weather-Proof Condulets for Thumb Knob Snap Switches, Attachment Plug Receptacles and Crouse-Hinds Plug Receptacles RQH302 and RQH303

Furnished with Fastening Straps and Bolts for Fittings



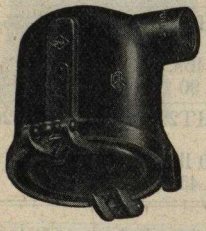
Type QHC
Showing Switch Mounted and Padlock
(Broken-away View)



Type QHB
Showing Attachment Plug Receptacle Mounted
(Broken-away View)



Type QHC
Showing Crouse-Hinds Plug Receptacle RQH302 Mounted
(Door Open)



TYPE QHA CONDULETS—Black Enamel Finish

	Size in inches	½	¾	1
Form 10	Catalogue Number.	QHA1510	QHA2510	QHA3510
	Standard Package..	35	25	15
	Weight Std. Pkg...	80 lbs.	60 lbs.	45 lbs.
	List Price, each	$1.25	$1.40	$1.55
Form 20	Catalogue Number.	QHA120	QHA220	QHA320
	Standard Package..	35	25	15
	Weight Std. Pkg...	150 lbs.	110 lbs.	70 lbs.
	List Price, each	$1.65	$1.80	$2.00



TYPE QHB CONDULETS—Black Enamel Finish

	Size in inches	½	¾	1
Form 10	Catalogue Number.	QHB1510	QHB2510	QHB3510
	Standard Package..	35	25	15
	Weight Std. Pkg....	75 lbs.	60 lbs.	45 lbs.
	List Price, each....	$1.30	$1.45	$1.60
Form 20	Catalogue Number.	QHB120	QHB220	QHB320
	Standard Package..	35	25	15
	Weight Std. Pkg....	140 lbs.	100 lbs.	70 lbs.
	List Price, each	$1.75	$1.90	$2.05

Fittings for use with Condulets of the QH series are not included in above list prices, but are enumerated on following page.

Padlock is not included in above list prices for Condulets of the QH series.

For finishes and assortments, see note on following page.

Condulet reducers are listed on page Cross Reference No. CH171.

TYPES QHC, QHL AND QHT CONDULETS

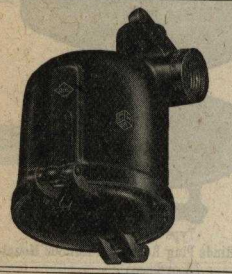
Weather-Proof Condulets for Thumb Knob Snap Switches, Attachment Plug Receptacles and Crouse-Hinds Plug Receptacles RQH302 and RQO303

Furnished with Fastening Straps and Bolts for Fittings



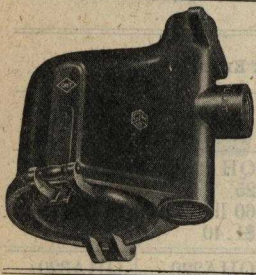
TYPE QHC CONDULETS—Black Enamel Finish

	Size in inches.....	½	¾	1
Form 10	Catalogue Number..	QHC11510	QHC22510	QHC33510
	Standard Package...	35	25	15
	Weight Std. Pkg.....	120 lbs.	90 lbs.	60 lbs.
	List Price, each.....	$1.50	$1.75	$2.00
Form 20	Catalogue Number..	QHC1120	QHC2220	QHC3320
	Standard Package...	35	25	15
	Weight Std. Pkg.....	180 lbs.	120 lbs.	80 lbs.
	List Price, each.....	$2.00	$2.30	$2.60



TYPE QHL CONDULETS—Black Enamel Finish

	Size in inches.....	½	¾	1
Form 10	Catalogue Number..	QHL11510	QHL22510	QHL33510
	Standard Package...	35	25	15
	Weight Std. Pkg.....	90 lbs.	60 lbs.	50 lbs.
	List Price, each.....	$1.40	$1.55	$1.70
Form 20	Catalogue Number..	QHL1120	QHL2220	QHL3320
	Standard Package...	35	25	15
	Weight Std. Pkg.....	150 lbs.	100 lbs.	70 lbs.
	List Price, each.....	$1.90	$2.10	$2.30



TYPE QHT CONDULETS—Black Enamel Finish

	Size in inches.....	½	¾	1
Form 10	Catalogue Number..	QHT111510	QHT222510	QHT333510
	Standard Package...	35	25	15
	Weight Std. Pkg.....	120 lbs.	90 lbs.	60 lbs.
	List Price, each.....	$1.65	$1.90	$2.15
Form 20	Catalogue Number..	QHT11120	QHT22220	QHT33320
	Standard Package...	35	25	15
	Weight Std. Pkg.....	160 lbs.	110 lbs.	90 lbs.
	List Price, each.....	$2.15	$2.45	$2.80

Fittings for use with Condulets of the QH series are not included in above list prices, but are as follows:

For Form 10

Thumb Knob Snap Switches: All 5, and 10 ampere, 125 and 250 volt switches enumerated on preceding pages, and all 5 and 10 ampere, 600 volt switches not over 2 3-8 inches deep over all, not over 1 15-16 inches deep to top of cover, and with bases not exceeding 2 1-2 inches in diameter, enumerated on the same pages.
Attachment Plug Receptacles: HUBBELL—5617, 5621, 5624, 5757. G. E. CO.—102700.
Crouse-Hinds, 30 Ampere, 2-Pole, Plug Receptacle—RQH302.

For Form 20

Thumb Knob Snap Switches: All 5, 10 and 20 ampere, 125 and 250 volt switches enumerated on preceding pages, and all 5, 10 and 20 ampere, 600 volt switches not over 3 inches deep over all, not over 2 5-8 inches deep to top of cover, and with bases not exceeding 3 3-8 inches in diameter, enumerated on the same pages.
Attachment Plug Receptacles: HUBBELL—5617, 5621, 5624, 5757. G. E. CO.—102700.
Crouse-Hinds, 30 Ampere, 3-Pole, Plug Receptacle—RQH303.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulets with plain and special finishes, aluminum Condulets with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Padlock is not included in above list prices for Condulets of the QH series.

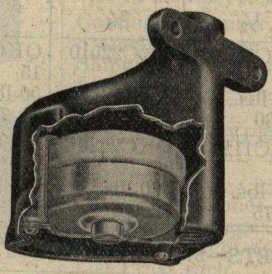
Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH89)

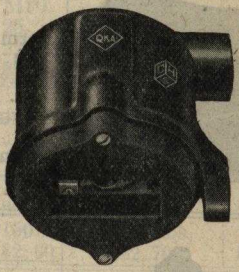
TYPES QKA AND QKB CONDULETS

Weather-Proof Condulets for Standard Lock Snap Switches and Crouse-Hinds Plug Receptacles RQK302 and RQK303

Furnished with Covers, Fastening Straps and Bolts for Switches and all necessary Screws



Type QKC
Showing Lock Snap Switch Mounted
(Broken-away View)



Type QKA
Showing Crouse-Hinds Plug Receptacle
RQK302 Mounted



TYPE QKA CONDULETS—Black Enamel Finish

	Size in inches.....	½	¾	1
Form 10	Catalogue Number...	QKA1510	QKA2510	QKA3510
	Standard Package....	35	25	15
	Weight Std. Pkg.....	70 lbs.	55 lbs.	40 lbs.
	List Price, each.....	$1.10	$1.20	$1.35
Form 20	Catalogue Number...	QKA120	QKA220	QKA320
	Standard Package....	35	25	15
	Weight Std. Pkg.....	120 lbs.	90 lbs.	60 lbs.
	List Price, each.....	$1.45	$1.60	$1.80



TYPE QKB CONDULETS—Black Enamel Finish

	Size in inches.....	½	¾	1
Form 10	Catalogue Number...	QKB1510	QKB2510	QKB3510
	Standard Package....	35	25	15
	Weight Std. Pkg.....	70 lbs.	55 lbs.	40 lbs.
	List Price, each.....	$1.15	$1.25	$1.40
Form 20	Catalogue Number...	QKB120	QKB220	QKB320
	Standard Package....	35	25	15
	Weight Std. Pkg.....	120 lbs.	90 lbs.	60 lbs.
	List Price, each.....	$1.50	$1.70	$1.85

Fittings for use with Condulets of the QK series are not included in above list prices, but are enumerated on following page.

For finishes and assortments, see note on following page.

Condulet reducers are listed on page Cross Reference No. CH171.

TYPES QKC, QKL AND QKT CONDULETS

Weather-Proof Condulets for Standard Lock Snap Switches and Crouse-Hinds Plug Receptacles RQK302 and RQK303

Furnished with Covers, Fastening Straps and Bolts for Switches and all necessary Screws



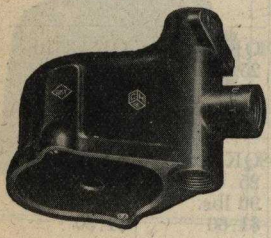
TYPE QKC CONDULETS—Black Enamel Finish

	Size in inches	½	¾	1
Form 10	Catalogue No....	QKC11510	QKC22510	QKC33510
	Standard Package	35	25	15
	Weight Std. Pkg..	100 lbs.	70 lbs.	50 lbs.
	List Price, each ..	$1.30	$1.50	$1.70
Form 20	Catalogue No....	QKC1120	QKC2220	QKC3320
	Standard Package	35	25	15
	Weight Std. Pkg..	160 lbs.	120 lbs.	80 lbs.
	List Price, each ..	$1.75	$2.00	$2.30



TYPE QKL CONDULETS—Black Enamel Finish

	Size in inches	½	¾	1
Form 10	Catalogue No....	QKL11510	QKL22510	QKL33510
	Standard Package	35	25	15
	Weight Std. Pkg..	90 lbs.	60 lbs.	45 lbs.
	List Price, each ..	$1.20	$1.35	$1.50
Form 20	Catalogue No....	QKL1120	QKL2220	QKL3320
	Standard Package	35	25	15
	Weight Std. Pkg..	150 lbs.	110 lbs.	75 lbs.
	List Price, each ..	$1.70	$1.85	$2.05



TYPE QKT CONDULETS—Black Enamel Finish

	Size in inches	½	¾	1
Form 10	Catalogue No....	QKT111510	QKT222510	QKT333510
	Standard Package	35	25	15
	Weight Std. Pkg..	110 lbs.	80 lbs.	60 lbs.
	List Price, each ..	$1.40	$1.60	$1.90
Form 20	Catalogue No....	QKT11120	QKT22220	QKT33320
	Standard Package	35	25	15
	Weight Std. Pkg..	170 lbs.	130 lbs.	85 lbs.
	List Price, each ..	$1.90	$2.20	$2.50

Fittings for use with Condulets of the QK series are not included in above list prices, but are as follows:

For Form 10

Lock Snap Switches: All 5 and 10-ampere, 125 and 250 volt switches enumerated on two preceding pages listing Forms 5, 10 and 20 fittings for types G and H Condulets, and all 5 and 10 ampere, 600 volt switches not over 1 5-8 inches deep to top of cover and with bases not exceeding 2 9-16 inches in diameter, enumerated on the same pages.

Crouse-Hinds, 30 Ampere, 2-pole, Plug Receptacle—RQK302.

For Form 20

Lock Snap Switches: All 5, 10 and 20 ampere, 125 and 250 volt switches enumerated on two preceding pages listing Forms 5, 10 and 20 fittings for types G and H Condulets, and all 5, 10 and 20 ampere, 600 volt switches not over 2 5-16 inches deep to top of cover and with bases not exceeding 3 7-16 inches in diameter, enumerated on the same pages.

Crouse-Hinds, 30 Ampere, 3-pole, Plug Receptacle—RQK303.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulets with plain and special finishes, aluminum Condulets with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH91)

TYPES MP AND MPD CONDULETS

FOR TELEPHONE BELL BOXES

Type MP takes Western Electric Telephone Bell Box 334A
Type MPD takes Stromberg-Carlson Telephone Bell Box 1131-F
Furnished with Fastening Screws for Bell Box



TYPE MP CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	MP1	MP2	MP3
Standard Package	25	25	25
Shipping Weight Std. Pkg.	220 lbs.	220 lbs.	220 lbs.
List Price, each	$2.60	$2.70	$2.80



TYPE MPD CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	MPD1	MPD2	MPD3
Standard Package	25	25	25
Shipping Weight Std. Pkg.	150 lbs.	150 lbs.	150 lbs.
List Price, each	$2.60	$2.70	$2.80

TYPES RQH AND RQK RECEPTACLES AND TYPE RQ PLUGS

Two-Pole Types RQH and RQK Receptacles are for use with Form 10 Condulets of the QH and QK Series, respectively

Three-Pole Types RQH and RQK Receptacles are for use with Form 20 Condulets of the QH and QK Series, respectively

TYPE RQH RECEPTACLES—30 Ampere Capacity

For Condulets of the QH Series



2-Pole		3-Pole
For Form 10 Condulet		For Form 20 Condulet
RQH302*	Catalogue Number	RQH303*
25	Standard Package.	25
30 lbs.	Weight Std. Pkg..	30 lbs.
$2.00	List Price, each..	$3.00



TYPE RQK RECEPTACLES—30 Ampere Capacity

For Condulets of the QK Series



2-Pole		3-Pole
For Form 10 Condulet		For Form 20 Condulet
RQK302†	Catalogue Number	RQK303*
25	Standard Package.	25
30 lbs.	Weight Std. Pkg..	30 lbs.
$2.00	List Price, each..	$3.00



TYPE RQ PLUGS—30 Ampere Capacity

For Types RQH, RQK and RYQ Receptacles



2-Pole		3-Pole
RQ302	Catalogue Number	RQ303
25	Standard Package.	25
60 lbs.	Weight Std. Pkg..	70 lbs.
$3.50	List Price, each..	$5.00



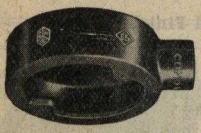
*To be mounted on fastening strap furnished with the Condulet. †Furnished with special mounting strap.

Condulets that take type RQH receptacles are listed on pages Cross Reference Nos. CH88 and CH89. Condulets that take RQK receptacles are listed on pages Cross Reference Nos. CH90 and CH91. Type RYQ receptacles, which take type RQ plugs, are listed on page Cross Reference No. CH167a.

(Cross Reference No. CH91a)

TYPES SE, SEC, SEL, SET AND SEX CONDULET BODIES

Take Key, Keyless or Pull Receptacles; Rosettes; Pull Switch Rosettes, or Pull Switches Enumerated Below



TYPE SE CONDULET BODIES—Black Enamel Finish

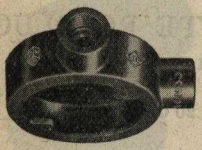
Size in inches	½	¾	1
Catalogue Number	SE1	SE2	SE3
Standard Package	75	50	25
Shipping Weight Std. Pkg.	155 lbs.	115 lbs.	70 lbs.
List Price, each	$ .80	$ .90	$1.10



With Receptacle Mounted
Prices do not include Receptacle

TYPE SEC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SEC11	SEC22	SEC33
Standard Package	75	50	25
Shipping Weight Std. Pkg.	165 lbs.	125 lbs.	75 lbs.
List Price, each	$ .95	$1.05	$1.25



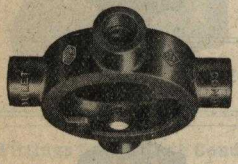
TYPE SEL CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SEL11	SEL22	SEL33
Standard Package	75	50	25
Shipping Weight Std. Pkg.	165 lbs.	125 lbs.	75 lbs.
List Price, each	$ .95	$1.05	$1.25



TYPE SET CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SET111	SET222	SET333
Standard Package	75	50	25
Shipping Weight Std. Pkg.	180 lbs.	140 lbs.	80 lbs.
List Price, each	$1.05	$1.15	$1.35



TYPE SEX CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SEX1111	SEX2222	SEX3333
Standard Package	75	50	25
Shipping Weight Std. Pkg.	200 lbs.	155 lbs.	90 lbs.
List Price, each	$1.15	$1.25	$1.45

Condulet bodies listed above take the following:

Receptacles, Key: **ARROW E**—4045, 7513, 7513W, 7536, 7536W, 8044, 8044W, 8080, 8080W. **BRYANT**—4045, 4513, 4536, 7513, 7536, all BL and BN bases. **G. E. CO.**—GE052, GE278, GE281, GE418, GE483, GE495. **HUBBELL**—3070, 3156, 3316, 3752. **PAISTE**—5473, 5476, 5569, 5571. **P. & S.**—7, 46, 814.

Receptacles, Keyless: **ARROW E**—40, 41, 85, 109, 4046, 7514, 7537, 8045, 8081, 62357, 103704. **BRYANT**—4031, 4046, 7514, 7537, 62357, all BL and BN bases. **G. E. CO.**—GE055, GE096, GE155, GE279, GE484, GE496, 62357. **HUBBELL**—3071, 3754. **PAISTE**—5474, 5477, 5570, 5572. **P. & S.**—1, 4, 40, 41, 85, 109, 62357, 103704.

Receptacles, Pull: **ARROW E**—4047, 4515, 4537, 8522, 8537. **BRYANT**—4047, 4515, 4537, all BL and BN bases. **G. E. CO.**—GE280, 88964. **HUBBELL**—3069, 3083, 3750, 3841. **PAISTE**—5475, 5478, 5587, 5588, **P. & S.**—128.

Rosettes: **ARROW E**—368, 369, 457, 525, 8074, 8075. **BRYANT**—368, 369, 457, all BL and BN bases. **P. & S.**—113, 199, 723, 1172, 1174.

Rosettes, Pull Switch: **ARROW E**—176, 179, 8605, 8608. **BRYANT**—All BL and BN bases. **HUBBELL**—5906, 5926, 5996, 6007, **P. & S.**—700.

Switches, Pull: **ARROW E**—174, 175, 177, 178, 8603, 8604, 8606, 8607. **BRYANT**—All BL and BN bases.

(Cross Reference No. CH93a)

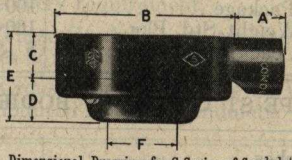
TYPES S, SA AND SC CONDULET BODIES

For Pony Receptacles, Clamp Receptacles and Rosettes, and Hubbell Polarity Plug Receptacle 5757

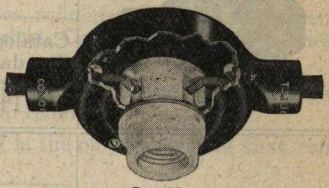
Furnished with Fastening Straps for Fittings and all necessary Screws



Type SC
Showing Pony Receptacle Mounted
(Broken-away View)

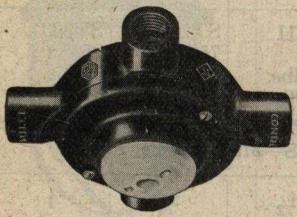


Dimensional Drawing for S Series of Condulets

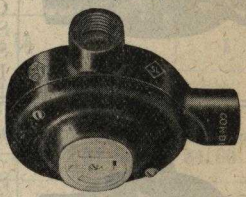


Type SC
Showing Crouse-Hinds Clamp Receptacle, without Shade Holder Groove, Mounted
(Broken-away View)

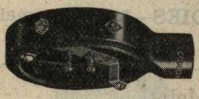
A—For $\frac{1}{2}$-inch sizes, $1\frac{1}{32}$ inches
For $\frac{3}{4}$-inch sizes, $1\frac{5}{32}$ inches
For 1-inch sizes, $1\frac{1}{2}$ inches
B—For all sizes, $3\frac{3}{4}$ inches
C—For all sizes, $\frac{29}{32}$-inch
D—For all sizes, $1\frac{1}{32}$ inches
E—For all sizes, $1\frac{15}{16}$ inches
F—For type OO cover, $1\frac{19}{32}$ inches
For type OOK cover, $1\frac{3}{32}$ inches



Type SX
Showing Crouse-Hinds Clamp Cord Rosette Mounted



Type SL
Showing Hubbell Polarity Plug Receptacle 5757 Mounted



TYPE S CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	S1	S2	S3
Standard Package	100	75	25
Shipping Weight Std. Pkg.	130 lbs.	110 lbs.	50 lbs.
List Price, each	$ .70	$ .75	$ .90



TYPE SA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SA1	SA2	SA3
Standard Package	100	75	25
Shipping Weight Std. Pkg.	130 lbs.	110 lbs.	50 lbs.
List Price, each	$ .70	$ .75	$ .90



TYPE SC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SC11	SC22	SC33
Standard Package	100	75	25
Shipping Weight Std. Pkg.	160 lbs.	135 lbs.	65 lbs.
List Price, each	$ .80	$ .85	$1.05

Fittings for use with Condulets of the S series are not included in above list prices, but are enumerated on following page.

For finishes and assortments, see note on page Cross Reference No. CH91.

Conduletto clamp receptacles and rosettes, for use with Condulets of the S series, are listed on page Cross Reference No. CH190. Condulet reducers are listed on page Cross Reference No. CH171.

TYPES SL, ST AND SX CONDULET BODIES

For Pony Receptacles, Clamp Receptacles and Rosettes, and Hubbell Polarity Plug Receptacle 5757

Furnished with Fastening Straps for Fittings and all necessary Screws



TYPE SL CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SL11	SL22	SL33
Standard Package	100	75	25
Shipping Weight Std. Pkg.	160 lbs.	135 lbs.	65 lbs.
List Price, each	$ .80	$ .85	$1.05



TYPE ST CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	ST111	ST222	ST333
Standard Package	100	75	25
Shipping Weight Std. Pkg.	170 lbs.	140 lbs.	70 lbs.
List Price, each	$ .90	$1.00	$1.20



TYPE SX CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SX1111	SX2222	SX3333
Standard Package	100	75	25
Shipping Weight Std. Pkg.	210 lbs.	180 lbs.	80 lbs.
List Price, each	$1.00	$1.10	$1.35

COVERS FOR TYPES S, SA, SC, SL, ST AND SX CONDULET BODIES—Black Enamel Finish. For 1-2, 3-4 and 1-inch Condulet Bodies



For Receptacles and Rosettes		For Hubbell Plug 5757		Style of Cover	Blank Metal	
Sheet Steel	Cast Iron	Sheet Steel	Cast Iron		Sheet Steel	Cast Iron
00	00g	00k	00kg	..Catalogue No..	00b	00bg
100	100	100	100	..Standard Pkg..	100	100
50 lbs.	50 lbs.	40 lbs.	40 lbs.	..Weight Std. Pkg.	70 lbs.	70 lbs.
$ .12	$ .35	$ .12	$ .35	..List Price, each..	$ .12	$ .35



Fittings for use with Condulets of the S series are not included in above list prices, but are as follows:

Pony Receptacles: ARROW E—28795, 50715. **BRYANT**—28795, 50715. **G. E. CO.**—11221, 28795, 50715 **PAISTE**—28795, 50715. **P. & S.**—61870.

Clamp Receptacles and Rosettes: CONDULETTO (Crouse-Hinds)—C337G, C337, C442, C448, C449. **ARROW E**—8100, 59108. **BRYANT**—59108, 61988. **FEDERAL**—303, 304, 305. **G. E. CO.**—105001. **PAISTE**—59439, 61988. **P. & S.**—61877, 61988, 102703.

Polarity Plug Receptacle: HUBBELL—5757.

Types 00 and 00g covers have openings $1\frac{19}{32}$ inches in diameter. Types 00k and 00kg covers have openings $1\frac{23}{32}$ inches in diameter.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

For finishes, see note on page Cross Reference No. CH91.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. Black enameled and galvanized covers of all three styles may be assorted to make up a standard package. No other assortments are allowed.

Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies; but on an order for covers alone, standard package discount is allowed, only, on the specified standard package quantity for those covers.

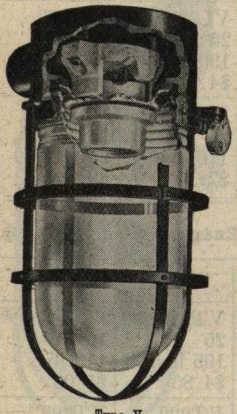
Conduletto clamp receptacles and rosettes, for use with Condulets of the S series, are listed on page Cross Reference No. CH190. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH95)

TYPES V, VA AND VC IRON CONDULETS

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 40-Watt, or any Lamp with Dimensions not Exceeding 2¾x5¼ Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard



Type V
(Padlock not included in list prices)

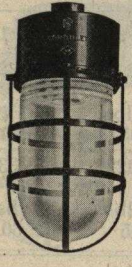
For marine work and in breweries, refineries, flour mills or wherever there is dampness, gas or fine dust, Condulets of the V series meet every requirement.

These Condulets remain vapor, gas and dust-proof even though globes be broken or removed for lamp renewals.

Crouse-Hinds receptacle CCV337 is the only receptacle that can be mounted in these Condulets.

TYPE V CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number.....	V189	V289	V389
	Standard Package.....	35	25	10
	Weight Std. Pkg.....	230 lbs.	180 lbs.	100 lbs.
	List Price, each.....	$4.50	$4.55	$4.60
Complete, except Globe and Guard	Catalogue Number.....	V1	V2	V3
	Standard Package.....	35	25	10
	Weight Std. Pkg.....	125 lbs.	100 lbs.	50 lbs.
	List Price, each.....	$1.90	$1.95	$2.00



TYPE VA CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number.....	VA189	VA289	VA389
	Standard Package.....	35	25	10
	Weight Std. Pkg.....	230 lbs.	180 lbs.	100 lbs.
	List Price, each.....	$4.50	$4.55	$4.60
Complete, except Globe and Guard	Catalogue Number.....	VA1	VA2	VA3
	Standard Package.....	35	25	10
	Weight Std. Pkg.....	125 lbs.	100 lbs.	50 lbs.
	List Price, each.....	$1.90	$1.95	$2.00



TYPE VC CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number.....	VC1189	VC2289	VC3389
	Standard Package.....	35	25	10
	Weight Std. Pkg.....	250 lbs.	190 lbs.	110 lbs.
	List Price, each.....	$4.60	$4.70	$4.80
Complete, except Globe and Guard	Catalogue Number.....	VC11	VC22	VC33
	Standard Package.....	35	25	10
	Weight Std. Pkg.....	135 lbs.	110 lbs.	60 lbs.
	List Price, each.....	$2.00	$2.10	$2.20

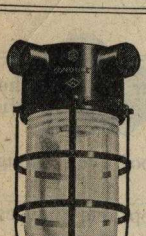
For finishes, assortments and other important information, see note on the following page. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH98)

TYPES VL, VT AND VX IRON CONDULETS

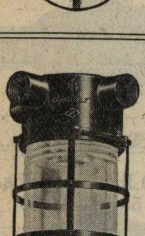
Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 40-Watt, or any Lamp with Dimensions not Exceeding 2¾ x 5¼ Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and All Necessary Fastening Screws, and with or without Globe and Guard



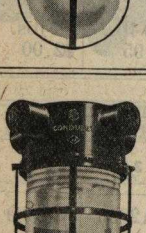
TYPE VL CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VL1189	VL2289	VL3389
	Standard Package	35	25	10
	Weight Std. Pkg.	250 lbs.	190 lbs.	110 lbs.
	List Price, each	$4.60	$4.70	$4.80
Complete, except Globe and Guard	Catalogue Number	VL11	VL22	VL33
	Standard Package	35	25	10
	Weight Std. Pkg.	135 lbs.	110 lbs.	60 lbs.
	List Price, each	$2.00	$2.10	$2.20



TYPE VT CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VT11189	VT22289	VT33389
	Standard Package	35	25	10
	Weight Std. Pkg.	255 lbs.	195 lbs.	115 lbs.
	List Price, each	$4.75	$4.85	$5.05
Complete, except Globe and Guard	Catalogue Number	VT111	VT222	VT333
	Standard Package	35	25	10
	Weight Std. Pkg.	140 lbs.	120 lbs.	70 lbs.
	List Price, each	$2.15	$2.25	$2.45



TYPE VX CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VX111189	VX222289	VX333389
	Standard Package	35	25	10
	Weight Std. Pkg.	265 lbs.	200 lbs.	120 lbs.
	List Price, each	$4.85	$5.05	$5.20
Complete, except Globe and Guard	Catalogue Number	VX1111	VX2222	VX3333
	Standard Package	35	25	10
	Weight Std. Pkg.	150 lbs.	130 lbs.	80 lbs.
	List Price, each	$2.25	$2.45	$2.60

Clear globes are regularly furnished on orders for complete Condulets.

Colored globes will be furnished with Condulets of the V series, if specifically ordered, at the following increases over list prices for complete Condulets: opal, $.30; green, blue or orange, $.90; ruby, $1.55.

Globes and guards for Condulets of the V series are made in one size only.

Padlock is not included in prices for Condulets of the V series, but will be furnished, if specifically ordered.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as for all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulets with plain and special finishes, aluminum Condulets with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

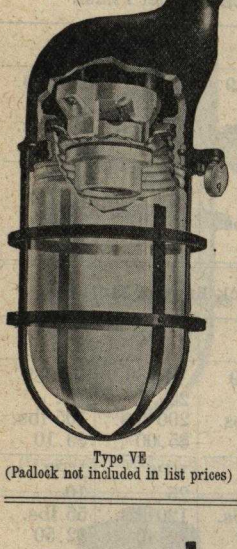
Globes and Guards are listed separately on page Cross Reference No. CH173. Sealing plate is listed separately on page Cross Reference No. CH173. Gaskets are listed separately on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH99)

TYPES VE, VF AND VD IRON CONDULETS

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 40-Watt, or any Lamp with Dimensions not Exceeding 2¾ x 5¼ Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard



Type VE
(Padlock not included in list prices)

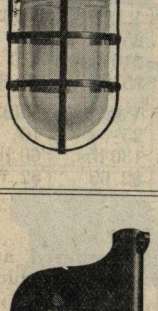
For marine work and in breweries, refineries, flour mills or wherever there is dampness, gas or fine dust, Condulets of the V series meet every requirement.

These Condulets remain vapor, gas and dust-proof even though globes be broken or removed for lamp renewals.

Crouse-Hinds receptacle CCV337 is the only receptacle that can be mounted in these Condulets.

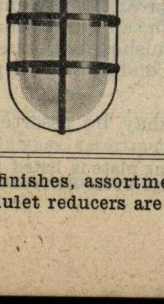
TYPE VE CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VE189	VE289	VE389
	Standard Package	35	25	10
	Weight Std. Pkg.	250 lbs.	190 lbs.	100 lbs.
	List Price, each	$4.75	$4.85	$4.95
Complete, except Globe and Guard	Catalogue Number	VE1	VE2	VE3
	Standard Package	35	25	10
	Weight Std. Pkg.	135 lbs.	110 lbs.	50 lbs.
	List Price, each	$2.15	$2.25	$2.35



TYPE VF CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VF189	VF289	VF389
	Standard Package	35	25	10
	Weight Std. Pkg.	260 lbs.	200 lbs.	105 lbs.
	List Price, each	$4.90	$5.00	$5.10
Complete, except Globe and Guard	Catalogue Number	VF1	VF2	VF3
	Standard Package	35	25	10
	Weight Std. Pkg.	145 lbs.	120 lbs.	55 lbs.
	List Price, each	$2.30	$2.40	$2.50



TYPE VD CONDULETS—IRON—Black Enamel Finish

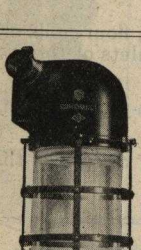
	Size in inches	½	¾	1
Complete	Catalogue Number	VD1189	VD2289	VD3389
	Standard Package	35	25	10
	Weight Std. Pkg.	275 lbs.	210 lbs.	110 lbs.
	List Price, each	$5.15	$5.25	$5.35
Complete, except Globe and Guard	Catalogue Number	VD11	VD22	VD33
	Standard Package	35	25	10
	Weight Std. Pkg.	160 lbs.	130 lbs.	60 lbs.
	List Price, each	$2.55	$2.65	$2.75

For finishes, assortments and other important information, see note on following page.
Condulet reducers are listed on page Cross Reference No. CH171.
Cross Reference No. CH100)

TYPES VK, VP AND VJ IRON CONDULETS

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 40-Watt, or any Lamp with Dimensions not Exceeding 2¾ x 5¼ Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard



TYPE VK CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VK189	VK289	VK389
	Standard Package	35	25	10
	Shipping Weight Std. Pkg.	260 lbs.	200 lbs.	105 lbs.
	List Price, each	$4.90	$5.00	$5.10
Complete, except Globe and Guard	Catalogue Number	VK1	VK2	VK3
	Standard Package	35	25	10
	Shipping Weight Std. Pkg.	145 lbs.	120 lbs.	55 lbs.
	List Price, each	$2.30	$2.40	$2.50



TYPE VP CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VP189	VP289	VP389
	Standard Package	35	25	10
	Shipping Weight Std. Pkg.	260 lbs.	200 lbs.	105 lbs.
	List Price, each	$4.90	$5.00	$5.10
Complete, except Globe and Guard	Catalogue Number	VP1	VP2	VP3
	Standard Package	35	25	10
	Shipping Weight Std. Pkg.	145 lbs.	120 lbs.	55 lbs.
	List Price, each	$2.30	$2.40	$2.50



TYPE VJ CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VJ1189	VJ2289	VJ3389
	Standard Package	35	25	10
	Shipping Weight Std. Pkg.	280 lbs.	210 lbs.	110 lbs.
	List Price, each	$5.15	$5.25	$5.35
Complete, except Globe and Guard	Catalogue Number	VJ11	VJ22	VJ33
	Standard Package	35	25	10
	Shipping Weight Std. Pkg.	165 lbs.	130 lbs.	60 lbs.
	List Price, each	$2.55	$2.65	$2.75

Clear globes are regularly furnished on orders for complete Condulets.

Colored globes will be furnished with Condulets of the V series, if specifically ordered, at the following increases over list prices for complete Condulets: opal, $.30; green, blue or orange, $.90; ruby, $1.55.

Globes and guards for Condulets of the V series are made in one size only.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as for all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulets with plain and special finishes, aluminum Condulets with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

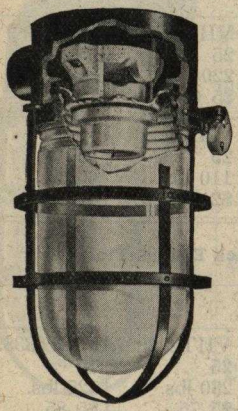
Globes and Guards are listed separately on page Cross Reference No. CH173. Sealing plate is listed separately on page Cross Reference No. CH173. Gaskets are listed separately on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH101)

TYPES VH, VHA AND VHC IRON CONDULETS

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 100-Watt, or any Lamp with Dimensions not Exceeding 3¾ x 7¾ Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard



Type VH
(Padlock not included in list prices)

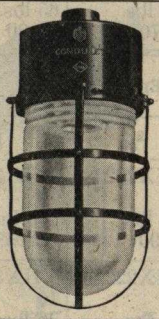
For marine work and in breweries, refineries, flour mills or wherever there is dampness, gas or fine dust, Condulets of the VH series meet every requirement.

These condulets remain vapor, gas and dust-proof even though globes be broken or removed for lamp renewals.

Crouse-Hinds receptacle CCV337 is the only receptacle that can be mounted in these Condulets.

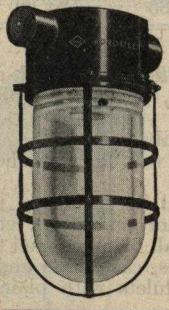
TYPE VH CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number	VH189	VH289	VH389
	Standard Package.	35	25	10
	Ship. Wt. Std. Pkg.	285 lbs.	220 lbs.	120 lbs.
	List Price, each....	$5.40	$5.45	$5.50
Complete, except Globe and Guard	Catalogue Number	VH1	VH	VH3
	Standard Package.	35	25	10
	Ship. Wt. Std. Pkg.	135 lbs.	110 lbs.	60 lbs.
	List Price, each....	$2.35	$2.40	$2.45



TYPE VHA CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number	VHA189	VHA289	VHA389
	Standard Package.	35	25	10
	Ship. Wt. Std. Pkg.	285 lbs.	220 lbs.	120 lbs.
	List Price, each....	$5.40	$5.45	$5.50
Complete, except Globe and Guard	Catalogue Number	VHA1	VHA2	VHA3
	Standard Package.	35	25	10
	Ship. Wt. Std. Pkg.	135 lbs.	110 lbs.	60 lbs.
	List Price, each....	$2.35	$2.40	$2.45



TYPE VHC CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number	VHC1189	VHC2289	VHC3389
	Standard Package.	35	25	10
	Ship. Wt. Std. Pkg.	295 lbs.	230 lbs.	125 lbs.
	List Price, each....	$5.50	$5.60	$5.65
Complete, except Globe and Guard	Catalogue Number	VHC11	VHC22	VHC33
	Standard Package.	35	25	10
	Ship. Wt. Std. Pkg.	145 lbs.	120 lbs.	65 lbs.
	List Price, each....	$2.45	$2.55	$2.60

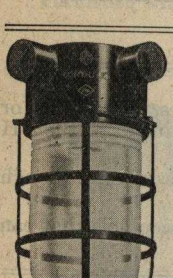
For finishes, assortments and other important information, see note on following page.

Condulet reducers are listed on page Cross Reference No. CH171.

TYPES VHL, VHT AND VHX IRON CONDULETS

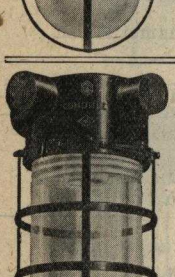
Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 100-Watt, or any Lamp with Dimensions not Exceeding 3¾ x 7¾ Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard



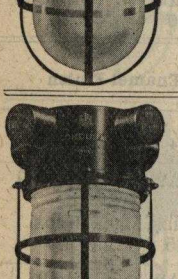
TYPE VHL CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number.....	VHL1189	VHL2289	VHL3389
	Standard Package.....	35	25	10
	Ship. Wt. Std. Pkg.....	295 lbs.	220 lbs.	120 lbs.
	List Price, each.....	$5.50	$5.60	$5.65
Complete, except Globe and Guard	Catalogue Number.....	VHL11	VHL22	VHL33
	Standard Package.....	35	25	10
	Ship. Wt. Std. Pkg.....	140 lbs.	110 lbs.	60 lbs.
	List Price, each.....	$2.45	$2.55	$2.60



TYPE VHT CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number.....	VHT11189	VHT22289	VHT33389
	Standard Package.....	35	25	10
	Ship. Wt. Std. Pkg.....	305 lbs.	230 lbs.	125 lbs.
	List Price, each.....	$5.60	$5.75	$5.85
Complete, except Globe and Guard	Catalogue Number.....	VHT111	VHT222	VHT333
	Standard Package.....	35	25	10
	Ship. Wt. Std. Pkg.....	150 lbs.	120 lbs.	65 lbs.
	List Price, each.....	$2.55	$2.70	$2.80



TYPE VHX CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number.....	VHX111189	VHX222289	VHX333389
	Standard Package.....	35	25	10
	Ship. Wt. Std. Pkg.....	310 lbs.	240 lbs.	130 lbs.
	List Price, each.....	$5.70	$5.90	$6.05
Complete, except Globe and Guard	Catalogue Number.....	VHX1111	VHX2222	VHX3333
	Standard Package.....	35	25	10
	Ship. Wt. Std. Pkg.....	160 lbs.	130 lbs.	70 lbs.
	List Price, each.....	$2.65	$2.85	$3.00

Clear globes are regularly furnished on orders for complete Condulets.

Colored globes will be furnished with Condulets of the VH series, if specifically ordered, at the following increases over list prices for complete Condulets: opal, $.90; green, blue or orange, $1.55; ruby, $2.10.

Globes and guards for Condulets of the VH series are made in one size only.

Padlock is not included in prices for Condulets of the VH series, but will be furnished, if specifically ordered.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as for all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulets with plain and special finishes, aluminum Condulets with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

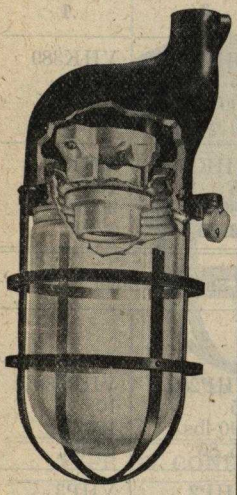
Globes and Guards are listed separately on page Cross Reference No. CH173. Sealing plate is listed separately on page Cross Reference No. CH173. Gaskets are listed separately on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH103)

TYPES VHE, VHF AND VHD IRON CONDULETS

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 100-Watt, or any Lamp with Dimensions not Exceeding 3¾ x 7¾ Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard



Type VHE
(Padlock not included in list prices)

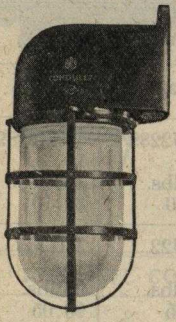
For marine work and in breweries, refineries, flour mills or wherever there is dampness, gas or fine dust, Condulets of the VH series meet every requirement.

These Condulets remain vapor, gas and dust-proof even though globes be broken or removed for lamp renewals.

Crouse-Hinds receptacle CCV337 is the only receptacle that can be mounted in these Condulets.

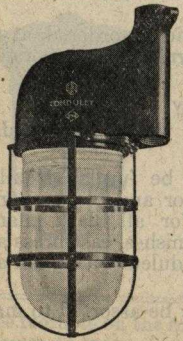
TYPE VHE CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VHE189	VHE289	VHE389
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg.	335 lbs.	260 lbs.	130 lbs.
	List Price, each	$5.50	$5.60	$5.70
Complete, except Globe and Guard	Catalogue Number	VHE1	VHE2	VHE3
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg.	185 lbs.	150 lbs.	70 lbs.
	List Price, each	$2.45	$2.55	$2.65



TYPE VHF CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VHF189	VHF289	VHF389
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg.	335 lbs.	260 lbs.	130 lbs.
	List Price, each	$5.75	$5.85	$5.95
Complete, except Globe and Guard	Catalogue Number	VHF1	VHF2	VHF3
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg.	185 lbs.	150 lbs.	70 lbs.
	List Price, each	$2.70	$2.80	$2.90



TYPE VHD CONDULETS—IRON—Black Enamel Finish

	Size in inches	½	¾	1
Complete	Catalogue Number	VHD1189	VHD2289	VHD3389
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg.	350 lbs.	270 lbs.	140 lbs.
	List Price, each	$5.90	$6.00	$6.10
Complete, except Globe and Guard	Catalogue Number	VHD11	VHD22	VHD33
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg.	200 lbs.	160 lbs.	80 lbs.
	List Price, each	$2.85	$2.95	$3.05

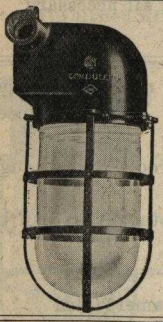
For finishes, assortments and other important information, see note on the following page. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH104)

TYPES VHK, VHP AND VHJ IRON CONDULETS

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 100-Watt, or any Lamp with Dimensions not Exceeding 3¾ x 7¾ Inches

Furnished with Crouse-Hinds Receptacle CGV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard



TYPE VHK CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number ...	VHK189	VHK289	VHK389
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg....	370 lbs.	290 lbs.	150 lbs.
	List Price, each.....	$5.75	$5.85	$5.95
Complete, except Globe and Guard	Catalogue Number ...	VHK1	VHK2	VHK3
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg....	220 lbs.	180 lbs.	90 lbs.
	List Price, each.....	$2.70	$2.80	$2.90



TYPE VHP CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number ...	VHP189	VHP289	VHP389
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg....	370 lbs.	290 lbs.	150 lbs.
	List Price, each.....	$5.75	$5.85	$5.95
Complete, except Globe and Guard	Catalogue Number ...	VHP1	VHP2	VHP3
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg....	220 lbs.	180 lbs.	90 lbs.
	List Price, each.....	$2.70	$2.80	$2.90



TYPE VHJ CONDULETS—IRON—Black Enamel Finish

	Size in inches.....	½	¾	1
Complete	Catalogue Number ...	VHJ1189	VHJ2289	VHJ3389
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg....	375 lbs.	295 lbs.	155 lbs.
	List Price, each.....	$5.90	$6.00	$6.10
Complete, except Globe and Guard	Catalogue Number ...	VHJ11	VHJ22	VHJ33
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg....	225 lbs.	185 lbs.	95 lbs.
	List Price, each.....	$2.85	$2.95	$3.05

Clear globes are regularly furnished on orders for complete Condulets.

Colored globes will be furnished with Condulets of the VH series, if specifically ordered, at the following increases over list prices for complete Condulets: opal, $.90; green, blue or orange, $1.55; ruby, $2.10.

Globes and guards for Condulets of the VH series are made in one size only.

Padlock is not included in prices for Condulets of the VH series but will be furnished, if specifically ordered.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as for all black enamel finish when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulets with plain and special finishes, aluminum Condulets with plain and black enamel finish, see page Cross Reference No. CH182.

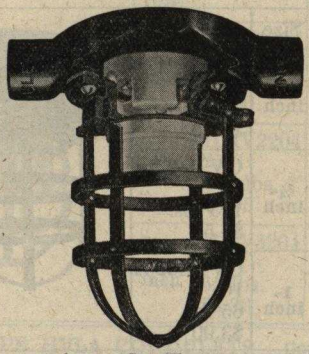
Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Globes and Guards are listed separately on page Cross Reference No. CH173. Sealing plate is listed separately on page Cross Reference No. CH173. Gaskets are listed separately on page Cross Reference No. CH176. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH105)

TYPES GV, GVA, GVL AND GVLA WEATHER-PROOF CONDULETS

Furnished with Receptacle C337, Receptacle and Guard Holder RMP2 and Guard HV94*
Take any Incandescent Lamp not Exceeding $2\frac{7}{16}$ x $3\frac{3}{4}$ Inches
Not Designed to Take Glass Sealing-Globe

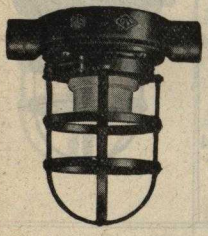


Type GV

Condulets of the GV and HV series are weather-proof and semivapor-proof lamp fittings, and can be used to advantage wherever conditions are not so severe as to require an outer sealing globe. They are thoroughly gasketed and are in every way suitable for such places as laundries, kitchens, interior installations on boats and in subways.

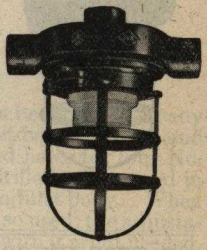
The guard effectually protects the lamp from breakage and, when padlocked on, also prevents the unauthorized removal or theft of lamp.

TYPE GV CONDULETS—Complete



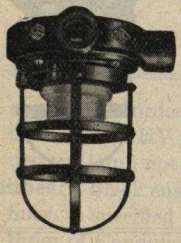
Size		Black Enameled
½-inch	GV1204 35 140 lbs. $3.00	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
¾-inch	GV2204 25 115 lbs. $3.05	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
1-inch	GV3204 10 55 lbs. $3.30	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...

TYPE GVA CONDULETS—Complete



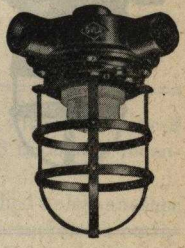
Size	
½-inch	GVA1204 35 145 lbs. $3.20
¾-inch	GVA2204 25 120 lbs. $3.30
1-inch	GVA3204 10 60 lbs. $3.60

TYPE GVL CONDULETS—Complete



Size		Black Enameled
½-inch	GVL1204 35 140 lbs. $3.05	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
¾-inch	GVL2204 25 115 lbs. $3.15	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
1-inch	GVL3204 10 55 lbs. $3.45	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...

TYPE GVLA CONDULETS—Complete



Size	
½-inch	GVLA1204 35 145 lbs. $3.20
¾-inch	GVLA2204 25 120 lbs. $3.30
1-inch	GVLA3204 10 60 lbs. $3.60

*See footnote on the following page.

Receptacle C337 is listed separately on page Cross Reference No. CH190.

Receptacle and Guard Holder RMP2 is listed separately on page Cross Reference No. CH1000E28.

Guards HV94 and HV96 are listed separately on page Cross Reference No. CH1000E28.

Listings of Weather-Proof Condulets are continued on the two following pages.

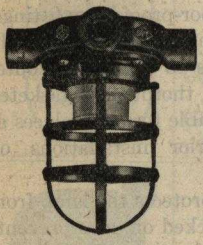
TYPES GVT, GVTA, GVX, GVXA, HV AND HVA WEATHER-PROOF CONDULETS

Furnished with Receptacle C337, Receptacle and Guard Holder RMP2 and Guard HV94*

Take any Incandescent Lamp not Exceeding $2\frac{7}{16}$ x $3\frac{3}{4}$ Inches

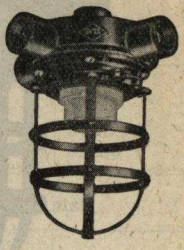
Not Designed to Take Glass Sealing-Globe

TYPE GVT CONDULETS—Complete



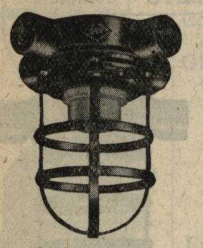
Size	Black Enameled	
½-inch	GVT1204 35 145 lbs. $3.20	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
¾-inch	GVT2204 25 120 lbs. $3.30	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
1-inch	GVT3204 10 60 lbs. $3.60	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...

TYPE GVTA CONDULETS—Complete



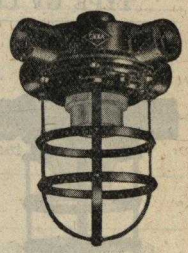
Size	Black Enameled	
½-inch	GVTA1204 35 150 lbs. $3.35	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
¾-inch	GVTA2204 25 125 lbs. $3.50	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
1-inch	GVTA3204 10 65 lbs. $3.90	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...

TYPE GVX CONDULETS—Complete



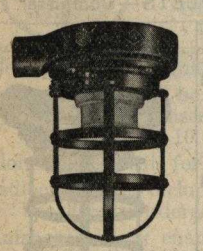
Size	Black Enameled	
½-inch	GVX1204 35 150 lbs. $3.35	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
¾-inch	GVX2204 25 125 lbs. $3.50	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
1-inch	GVX3204 10 65 lbs. $3.90	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...

TYPE GVXA CONDULETS—Complete



Size	Black Enameled	
½-inch	GVXA1204 35 155 lbs. $3.50	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
¾-inch	GVXA2204 25 130 lbs. $3.70	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
1-inch	GVXA3204 10 70 lbs. $4.10	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...

TYPE HV CONDULETS—Complete



Size	Black Enameled	
½-inch	HV1204 35 135 lbs. $2.90	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
¾-inch	HV2204 25 110 lbs. $2.95	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
1-inch	HV3204 10 50 lbs. $3.20	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...

TYPE HVA CONDULETS—Complete



Size	Black Enameled	
½-inch	HVA1204 35 135 lbs. $2.95	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
¾-inch	HVA2204 25 110 lbs. $3.00	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
1-inch	HVA3204 10 50 lbs. $3.30	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...

*If specified on order, Guard HV96, instead of Guard HV94, will be furnished with Condulets of the GV and HV Series, at an advance of $0.10 in list prices. Guard HV96 takes any incandescent lamp not exceeding $2\frac{7}{16}$ x $5\frac{1}{4}$ inches.

Receptacle C337 is listed separately on page Cross Reference No. CH190.

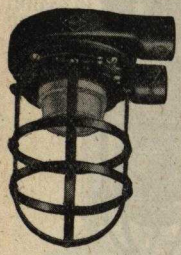
Receptacle and Guard Holder RMP2 is listed separately on the following page. Guards HV94 and HV96 are listed separately on the following page.

Listings of Weather-Proof Condulets are continued on the following page.

TYPES HHV, HHVC AND HVLA WEATHER-PROOF CONDULETS

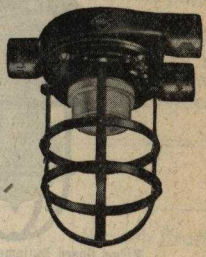
Furnished with Receptacle C337, Receptacle and Guard Holder RMP2 and Guard HV94*
Take any Incandescent Lamp not Exceeding $2\frac{7}{16}$ x $2\frac{3}{4}$ Inches
Not Designed to Take Glass Sealing-Globe

TYPE HHV CONDULETS—Complete



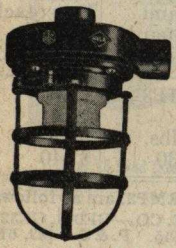
Size		Black Enameled
½-inch	HHV1204 35 140 lbs. $3.00	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
¾-inch	HHV2204 25 115 lbs. $3.05	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
1-inch	HHV3204 10 55 lbs. $3.30	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...

TYPE HHVC CONDULETS—Complete



Size	
½-inch	HHVC1204 35 145 lbs. $3.20
¾-inch	HHVC2204 25 120 lbs. $3.30
1-inch	HHVC3204 10 60 lbs. $3.60

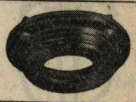
TYPE HVLA CONDULETS—Complete



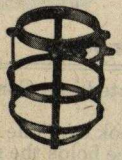
Size		Black Enamel Finish
½-inch	HVLA1204 35 140 lbs. $3.05	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
¾-inch	HVLA2204 25 115 lbs. $3.15	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...
1-inch	HVLA3204 10 55 lbs. $3.45	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...

RECEP. AND GUARD HOLDER RMP2

For Weather-Proof Condulets of GV and HV Series, Furnished with Gasket and Screws

RMP2 35 30 lbs. $ .30	

This holder can be mounted on any Form 20 Condulet body of the G and H series, provided holes for four No. 8-32 screws are drilled and tapped in the rim of the Condulet body. When Condulet body is so used, the adjustable bar furnished with it is not needed.



TYPE HV GUARDS

For Above Receptacle and Guard Holder Black Finish

HV94 35 30 lbs. $1.40	.Catalogue No.. .Std. Package. .Wt. Std. Pkg.. ...List, each...	HV96 35 35 lbs. $1.50



*If specified on order, Guard HV96, instead of Guard HV94, will be furnished with Condulets of the GV and HV series, at an advance of $0.10 in list price. Guard HV96 takes any incandescent lamp not exceeding $2\frac{7}{16}$ x $5\frac{1}{4}$ inches.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulets with plain and special finishes, aluminum Condulets with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Receptacle C337 is listed separately on page Cross Reference No. CH190.

MIDGET GUARD EQUIPMENT

For Forms 5 and 10 Condulet Bodies of G and H Series

Furnished Complete with Guard HGV95, Receptacle and Guard Holder RMP3, Keyless Receptacle PE55 and all necessary Screws*
Takes any Incandescent Lamp not Exceeding 2⅜ x 3¼ Inches
Not Designed to Take Glass Sealing-Globe

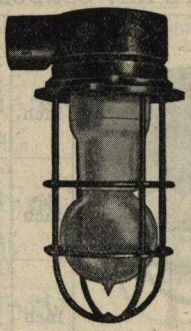


Midget Guard Equipment Mounted on Type H Condulet Body and with Key Receptacle and Lamp Installed (Broken-away View)

This equipment adapts Forms 5 and 10 Condulet bodies of the G and H series for use wherever a small, guarded electric light is required, such as on boats, in theatre dressing rooms, stairways, etc.

The equipment is designed to be attached to the adjustable bar furnished with the Condulet body.

Either key or keyless receptacles can be used.



Midget Guard Equipment Mounted on Type H Condulet Body and with Keyless Receptacle and Lamp Installed



MIDGET GUARD EQUIPMENT—Black Finish

Complete with Guard HGV95, Receptacle and Guard Holder RMP3, Keyless Receptacle PE55 and all necessary Screws.		Guard Only	Receptacle and Guard Holder	Receptacle Only
Catalogue Number...	HGV3595	HGV95	RMP3	PE55
Standard Package...	40	40	40	200
Ship. Wt. Std. Pkg...	80 lbs.	30 lbs.	50 lbs.	95 lbs.
List Price, each.....	$2.10†	$1.40	$ .30	$ .40

***Other receptacles than PE55 which can be used with receptacle and guard holder RMP3, are as follows:**

Key Receptacles: **ARROW E**—8025, 8025W, 66609, 66609W. **BRYANT**—4484, 66609. **G. E. CO.**—GE043, GE324, GE414, GE419, GE471, GE487. **HUBBELL**—3049, 3147, 3307, 3732. **PAISTE**—5437, 5545. **P. & S.**—132, 617, 618, 811, 61387, 66609.

Keyless Receptacles: **ARROW E**—8026, 66610. **BRYANT**—66610. **G. E. CO.**—GE044, GE325, GE472, GE488. **HUBBELL**—3050, 3733. **PAISTE**—5438, 5546. **P. & S.**—146, 451, 60387, 88259.

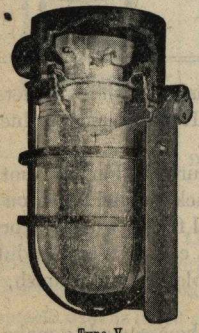
†Forms 5 and 10 Condulet bodies of G and H series are not included in this price, but are listed on pages Cross Reference Nos. CH57 to CH60, inclusive.

TYPE SH REFLECTORS

For Guards V9, V90, VH9 and VH90—Furnished with necessary Fastening Screws

It is sometimes desirable to shut off the light from one side of a lamp mounted in a Condulet of the V or VH series, and type SH reflectors are designed for this purpose.

Two angle pieces on the face of the reflector hook over one of the guard rings. Tightening a screw in each angle piece holds the reflector in place.



Type V With Reflector SH4 Mounted

TYPE SH REFLECTORS—Steel
Outer Surface Black, Inner Surface Aluminumized



For V9 and V90 Guards	Catalogue Number...	SH4
	Standard Package....	35
	Ship. Wt. Std. Pkg....	40 lbs.
	List Price, each.....	$1.70
For VH9 and VH90 Guards	Catalogue Number...	SH5
	Standard Package....	35
	Ship. Wt. Std. Pkg...	50 lbs.
	List Price, each.....	$2.75

Guards V9, V90, VH9 and VH90 are listed on page Cross Reference No. CH173.

(Cross Reference No. CH1000E29)

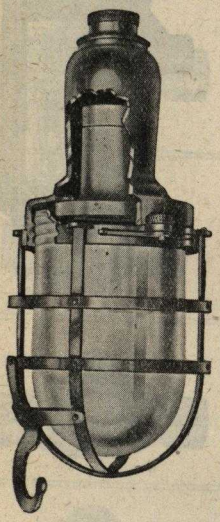
TYPE VS HAND LAMPS

Vapor, Gas and Dust-proof Portable Hand Lamp
Takes any Lamp with Dimensions not Exceeding 2½x5¼ Inches*
Furnished with Crouse-Hinds Receptacle C9514, Clear Globe, Guard and Gaskets

Type VS hand lamps are exceptionally well suited for use in garages, refineries, flour mills, for marine work, or wherever there is inflammable vapor, fine dust or moisture in the air.

Globes listed below can also be used on the V series of Condulets, and when so used take any lamp with dimensions not exceeding 2½x4¼ inches. These dimensions permit the use of any lamp having a bulb that is no larger than an S14 or G18½.

The globes listed below are smaller than those listed on other pages and when used on Condulets of the V series require a correspondingly smaller guard than that listed on another page. This smaller guard is listed below.



Type VS Hand Lamp

Guards VS095 and VS950, listed below for use with type VS hand lamps, have a hook and are provided with a locking cam, which is held closed by a knurled screw. Guards V950 and V95, listed below for use with Condulets of the V series, have no hook and are provided with a locking cam, which is arranged to take a padlock.

TYPE VS HAND LAMP—Aluminum

Finish	Scratch Brush
Catalogue Number	VS100895
Standard Package	35
Shipping Weight Std. Pkg.	105 lbs.
List Price, each	$6.15

TYPE VS HAND LAMP—Brass

Finish	Marine
Catalogue Number	VS10895
Standard Package	35
Shipping Weight Std. Pkg.	265 lbs.
List Price, each	$9.00



GLOBES—5 Inches in Overall Length
For Type VS Hand Lamps and Condulets of the V Series**

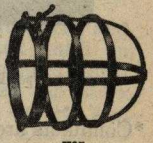
Color	Clear	Opal	Green	Blue	Orange	Ruby
Catalogue No.	V85	V415	V425	V435	V445	V455
Standard Pkg.	35	35	35	35	35	35
Wt. Std. Pkg.	40 lbs.	40 lbs.	40 lbs.	40 lbs.	40 lbs.	40 lbs
List Price, each	$ .80	$1.10	$1.70	$1.70	$1.70	$2.35

GUARDS—Brass
For Globes Listed on this Page

For Type VS Hand Lamps			For Condulets of the V Series**		
Galvanized	Marine	Finish	Marine	Black	
VS095	VS950	Catalogue No.	V950	V95	
35	35	Standard Pkg.	35	35	
40 lbs.	40 lbs.	Wt. Std. Pkg.	40 lbs.	40 lbs.	
$2.00	$2.00	List Price, each	$1.80	$1.80	



VS095



V95

*These dimensions permit the use of any lamp having a bulb that is no larger than an S19 or G18½.
**The V series of Condulets are listed on pages Cross Reference Nos. CH98 to CH101, inclusive.

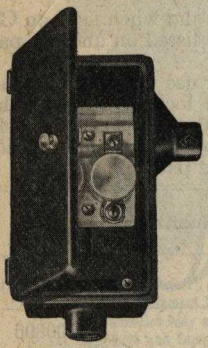
If specified on order, leather gaskets will be furnished with type VS hand lamp, instead of rubber gaskets, without extra charge.

(Cross Reference No. CH113a)

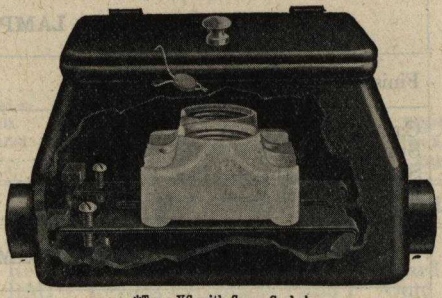
TYPES Y, YC, YL, YR, YS, YD AND YX CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

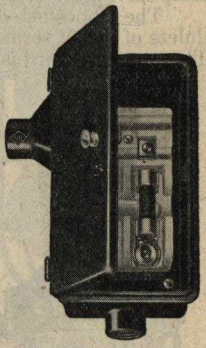
Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws



Type YL with Plug Fuse Cut-out Installed



*Type YC with Cover Sealed
(Broken-away View, Showing Plug Fuse Cut-out Installed)



Type YR with Cartridge Fuse Cut-out Installed



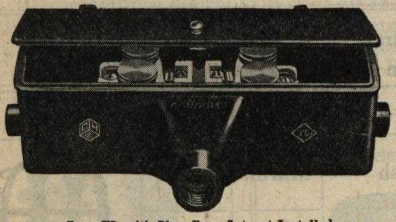
Type YC with Plug Fuse Cut-out Installed



Type YS with Cartridge Fuse Cut-out Installed



Type Y with Plug Fuse Cut-out Installed



Type YD with Plug Fuse Cut-out Installed



Type YX with Cartridge Fuse Cut-out Installed

*Condulets are not furnished with holes for sealing. Where sealing is desirable, holes can readily be drilled.

Cut-outs are enumerated under the listings of Condulets for which they are suitable. Condulet reducers are listed on page Cross Reference No. CH171. Condulets of the Y series are listed on pages Cross Reference Nos. CH119 to CH129, inclusive.

(Cross Reference No. CH118)

TYPES W, WC, WL, WT AND WX CONDULET BODIES

FOR PLUG RECEPTACLES—HUBBELL, 5624; GENERAL ELECTRIC CO., 102700



Broken-away View, showing Receptacle and Cover installed
Prices do not include Receptacle or Cover

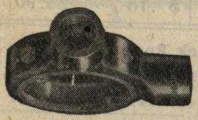
TYPE W CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	W1	W2	W3
Standard Package	100	75	25
Shipping Weight Std. Pkg.	115 lbs.	90 lbs.	45 lbs.
List Price, each	$ .50	$ .60	$ .70



TYPE WC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	WC11	WC22	WC33
Standard Package	100	75	25
Shipping Weight Std. Pkg.	140 lbs.	110 lbs.	55 lbs.
List Price, each	$ .60	$ .65	$ .80



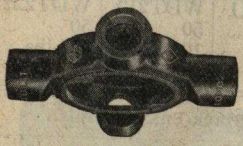
TYPE WL CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	WL11	WL22	WL33
Standard Package	100	75	25
Shipping Weight Std. Pkg.	140 lbs.	110 lbs.	55 lbs.
List Price, each	$ .60	$ .65	$ .80



TYPE WT CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	WT111	WT222	WT333
Standard Package	100	75	25
Shipping Weight Std. Pkg.	150 lbs.	120 lbs.	60 lbs.
List Price, each	$ .70	$ .80	$1.00



TYPE WX CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	WX1111	WX2222	WX3333
Standard Package	100	75	25
Shipping Weight Std. Pkg.	160 lbs.	150 lbs.	75 lbs.
List Price, each	$ .80	$ .90	$1.15

COVERS

For Types W, WC, WL, WT and WX Condulet Bodies—Black Enamel Finish

For 1-2, 3-4 and 1-Inch Condulet Bodies



For Attach. Plug		Style of Cover	Blank Metal	
Sheet Steel	Cast Iron		Sheet Steel	Cast Iron
0	0g	Catalogue Number	0b	0bg
100	100	Standard Package	100	100
30 lbs.	30 lbs.	Weight Std. Pkg.	35 lbs.	35 lbs.
$ .10	$ .20	List Price, each	$ .10	$ .20



Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for both Condulet bodies and metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies and all galvanized finish on covers will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes on Condulet bodies and covers, cast brass and cast bronze Condulet bodies and brass and bronze covers with plain and special finishes, aluminum Condulet bodies and covers with plain and black enamel finish, see page Cross Reference No. CH182.

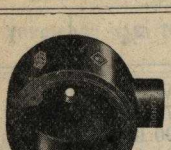
Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment of Condulet bodies is allowed.

Black enameled and galvanized covers of both styles for Condulet bodies of the W series may be assorted to make up a standard package.

(Cross Reference No. CH114a)

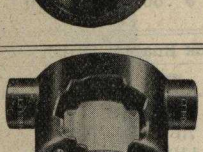
TYPES WD, WDC, WDL, WDT AND WDX CONDULET BODIES

For Clamp Receptacles



TYPE WD CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	WD1	WD2	WD3
Standard Package	75	50	25
Shipping Weight Std. Pkg.	90 lbs.	75 lbs.	50 lbs.
List Price, each	$ .60	$ .70	$ .80



Broken-away View, showing Receptacle and Cover Installed

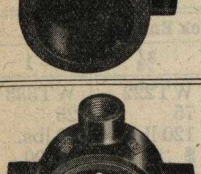
TYPE WDC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	WDC11	WDC22	WDC33
Standard Package	75	50	25
Shipping Weight Std. Pkg.	105 lbs.	90 lbs.	60 lbs.
List Price, each	$ .70	$ .75	$ .90



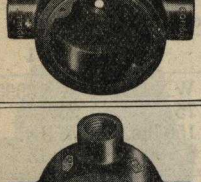
TYPE WDL CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾–½	¾
Catalogue Number	WDL11	WDL21	WDL22
Standard Package	75	50	50
Shipping Weight Std. Pkg	105 lbs.	90 lbs.	90 lbs.
List Price, each	$ .70	$ .75	$ .75



TYPE WDT CONDULET BODIES—Black Enamel Finish

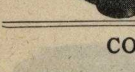
Size in inches	½	¾–½–¾*	¾
Catalogue Number	WDT111	WDT212	WDT222
Standard Package	75	50	50
Shipping Weight Std. Pkg.	120 lbs.	100 lbs.	105 lbs.
List Price, each	$ .80	$ .90	$ .90



TYPE WDX CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	WDX1111	WDX2222	WDX3333
Standard Package	75	50	25
Shipping Weight Std. Pkg.	140 lbs.	115 lbs.	75 lbs.
List Price, each	$ .90	$1.00	$1.25

COVERS—For Condulet Bodies of the WD Series—Black Enamel Finish
Furnished with Fastening Screws



Style of Cover	1 11/16" Opening†		1½" Opening‡		Black Metal	
	Sheet Steel	Cast Iron	Sheet Steel	Cast Iron	Sheet Steel	Cast Iron
Catalogue No.	WD054	WD0054	WD048	WD0048	WD00	WD000
Standard Pkg.	75	75	75	75	75	75
Wt. Std. Pkg.	25 lbs.	40 lbs.	25 lbs.	40 lbs.	25 lbs.	45 lbs.
List, each	$ .15	$ .30	$ .15	$ .30	$ .15	$ .30

Prices for Condulet bodies do not include receptacles or covers.

*Center hub is the smallest one.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Condulet bodies listed above take the following:

†**Cover with 1 11/16-inch opening: ARROW E**—86, 440. **BRYANT**—4014, 4057. **FEDERAL**—303, 304, 305. **P. & S** 86, 440.

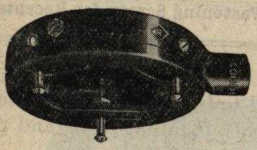
‡**Cover with 1½-inch opening: ARROW E**—427, 439, 61577, 61578, 61877, 61988. **BRYANT**—4035, 4036, 61988. **G. E. CO.**—GE001, GE060, GE079, GE118, GE153, GE267, GE269, GE271. **PAISTE**—47566, 59439, 61988. **P. & S.**—427, 436, 437, 439, 61577, 61578, 61877, 61988, 102703, 102704.

(Cross Reference No. CH115a)

TYPES R, RA, RC, RL, RT AND RX CONDULETS

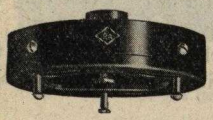
For Arc Lamp Hanger Boards—G.E. Co., 2046, 2865, 36850; Paiste, 4071; Perkins, 3226, 3269

Furnished with Fastening Bolts for Hanger Boards



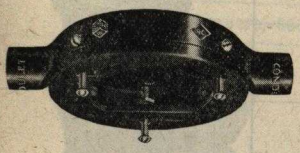
TYPE R CONDULETS—Black Enamel Finish

Size in inches....	½	¾	1	1¼	1½
Catalogue No....	R1	R2	R3	R4	R5
Standard Package	35	25	15	10	10
Ship. Wt. Std. Pkg.	120 lbs.	90 lbs.	70 lbs.	70 lbs.	75 lbs.
List Price, each...	$2.15	$2.25	$2.45	$2.55	$2.65



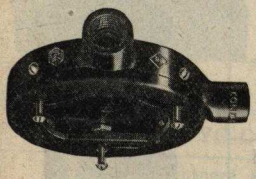
TYPE RA CONDULETS—Black Enamel Finish

Size in inches....	½	¾	1	1¼	1½
Catalogue No....	RA1	RA2	RA3	RA4	RA5
Standard Package	35	25	15	10	10
Ship. Wt. Std. Pkg.	120 lbs.	90 lbs.	70 lbs.	70 lbs.	75 lbs.
List Price, each...	$2.15	$2.25	$2.45	$2.55	$2.65



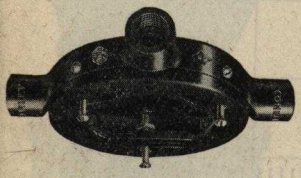
TYPE RC CONDULETS—Black Enamel Finish

Size in inches....	½	¾	1	1¼	1½
Catalogue No....	RC11	RC22	RC33	RC44	RC55
Standard Package	35	25	15	10	10
Ship. Wt. Std. Pkg.	140 lbs.	110 lbs.	90 lbs.	85 lbs.	90 lbs.
List Price, each..	$2.40	$2.50	$2.75	$2.85	$2.95



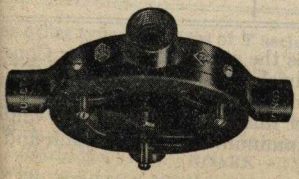
TYPE RL CONDULETS—Black Enamel Finish

Size in inches....	½	¾	1	1¼	1½
Catalogue No....	RL11	RL22	RL33	RL44	RL55
Standard Package	35	25	15	10	10
Ship. Wt. Std. Pkg.	140 lbs.	110 lbs.	90 lbs.	85 lbs.	90 lbs.
List Price, each..	$2.40	$2.50	$2.75	$2.85	$2.95



TYPE RT CONDULETS—Black Enamel Finish

Size in inches....	½	¾	1	1¼	1½
Catalogue No....	RT111	RT222	RT333	RT444	RT555
Standard Package	35	25	15	10	10
Ship. Wt. Std. Pkg.	150 lbs.	120 lbs.	95 lbs.	95 lbs.	100 lbs.
List Price, each..	$2.50	$2.65	$3.00	$3.10	$3.20



TYPE RX CONDULETS—Black Enamel Finish

Size in inches....	½	¾	1	1¼	1½
Catalogue No....	RX1111	RX2222	RX3333	RX4444	RX5555
Standard Package	35	25	15	10	10
Ship. Wt. Std. Pkg.	170 lbs.	135 lbs.	105 lbs.	100 lbs.	105 lbs.
List Price, each..	$2.70	$2.85	$3.20	$3.30	$3.40

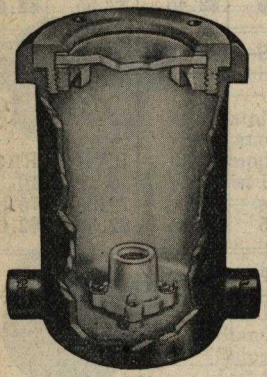
(Cross Reference No. CH115b)

TYPES SPD, SPDC, SPDL, SPDT AND SPDX CONDULETS

FOR USE UNDER WATER

Take Regular Mazda Lamp up to and Including 60-Watt, or any Incandescent Lamp with Dimensions not Exceeding 2¾ x 5⅝ Inches

Furnished with Crouse-Hinds Receptacle C9397, Glass Disk, Gaskets and Fastening Screws for Receptacle



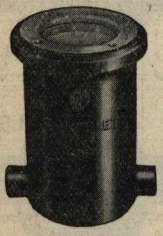
Type SPDC
(Broken-away View)

These Condulets are designed to be set in the concrete at bottom or sides of swimming pools, fountains, etc., and provide water-tight housings for lamps.

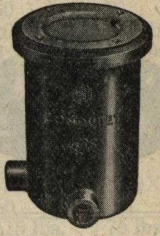
The inner surface is white enameled and reflects the light through a heavy plate glass disk in the top of the Condulet. This glass disk is suitably secured in a heavy brass ring that engages a female thread on the body of the Condulet. The ring can be removed at any time when not submerged, thus providing for lamp renewal. All joints are sealed with thick rubber gaskets of best quality.

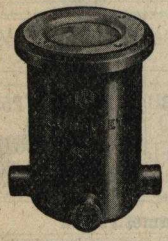
TYPE SPD CONDULET	
Size in inches	½
Catalogue Number .	SPD1
Standard Package . .	5
Ship. Wt. Std. Pkg..	60 lbs.
List Price, each	$60.25



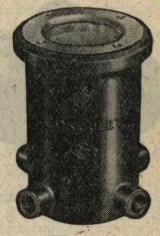


TYPE SPDC CONDULET		TYPE SPDL CONDULET
½	... Size in inches ...	½
SPDC11	. Catalogue Number.	SPDL11
5	. Standard Package .	5
65 lbs.	. Ship. Wt. Std. Pkg..	65 lbs.
$61.25	. . List Price, each . .	$61.25





TYPE SPDT CONDULET		TYPE SPDX CONDULET
½	... Size in inches ...	½
SPDT111	. Catalogue Number.	SPDX1111
5	. Standard Package.	5
80 lbs.	. Ship. Wt. Std. Pkg..	90 lbs.
$62.25	. . List Price, each . .	$63.25



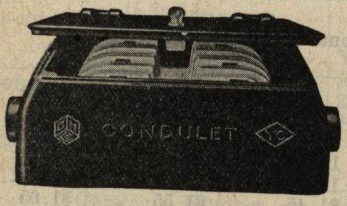
Finishes: Black enamel on exterior and white enamel on interior is the standard finish for Condulets of the SPD series, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior of Condulets will be furnished at same price as black enamel finish when the order specifies galvanized finish. For special plated finishes, for cast brass and cast bronze Condulets, plain and with special finishes and for aluminum Condulets, plain and with black enamel finish, see page Cross Reference No. CH182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

TYPES Y AND YC CONDULETS

FOR 3-WIRE CARTRIDGE FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all Necessary Bolts and Screws



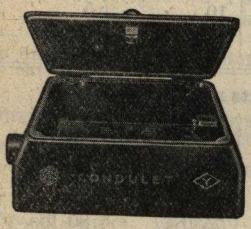
Type YC
With Cut-outs Installed

The doors on these Condulets are cast iron and rabbetted, making a dust-tight joint. They can be hinged on any one of the four sides of the opening that may be specified. Regularly the doors are hinged as shown in the illustration.

If it is desired to make these Condulets water tight, a cast iron door with tubular gasket will be furnished, which is attached to the body by four screws in place of hinges. This arrangement will be furnished at an advance of $1.25 in list price.

TYPE Y CONDULETS—Dead End—Black Enamel Finish

For 30 or 60-Ampere, 600-Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished



Size in inches.....		½	¾	1
3-wire	Catalogue Number	Y16036	Y26036	Y36036
	Standard Package	15	15	10
	Ship. Wt. Std. Pkg.	400 lbs.	410 lbs.	295 lbs.
	List Price, each . .	$10.35	$10.45	$10.55
Size in inches.....		**1¼**	**1½**	
3-wire	Catalogue Number	Y46036	Y56036	
	Standard Package	10	5	
	Ship. Wt. Std. Pkg.	300 lbs.	160 lbs.	
	List Price, each . .	$10.70	$10.85	

TYPE YC CONDULETS—Through Feed—Black Enamel Finish

For 30 or 60-Ampere, 600-Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished



Size in inches.....		½	¾	1
3-wire	Catalogue Number	YC116036	YC226036	YC336036
	Standard Package	15	15	10
	Ship. Wt. Std. Pkg.	430 lbs.	430 lbs.	310 lbs.
	List Price, each . .	$10.65	$10.75	$10.85
Size in inches.....		**1¼**	**1½**	
3-wire	Catalogue Number	YC446036	YC556036	
	Standard Package	10	5	
	Ship. Wt. Std. Pkg.	320 lbs.	175 lbs.	
	List Price, each . .	$11.00	$11.15	

For other types and sizes of Y series Condulets, see pages Cross Reference Nos. CH119 to CH129, inclusive.

In listing 3-wire, 600 volt, types Y and YC Condulets, it is intended that three 1-wire cut-outs be mounted side by side.

The universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:
1-Wire, 30-Ampere, 600-Volt Cut-outs: BRYANT—(Cartridge) 1937. **D. & W.**—(Cartridge) 28076. **G. E. CO.**—(Cartridge) 34991. **NOARK**—(Cartridge) 5600. **SHAWMUT**—(Cartridge) 20735. **UNION**—(Cartridge) 4003.
1-Wire, 60-Ampere, 600-Volt Cut-outs: BRYANT—(Cartridge) 1938. **D. & W.**—(Cartridge) 28077. **G. E. CO.**—(Cartridge) 35101. **NOARK**—(Cartridge) 5601. **SHAWMUT**—(Cartridge) 20745. **UNION**—(Cartridge) 4004.

For finishes and assortments, see note on page Cross Reference No. CH1000E20.

TYPE Y CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TYPE Y CONDULETS—DEAD END—Black Enamel Finish

For 30 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished



Style of Cut-out	Size in inches	½	¾	1
2-wire	Catalogue Number	Y1302	Y2302	Y3302
	Standard Package	15	15	10
	Weight Std. Pkg.	110 lbs.	120 lbs.	90 lbs.
	List Price, each	$1.45	$1.55	$1.65

Style of Cut-out	Size in inches	1¼	1½	2
2-wire	Catalogue Number	Y4302	Y5302	Y6302
	Standard Package	10	5	5
	Weight Std. Pkg.	100 lbs.	60 lbs.	75 lbs.
	List Price, each	$1.85	$1.95	$2.15

Style of Cut-out	Size in inches	½	¾	1	1¼	1½
3-wire	Catalogue Number	Y1303	Y2303	Y3303	Y4303	Y5303
	Standard Package	15	15	10	10	5
	Weight Std. Pkg.	140 lbs.	150 lbs.	100 lbs.	110 lbs.	65 lbs.
	List Price, each	$1.95	$2.05	$2.15	$2.30	$2.45

For 60 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches	¾	1	1¼	1½	2
2-wire	Catalogue Number	Y2602	Y3602	Y4602	Y5602	Y6602
	Standard Package	15	10	10	5	5
	Weight Std. Pkg.	170 lbs.	120 lbs.	130 lbs.	75 lbs.	80 lbs.
	List Price, each	$2.40	$2.55	$2.75	$2.90	$3.00

Style of Cut-out	Size in inches	¾	1	1¼	1½	2
3-wire	Catalogue Number	Y2603	Y3603	Y4603	Y5603	Y6603
	Standard Package	15	10	10	5	5
	Weight Std. Pkg.	220 lbs.	150 lbs.	160 lbs.	90 lbs.	95 lbs.
	List Price, each	$3.15	$3.25	$3.55	$3.70	$3.85

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2-Wire: **BRYANT**—(Cartridge) 1917, (Plug) 62965. **D. & W.**—(Cartridge) 91102. **G. E. CO.**—(Cartridge) 34367, (Plug) 62965. **NOARK**—(Cartridge) 3327. **PAISTE**—(Cartridge) 72965, (Plug) 2965. **SHAWMUT**—(Cartridge) 2077. **TRUMBULL**—(Cartridge) 29653, (Plug) 2965. **WEBER**—(Plug) 62965. **UNION**—(Cartridge) 2010.

3-Wire: **BRYANT**—(Cartridge) 1924, (Plug) 62165. **D. & W.**—(Cartridge) 91103. **G. E. CO.**—(Cartridge) 34372, (Plug) 62165. **NOARK**—(Cartridge) 3328. **PAISTE**—(Cartridge) 72165, (Plug) 2165. **SHAWMUT**—(Cartridge) 2079. **TRUMBULL**—(Cartridge) 21653, (Plug) 2165. **WEBER**—(Plug) 62165. **UNION**—(Cartridge) 2012.

60 Ampere, 250 Volt, Cut-outs

2-Wire: **BRYANT**—(Cartridge) 1918. **D. & W.**—(Cartridge) 91108. **G. E. CO.**—(Cartridge) 34376. **NOARK**—(Cartridge) 3329. **PAISTE**—(Cartridge) 82965. **SHAWMUT**—(Cartridge) 2078. **TRUMBULL**—(Cartridge) 29656. **UNION**—(Cartridge) 2011.

3-Wire: **BRYANT**—(Cartridge) 1925. **D. & W.**—(Cartridge) 91109. **G. E. CO.**—(Cartridge) 34377. **NOARK**—(Cartridge) 3330. **PAISTE**—(Cartridge) 82165. **SHAWMUT**—(Cartridge) 2080. **TRUMBULL**—(Cartridge) 21656. **UNION**—(Cartridge) 2013.

For finishes, see note on page Cross Reference No. CH91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH119)

TYPES Y AND YC CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TYPE Y CONDULETS—DEAD END—Black Enamel Finish—Continued

For 100 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches	1	1¼	1½	2	2½
2-wire	Catalogue Number	Y31002	Y41002	Y51002	Y61002	Y71002
	Standard Package	10	10	5	5	5
	Weight Std. Pkg.	220 lbs.	230 lbs.	120 lbs.	130 lbs.	140 lbs.
	List Price, each	$5.20	$5.50	$5.65	$5.75	$5.85
Style of Cut-out	Size in inches	1	1¼	1½	2	2½
3-wire	Catalogue Number	Y31003	Y41003	Y51003	Y61003	Y71003
	Standard Package	10	10	5	5	5
	Weight Std. Pkg.	230 lbs.	240 lbs.	140 lbs.	150 lbs.	160 lbs.
	List Price, each	$5.80	$6.25	$6.35	$6.45	$6.55

For 30 or 60 Ampere, 600 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches	½	¾	1	1¼	1½
1-wire	Catalogue Number	Y16016	Y26016	Y36016	Y46016	Y56016
	Standard Package	15	15	10	10	5
	Weight Std. Pkg.	175 lbs.	185 lbs.	125 lbs.	130 lbs.	70 lbs.
	List Price, each	$3.15	$3.25	$3.35	$3.45	$3.55

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

100 Ampere, 250 Volt, Cut-outs

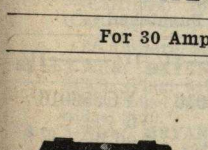
2-Wire: **BRYANT**—(Cartridge) 271. **D. & W.**—(Cartridge) 91119. **G. E. CO.**—(Cartridge) 36801. **NOARK**—(Cartridge) 3331. **SHAWMUT**—(Cartridge) 2101. **UNION**—(Cartridge) 2014.
3-Wire: **BRYANT**—(Cartridge) 272. **D. & W.**—(Cartridge) 91120. **G. E. CO.**—(Cartridge) 36800. **NOARK**—(Cartridge) 3332. **SHAWMUT**—(Cartridge) 2102. **UNION**—(Cartridge) 2015.

30 and 60 Ampere, 600 Volt, Cut-outs

1-Wire, 30 Ampere: **BRYANT**—(Cartridge) 1937. **D. & W.**—(Cartridge) 28076. **G. E. CO.**—(Cartridge) 34991. **NOARK**—(Cartridge) 5600. **SHAWMUT**—(Cartridge) 20735. **UNION**—(Cartridge) 4003.
1-Wire, 60 Ampere: **BRYANT**—(Cartridge) 1938. **D. & W.**—(Cartridge) 28077. **G. E. CO.**—(Cartridge) 35101 **NOARK**—(Cartridge) 5601. **SHAWMUT**—(Cartridge) 20745. **UNION**—(Cartridge) 4004.

TYPE YC CONDULETS—THROUGH FEED—Black Enamel Finish

For 30 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished



Style of Cut-out	Size in inches	½——½	¾——¾	1——1
2-wire	Catalogue Number	YC11302	YC22302	YC33302
	Standard Package	15	15	10
	Weight Std. Pkg.	120 lbs.	130 lbs.	100 lbs.
	List Price, each	$1.70	$1.80	$1.90
Style of Cut-out	Size in inches	1¼——1¼	1½——1½	2——2
2-wire	Catalogue Number	YC44302	YC55302	YC66302
	Standard Package	10	5	5
	Weight Std. Pkg.	110 lbs.	65 lbs.	70 lbs.
	List Price, each	$2.10	$2.20	$2.40

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

2-Wire, 30 Ampere Cut-outs: **BRYANT**—(Cartridge) 1917, (Plug) 62965. **D. & W.**—(Cartridge) 91102. **G. E. CO.**—(Cartridge) 34367, (Plug) 62965. **NOARK**—(Cartridge) 3327. **PAISTE**—(Cartridge) 72965, (Plug) 2965. **SHAWMUT**—(Cartridge) 2077. **TRUMBULL**—(Cartridge) 29653, (Plug) 2965. **WEBER**—(Plug) 62965. **UNION**—(Cartridge) 2010.

For finishes and assortments, see note on page Cross Reference No. CH91.
Condulet reducers are listed on page Cross Reference No. CH171.

TYPE YC CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TYPE YC CONDULETS—THROUGH FEED—Black Enamel Finish—Continued

For 30 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches.....	½——½	¾——¾	1——1	1¼——1¼	1½——1½
3-wire	Catalogue No.....	YC11303	YC22303	YC33303	YC44303	YC55303
	Standard Package.	15	15	10	10	5
	Weight Std. Pkg..	140 lbs.	145 lbs.	120 lbs.	130 lbs.	70 lbs.
	List Price, each...	$2.15	$2.25	$2.35	$2.60	$2.70

For 60 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches.....	¾——¾	1——1	1¼——1¼	1½——1½	2——2
2-wire	Catalogue No.....	YC22602	YC33602	YC44602	YC55602	YC66602
	Standard Package.	15	10	10	5	5
	Weight Std. Pkg..	210 lbs.	145 lbs.	150 lbs.	85 lbs.	90 lbs.
	List Price, each...	$2.65	$2.75	$2.85	$3.15	$3.25
Style of Cut-out	Size in inches.....	¾——¾	1——1	1¼——1¼	1½——1½	2——2
3-wire	Catalogue No.....	YC22603	YC33603	YC44603	YC55603	YC66603
	Standard Package.	15	10	10	5	5
	Weight Std. Pkg..	260 lbs.	170 lbs.	180 lbs.	100 lbs.	105 lbs.
	List Price, each...	$3.40	$3.50	$3.60	$3.95	$4.10

For 100 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches.....	1——1	1¼——1¼	1½——1½	2——2	2½——2½
2-wire	Catalogue No.....	YC331002	YC441002	YC551002	YC661002	YC771002
	Standard Package.	10	10	5	5	5
	Weight Std. Pkg..	270 lbs.	280 lbs.	140 lbs.	150 lbs.	160 lbs.
	List Price, each...	$5.45	$5.80	$5.90	$6.10	$6.20
Style of Cut-out	Size in inches.....	1——1	1¼——1¼	1½——1½	2——2	2½——2½
3-wire	Catalogue No.....	YC331003	YC441003	YC551003	YC661003	YC771003
	Standard Package.	10	10	5	5	5
	Weight Std. Pkg..	280 lbs.	290 lbs.	145 lbs.	150 lbs.	160 lbs.
	List Price, each...	$6.10	$6.50	$6.65	$6.75	$6.90

For 30 or 60 Ampere, 600 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches.....	½——½	¾——¾	1——1	1¼——1¼	1½——1½
1-wire	Catalogue No.....	YC116016	YC226016	YC336016	YC446016	YC556016
	Standard Package.	15	15	10	10	5
	Weight Std. Pkg..	180 lbs.	190 lbs.	130 lbs.	140 lbs.	80 lbs.
	List Price, each...	$3.30	$3.45	$3.60	$3.60	$3.90

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

3-Wire: BRYANT—(Cartridge) 1924, (Plug) 62165. **D. & W.**—(Cartridge) 91103. **G. E. CO.**—(Cartridge) 34372, (Plug) 62165. **NOARK**—(Cartridge) 3328. **PAISTE**—(Cartridge) 72165, (Plug) 2165. **SHAWMUT**—(Cartridge) 2079. **TRUMBULL**—(Cartridge) 21653, (Plug) 2165. **WEBER**—(Plug) 62165. **UNION**—(Cartridge) 2012.

60 Ampere, 250 Volt, Cut-outs

2-Wire: BRYANT—(Cartridge) 1918. **D. & W.**—(Cartridge) 91108. **G. E. CO.**—(Cartridge) 34376. **NOARK**—(Cartridge) 3329. **PAISTE**—(Cartridge) 82965. **SHAWMUT**—(Cartridge) 2078. **TRUMBULL**—(Cartridge) 29656. **UNION**—(Cartridge) 2011.

3-Wire: BRYANT—(Cartridge) 1925. **D. & W.**—(Cartridge) 91109. **G. E. CO.**—(Cartridge) 34377. **NOARK**—(Cartridge) 3330. **PAISTE**—(Cartridge) 82165. **SHAWMUT**—(Cartridge) 2080. **TRUMBULL**—(Cartridge) 21656. **UNION**—(Cartridge) 2013.

2-Wire, 100 Ampere and 3-Wire, 100 Ampere, 250 Volt, Cut-outs } See enumeration of cut-outs under type Y
1-Wire, 30 Ampere and 1-Wire, 60 Ampere, 600 Volt, Cut-outs } Condulets on preceding page.

For finishes and assortments, see note on page Cross Reference No. CH91.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH121)

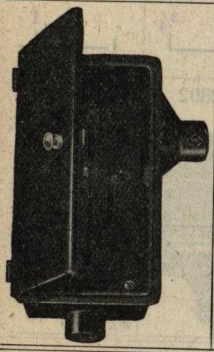
TYPE YL CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TYPE YL CONDULETS—THROUGH FEED—Black Enamel Finish

For 30 Ampere, 250 Volt, N. E. C. Main Line or Single Branch Cut-outs—Cut-outs not Furnished



Style of Cut-out	Size in inches	½ ½	¾ ¾	1 1
2-wire	Catalogue Number	YL11302	YL22302	YL33302
	Standard Package	15	15	10
	Weight Std. Pkg.	140 lbs.	150 lbs.	100 lbs.
	List Price, each	$1.75	$1.85	$1.95
Style of Cut-out	Size in inches	½ ½	¾ ¾	1 1
3-wire	Catalogue Number	YL11303	YL22303	YL33303
	Standard Package	15	15	10
	Weight Std. Pkg.	170 lbs.	175 lbs.	120 lbs.
	List Price, each	$2.55	$2.75	$2.85

For 60 Ampere, 250 Volt, N. E. C. Main Line or Single Branch Cut-outs—Cut-outs not Furnished

Style of Cut-out	¾ ¾	1 1	Size in inches	Style of Cut-out	¾ ¾	1 1
2-wire	YL22602	YL33602	Catalogue Number	3-wire	YL22603	YL33603
	15	10	Standard Package		15	10
	200 lbs.	140 lbs.	Weight Std. Pkg.		260 lbs.	190 lbs.
	$2.60	$2.70	List Price, each		$4.20	$4.30

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Main Line Cut-outs

2-Wire: **BRYANT**—(Cartridge) 1917, (Plug) 62965. **D. & W.**—(Cartridge) 91102. **G. E. CO.**—(Cartridge) 34367, (Plug) 62965. **NOARK**—(Cartridge) 3327. **PAISTE**—(Cartridge) 72965, (Plug) 2965. **SHAWMUT**—(Cartridge) 2077. **TRUMBULL**—(Cartridge) 29653, (Plug) 2965. **WEBER**—(Plug) 62965. **UNION**—(Cartridge) 2010.

3-Wire: **BRYANT**—(Cartridge) 1924, (Plug) 62165. **D. & W.**—(Cartridge) 91103. **G. E. CO.**—(Cartridge) 34372, (Plug) 62165. **NOARK**—(Cartridge) 3328. **PAISTE**—(Cartridge) 72165, (Plug) 2165. **SHAWMUT**—(Cartridge) 2079. **TRUMBULL**—(Cartridge) 21653, (Plug) 2165. **WEBER**—(Plug) 62165. **UNION**—(Cartridge) 2012.

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Single Branch Cut-outs

2 to 2-Wire: **BRYANT**—(Cartridge) 1919, (Plug) 61935. **D. & W.**—(Cartridge) 91104. **G. E. CO.**—(Cartridge) 34368, (Plug) 61935. **NOARK**—(Cartridge) 3345. **PAISTE**—(Cartridge) 71935, (Plug) 1935. **SHAWMUT**—(Cartridge) 2081. **TRUMBULL**—(Cartridge) 19353, (Plug) 1935. **WEBER**—(Plug) 61935. **UNION**—(Cartridge) 2020.

3 to 3-Wire: **BRYANT**—(Cartridge) 1926, (Plug) 8042. **D. & W.**—(Cartridge) 91105. **G. E. CO.**—(Cartridge) 34373, (Plug) 8042. **NOARK**—(Cartridge) 3346. **PAISTE**—(Cartridge) 78042, (Plug) 8042. **SHAWMUT**—(Cartridge) 2083. **TRUMBULL**—(Cartridge) 80423, (Plug) 8042. **WEBER**—(Plug) 8042. **UNION**—(Cartridge) 2022.

60 Ampere, 250 Volt, Main Line Cut-outs

2-Wire: **BRYANT**—(Cartridge) 1918. **D. & W.**—(Cartridge) 91108. **G. E. CO.**—(Cartridge) 34376. **NOARK**—(Cartridge) 3329. **PAISTE**—(Cartridge) 82965. **SHAWMUT**—(Cartridge) 2078. **TRUMBULL**—(Cartridge) 29656. **UNION**—(Cartridge) 2011.

3-Wire: **BRYANT**—(Cartridge) 1925. **D. & W.**—(Cartridge) 91109. **G. E. CO.**—(Cartridge) 34377. **NOARK**—(Cartridge) 3330. **PAISTE**—(Cartridge) 82165. **SHAWMUT**—(Cartridge) 2080. **TRUMBULL**—(Cartridge) 21656. **UNION**—(Cartridge) 2013.

60 Ampere, 250 Volt, Single Branch Cut-outs

2 to 2-Wire: **BRYANT**—(Cartridge) 1920. **D. & W.**—(Cartridge) 91110. **G. E. CO.**—(Cartridge) 34378. **NOARK**—(Cartridge) 3347. **PAISTE**—(Cartridge) 81935. **SHAWMUT**—(Cartridge) 2082. **TRUMBULL**—(Cartridge) 19356. **UNION**—(Cartridge) 2021.

3 to 3-Wire: **BRYANT**—(Cartridge) 1927. **D. & W.**—(Cartridge) 91111. **G. E. CO.**—(Cartridge) 34379. **NOARK**—(Cartridge) 3348. **PAISTE**—(Cartridge) 88042. **SHAWMUT**—(Cartridge) 2084. **TRUMBULL**—(Cartridge) 80426. **UNION**—(Cartridge) 2023.

For finishes, see note on page Cross Reference No. CH91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.

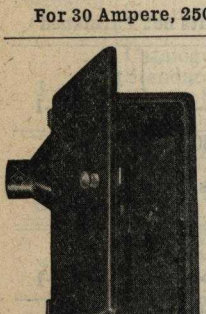
TYPE YR CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TYPE YR CONDULETS—THROUGH FEED—Black Enamel Finish

For 30 Ampere, 250 Volt, N. E. C. Main Line or Single Branch Cut-outs—Cut-outs not Furnished



Style of Cut-out	Size in inches	½	¾	1
2-wire	Catalogue Number	YR11302	YR22302	YR33302
	Standard Package	15	15	10
	Weight Std. Pkg.	140 lbs.	150 lbs.	100 lbs.
	List Price, each	$1.75	$1.85	$1.95
Style of Cut-out	Size in inches	½	¾	1
3-wire	Catalogue Number	YR11303	YR22303	YR33303
	Standard Package	15	15	10
	Weight Std. Pkg.	170 lbs.	175 lbs.	120 lbs.
	List Price, each	$2.55	$2.75	$2.85

For 60 Ampere, 250 Volt, N. E. C. Main Line or Single Branch Cut-outs—Cut-outs not Furnished

Style of Cut-out	¾	1	....Size in inches....	Style of Cut-out	¾	1
2-wire	YR22602	YR33602	..Catalogue Number..	3-wire	YR22603	YR33603
	15	10	..Standard Package..		15	10
	200 lbs.	140 lbs.	...Weight Std. Pkg...		260 lbs.	190 lbs.
	$2.60	$2.70	...List Price, each...		$4.20	$4.30

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Main Line Cut-outs

2-Wire: BRYANT—(Cartridge) 1917, (Plug) 62965. **D. & W.**—(Cartridge) 91102. **G. E. CO.**—(Cartridge) 34367, (Plug) 62965. **NOARK**—(Cartridge) 3327. **PAISTE**—(Cartridge) 72965, (Plug) 2965. **SHAWMUT**—(Cartridge) 2077. **TRUMBULL**—(Cartridge) 29653, (Plug) 2965. **WEBER**—(Plug) 62965. **UNION**—(Cartridge) 2010.

3-Wire: BRYANT—(Cartridge) 1924, (Plug) 62165. **D. & W.**—(Cartridge) 91103. **G. E. CO.**—(Cartridge) 34372, (Plug) 62165. **NOARK**—(Cartridge) 3328. **PAISTE**—(Cartridge) 72165, (Plug) 2165. **SHAWMUT**—(Cartridge) 2079. **TRUMBULL**—(Cartridge) 21653, (Plug) 2165. **WEBER**—(Plug) 62165. **UNION**—(Cartridge) 2012.

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Single Branch Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1919, (Plug) 61935. **D. & W.**—(Cartridge) 91104. **G. E. CO.**—(Cartridge) 34368, (Plug) 61935. **NOARK**—(Cartridge) 3345. **PAISTE**—(Cartridge) 71935, (Plug) 1935. **SHAWMUT**—(Cartridge) 2081. **TRUMBULL**—(Cartridge) 19353, (Plug) 1935. **WEBER**—(Plug) 61935. **UNION**—(Cartridge) 2020.

3 to 3-Wire: BRYANT—(Cartridge) 1926, (Plug) 8042. **D. & W.**—(Cartridge) 91105. **G. E. CO.**—(Cartridge) 34373, (Plug) 8042. **NOARK**—(Cartridge) 3346. **PAISTE**—(Cartridge) 78042, (Plug) 8042. **SHAWMUT**—(Cartridge) 2083. **TRUMBULL**—(Cartridge) 80423, (Plug) 8042. **WEBER**—(Plug) 8042. **UNION**—(Cartridge) 2022.

60 Ampere, 250 Volt, Main Line Cut-outs

2-Wire: BRYANT—(Cartridge) 1918. **D. & W.**—(Cartridge) 91108. **G. E. CO.**—(Cartridge) 34376. **NOARK**—(Cartridge) 3329. **PAISTE**—(Cartridge) 82965. **SHAWMUT**—(Cartridge) 2078. **TRUMBULL**—(Cartridge) 29656. **UNION**—(Cartridge) 2011.

3-Wire: BRYANT—(Cartridge) 1925. **D. & W.**—(Cartridge) 91109. **G. E. CO.**—(Cartridge) 34377. **NOARK**—(Cartridge) 3330. **PAISTE**—(Cartridge) 82165. **SHAWMUT**—(Cartridge) 2080. **TRUMBULL**—(Cartridge) 21656. **UNION**—(Cartridge) 2013.

60 Ampere, 250 Volt, Single Branch Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1920. **D. & W.**—(Cartridge) 91110. **G. E. CO.**—(Cartridge) 34378. **NOARK**—(Cartridge) 3347. **PAISTE**—(Cartridge) 81935. **SHAWMUT**—(Cartridge) 2082. **TRUMBULL**—(Cartridge) 19356. **UNION**—(Cartridge) 2021.

3 to 3-Wire: BRYANT—(Cartridge) 1927. **D. & W.**—(Cartridge) 91111. **G. E. CO.**—(Cartridge) 34379. **NOARK**—(Cartridge) 3348. **PAISTE**—(Cartridge) 88042. **SHAWMUT**—(Cartridge) 2084. **TRUMBULL**—(Cartridge) 80426. **UNION**—(Cartridge) 2023.

For finishes, see note on page Cross Reference No. CH91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.

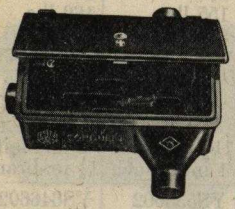
TYPE YS CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TYPE YS CONDULETS—THROUGH FEED—Black Enamel Finish

For 30 Ampere, 250 Volt, N. E. C. Single Branch Cut-outs—Cut-outs not Furnished



Style of Cut-out	Size in inches		½ — ½	¾ — ¾
			½ in. mains ½ in. branch	¾ in. mains ½ in. branch
2 to 2-wire	Catalogue Number		YS111302	YS212302
	Standard Package		15	15
	Shipping Weight Std. Pkg		150 lbs.	150 lbs.
	List Price, each		$2.00	$2.10
Style of Cut-out	Size in inches		¾ — ¾	½ — 1
			¾ in. mains ¾ in. branch	1 in. mains ½ in. branch
2 to 2-wire	Catalogue Number		YS222302	YS313302
	Standard Package		15	10
	Shipping Weight Std. Pkg		160 lbs.	100 lbs.
	List Price, each		$2.10	$2.15

Style of Cut-out	Size in inches	1 — 1	1¼ — 1¼	1¼ — 1¼	1½ — 1½	1½ — 1½
		1 in. mains 1 in. branch	1¼ in. mains ½ in. branch	1¼ in. mains ¾ in. branch	1½ in. mains ½ in. branch	1½ in. mains ¾ in. branch
2 to 2-wire	Catalogue No.	YS333302	YS414302	YS424302	YS515302	YS525302
	Standard Package	10	10	10	5	5
	Weight Std. Pkg.	100 lbs.	105 lbs.	110 lbs.	70 lbs.	75 lbs.
	List Price, each	$2.30	$2.60	$2.70	$2.85	$2.90

Style of Cut-out	Size in inches	½ — ½	¾ — ¾	¾ — ¾	1 — 1	1 — 1
		½ in. mains ½ in. branch	¾ in. mains ½ in. branch	¾ in. mains ¾ in. branch	1 in. mains ½ in. branch	1 in. mains 1 in. branch
3 to 3-wire	Catalogue No.	YS111303	YS212303	YS222303	YS313303	YS333303
	Standard Package	15	15	15	10	10
	Weight Std. Pkg.	210 lbs.	220 lbs.	230 lbs.	130 lbs.	135 lbs.
	List Price, each	$2.80	$2.90	$2.90	$3.00	$3.15
Style of Cut-out	Size in inches	1¼ — 1¼	1¼ — 1¼	1½ — 1½	1½ — 1½	1½ — 1½
		1¼ in. mains ½ in. branch	1¼ in. mains ¾ in. branch	1½ in. mains ½ in. branch	1½ in. mains ¾ in. branch	1½ in. mains 1 in. branch
3 to 3-wire	Catalogue No.	YS414303	YS424303	YS515303	YS525303	YS535303
	Standard Package	10	10	5	5	5
	Weight Std. Pkg.	130 lbs.	140 lbs.	85 lbs.	90 lbs.	95 lbs.
	List Price, each	$3.35	$3.45	$3.55	$3.65	$3.75

The universal cut-out fastening plates, furnished for above Condulets, take 30 ampere cut-outs enumerated on following page. For finishes and assortments, see note on page Cross Reference No. CH91. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH124)

TYPE YS CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and All Necessary Bolts and Screws

TYPE YS CONDULETS—THROUGH FEED—Black Enamel Finish—Continued

For 60 Ampere, 250 Volt, N. E. C. Single Branch Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches	½ — ¾ — ¾	¾ — ¾ — ¾	½ — 1 — 1	1 — 1 — 1	½ — 1¼ — 1¼
		¾ in. mains ½ in. branch	¾ in. mains ¾ in. branch	1 in. mains ½ in. branch	1 in. mains 1 in. branch	1¼ in. mains ½ in. branch
2 to 2-wire	Catalogue No....	YS212602	YS222602	YS313602	YS333602	YS414602
	Standard Package	15	15	10	10	10
	Weight Std. Pkg..	210 lbs.	220 lbs.	150 lbs.	155 lbs.	160 lbs.
	List Price, each ..	$2.85	$2.90	$2.95	$2.95	$3.00
Style of Cut-out	Size in inches	¾ — 1¼ — 1¼	½ — 1½ — 1½	¾ — 1½ — 1½	1 — 1½ — 1½	1¼ — 2 — 2
		1¼ in. mains ¾ in. branch	1½ in. mains ½ in. branch	1½ in. mains ¾ in. branch	1½ in. mains 1 in. branch	2 in. mains 1¼ in. branch
2 to 2-wire	Catalogue No....	YS424602	YS515602	YS525602	YS535602	YS646602
	Standard Package	10	5	5	5	5
	Weight Std. Pkg..	165 lbs.	90 lbs.	95 lbs.	100 lbs.	115 lbs.
	List Price, each ..	$3.10	$3.40	$3.50	$3.60	$3.70
Style of Cut-out	Size in inches	½ — ¾ — ¾	¾ — ¾ — ¾	½ — 1 — 1	¾ — 1 — 1	1 — 1 — 1
		¾ in. mains ½ in. branch	¾ in. mains ¾ in. branch	1 in. mains ½ in. branch	1 in. mains ¾ in. branch	1 in. mains 1 in. branch
3 to 3-wire	Catalogue No....	YS212603	YS222603	YS313603	YS323603	YS333603
	Standard Package	15	15	10	10	10
	Weight Std. Pkg.	300 lbs.	310 lbs.	220 lbs.	225 lbs.	230 lbs.
	List Price, each ..	$4.40	$4.45	$4.50	$4.60	$4.75
Style of Cut-out	Size in inches	¾ — 1¼ — 1¼	1 — 1¼ — 1¼	1¼ — 1½ — 1½	1 — 2 — 2	1¼ — 2 — 2
		1¼ in. mains ¾ in. branch	1¼ in. mains 1 in. branch	1½ in. mains 1¼ in. branch	2 in. mains 1 in. branch	2 in. mains 1¼ in. branch
3 to 3-wire	Catalogue No....	YS424603	YS434603	YS545603	YS636603	YS646603
	Standard Package	10	10	5	5	5
	Weight Std. Pkg.	220 lbs.	230 lbs.	130 lbs.	140 lbs.	150 lbs.
	List Price, each ..	$5.00	$5.15	$5.30	$5.40	$5.50

The universal cut-out fastening plates, furnished with the Condulets listed on this and the preceding page, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2 to 2-Wire: **BRYANT**—(Cartridge) 1919, (Plug) 61935. **D. & W.**—(Cartridge) 91104. **G. E. CO.**—(Cartridge) 34368, (Plug) 61935. **NOARK**—(Cartridge) 3345. **PAISTE**—(Cartridge) 71935, (Plug) 1935. **SHAWMUT**—(Cartridge) 2081. **TRUMBULL**—(Cartridge) 19353, (Plug) 1935. **WEBER**—(Plug) 61935. **UNION**—(Cartridge) 2020.

3 to 3-Wire: **BRYANT**—(Cartridge) 1926, (Plug) 8042. **D. & W.**—(Cartridge) 91105. **G. E. CO.**—(Cartridge) 34373, (Plug) 8042. **NOARK**—(Cartridge) 3346. **PAISTE**—(Cartridge) 78042, (Plug) 8042. **SHAWMUT**—(Cartridge) 2083. **TRUMBULL**—(Cartridge) 80423, (Plug) 8042. **WEBER**—(Plug) 8042. **UNION**—(Cartridge) 2022.

60 Ampere, 250 Volt, Cut-outs

2 to 2-Wire: **BRYANT**—(Cartridge) 1920. **D. & W.**—(Cartridge) 91110. **G. E. CO.**—(Cartridge) 34378. **NOARK**—(Cartridge) 3347. **PAISTE**—(Cartridge) 81935. **SHAWMUT**—(Cartridge) 2082. **TRUMBULL**—(Cartridge) 19356. **UNION**—(Cartridge) 2021.

3 to 3-Wire: **BRYANT**—(Cartridge) 1927. **D. & W.**—(Cartridge) 91111. **G. E. CO.**—(Cartridge) 34379. **NOARK**—(Cartridge) 3348. **PAISTE**—(Cartridge) 88042. **SHAWMUT**—(Cartridge) 2084. **TRUMBULL**—(Cartridge) 80426. **UNION**—(Cartridge) 2023.

For finishes, see note on page Cross Reference No. CH91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.

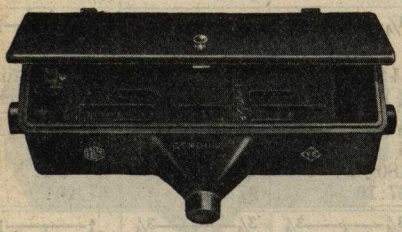
TYPE YD CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TYPE YD CONDULETS—DEAD END—Black Enamel Finish

For 30 Ampere, 250 Volt, N. E. C. Double Branch Cut-outs—Cut-outs not Furnished



Style of Cut-out	Size in inches.	½—½ ½ ½″ main ½″ branches	½—½ ¾ ¾″ main ½″ branches
2 to 2-wire or 3 to 2-wire	Catalogue No.	YD111302	YD121302
	Standard Pkg.	15	15
	Wt. Std. Pkg.	150 lbs.	160 lbs.
	List Price, ea.	$2.85	$2.95
Style of Cut-out	Size in inches.	¾—¾ ¾ ¾″ main ¾″ branches	½—½ 1 1″ main ½″ branches
2 to 2-wire or 3 to 2-wire	Catalogue No.	YD222302	YD131302
	Standard Pkg.	15	10
	Wt. Std. Pkg.	160 lbs.	110 lbs.
	List Price, ea.	$3.00	$3.00

Style of Cut-out	Size in inches.	¾—¾ 1 1″ main ¾″ branches	½—½ 1¼ 1¼″ main ½″ branches	¾—¾ 1¼ 1¼″ main ¾″ branches	½—½ 1½ 1½″ main ½″ branches	1—1 1½ 1½″ main 1″ branches	¾—¾ 2 2″ main ¾″ branches
2 to 2-wire or 3 to 2-wire	Catalogue No.	YD232302	YD141302	YD242302	YD151302	YD353302	YD262302
	Standard Pkg.	10	10	10	5	5	5
	Wt. Std. Pkg.	160 lbs.	170 lbs.	175 lbs.	85 lbs.	90 lbs.	95 lbs.
	List Price, ea.	$3.10	$3.40	$3.50	$3.55	$3.70	$3.75

Style of Cut-out	Size in inches.	½—½ ¾ ¾″ main ½″ branches	¾—¾ ¾ ¾″ main ¾″ branches	½—½ 1 1″ main ½″ branches	¾—¾ 1 1″ main ¾″ branches	½—½ 1¼ 1¼″ main ½″ branches	¾—¾ 1¼ 1¼″ main ¾″ branches
3 to 3-wire	Catalogue No.	YD121303	YD222303	YD131303	YD232303	YD141303	YD242303
	Standard Pkg.	15	15	10	10	10	10
	Wt. Std. Pkg.	270 lbs.	280 lbs.	210 lbs.	220 lbs.	230 lbs.	235 lbs.
	List Price, ea.	$4.15	$4.25	$4.25	$4.35	$4.70	$4.75
Style of Cut-out	Size in inches.	1—1 1¼ 1¼″ main 1″ branches	½—½ 1½ 1½″ main ½″ branches	1—1 1½ 1½″ main 1″ branches	¾—¾ 2 2″ main ¾″ branches	1—1 2 2″ main 1″ branches	1¼—1¼ 2 2″ main 1¼″ branch's
3 to 3-wire	Catalogue No.	YD343303	YD151303	YD353303	YD262303	YD363303	YD464303
	Standard Pkg.	10	5	5	5	5	5
	Wt. Std. Pkg.	235 lbs.	120 lbs.	130 lbs.	135 lbs.	140 lbs.	145 lbs.
	List Price, ea.	$4.80	$4.80	$4.85	$4.90	$5.00	$5.10

The universal cut-out fastening plates, furnished for above Condulets take 30 ampere cut-outs enumerated on the following page. For finishes and assortments, see note on page Cross Reference No. CH91.

Condulet reducers are listed on page Cross Reference No. CH171.

TYPE YD CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TYPE YD CONDULETS—DEAD END—Black Enamel Finish—Continued

For 60 Ampere, 250 Volt, N. E. C. Double Branch Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches	½—¾—½ ¾ in. main ½ in. branches	½—1—½ 1 in. main ½ in. branches	¾—1—¾ 1 in. main ¾ in. branches	1—1¼—1 1¼ in. main 1 in. branches
2 to 2-wire or 3 to 2-wire	Catalogue Number	YD121602	YD131602	YD232602	YD343602
	Standard Package	15	10	10	10
	Shipping Weight Std. Pkg.	360 lbs.	280 lbs.	290 lbs.	290 lbs.
	List Price, each	$6.25	$6.35	$6.40	$7.00
Style of Cut-out	Size in inches	1—1½—1 1½ in. main 1 in. branches	1¼—1½—1¼ 1½ in. main 1¼ in. branches	1¼—2—1¼ 2 in. main 1¼ in. branches	1½—2—1½ 2 in. main 1½ in. branches
2 to 2-wire or 3 to 2-wire	Catalogue Number	YD353602	YD454602	YD464602	YD565602
	Standard Package	5	5	5	5
	Shipping Weight Std. Pkg.	170 lbs.	180 lbs.	190 lbs.	200 lbs.
	List Price, each	$7.05	$7.10	$7.15	$7.20
Style of Cut-out	Size in inches	¾—¾—¾ ¾ in. main ¾ in. branches	¾—1—¾ 1 in. main ¾ in. branches	¾—1¼—¾ 1¼ in. main ¾ in. branches	1—1¼ 1¼ in. main 1 in. branches
3 to 3-wire	Catalogue Number	YD222603	YD232603	YD242603	YD343603
	Standard Package	15	10	10	10
	Shipping Weight Std. Pkg.	520 lbs.	360 lbs.	370 lbs.	375 lbs.
	List Price, each	$8.30	$8.35	$8.90	$9.05
Style of Cut-out	Size in inches	1—1½—1 1½ in. main 1 in. branches	1¼—1½—1¼ 1½ in. main 1¼ in. branches	1—2—1 2 in. main 1 in. branches	1½—2—1½ 2 in. main 1½ in. branches
3 to 3-wire	Catalogue Number	YD353603	YD454603	YD363603	YD565603
	Standard Package	5	5	5	5
	Shipping Weight Std. Pkg.	200 lbs.	210 lbs.	210 lbs.	220 lbs.
	List Price, each	$9.25	$9.30	$9.50	$9.60

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The universal cut-out fastening plates, furnished with the Condulets, listed on this and the preceding page, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2 to 2-Wire: **BRYANT**—(Cartridge) 1922, (Plug) 62587. **D. & W.**—(Cartridge) 91106. **G. E. CO.**—(Cartridge) 34369, (Plug) 62587. **NOARK**—(Cartridge) 3349. **PAISTE**—(Cartridge) 72587, (Plug) 2587. **SHAWMUT**—(Cartridge) 2085. **TRUMBULL**—(Cartridge) 25873, (Plug) 2587. **WEBER**—(Plug) 62587. **UNION**—(Cartridge) 2025.

3 to 2-Wire: **BRYANT**—(Cartridge) 1923, (Plug) 62199. **D. & W.**—(Cartridge) 91121. **G. E. CO.**—(Cartridge) 34370, (Plug) 62199. **NOARK**—(Cartridge) 3351. **PAISTE**—(Cartridge) 72199, (Plug) 2199. **SHAWMUT**—(Cartridge) 2087. **TRUMBULL**—(Cartridge) 21993, (Plug) 2199. **WEBER**—(Plug) 62199. **UNION**—(Cartridge) 2027.

3 to 3-Wire: **BRYANT**—(Cartridge) 1928, (Plug) 62135. **D. & W.**—(Cartridge) 91100. **G. E. CO.**—(Cartridge) 34374, (Plug) 62135. **NOARK**—(Cartridge) 3353. **PAISTE**—(Cartridge) 72135, (Plug) 2135. **SHAWMUT**—(Cartridge) 20835. **TRUMBULL**—(Cartridge) 21353, (Plug) 2135. **WEBER**—(Plug) 62135. **UNION**—(Cartridge) 2029.

60 Ampere, 250 Volt, Cartridge Fuse Cut-outs

2 to 2-Wire: **BRYANT**—(Cartridge) 1996. **D. & W.**—(Cartridge) 91113. **G. E. CO.**—(Cartridge) 36806. **NOARK**—(Cartridge) 3350. **PAISTE**—(Cartridge) 82587. **SHAWMUT**—(Cartridge) 2086. **TRUMBULL**—(Cartridge) 25876. **UNION**—(Cartridge) 2026.

3 to 2-Wire: **BRYANT**—(Cartridge) 1997. **G. E. CO.**—(Cartridge) 36805. **NOARK**—(Cartridge) 3352. **SHAWMUT**—(Cartridge) 2088. **TRUMBULL**—(Cartridge) 21996. **UNION**—(Cartridge) 2028.

3 to 3-Wire: **BRYANT**—(Cartridge) 1998. **G. E. CO.**—(Cartridge) 36804. **NOARK**—(Cartridge) 3354. **SHAWMUT**—(Cartridge) 20845. **TRUMBULL**—(Cartridge) 21356. **UNION**—(Cartridge) 2030.

For finishes, see note on page Cross Reference No. CH91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH127)

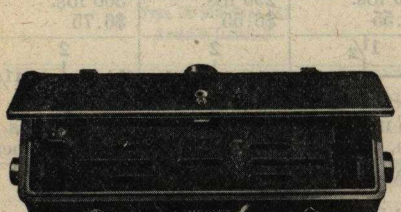
TYPE YX CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TYPE YX CONDULETS—THROUGH FEED—Black Enamel Finish

For 30 Amperes, 250 Volt, N. E. C. Double Branch Cut-outs—Cut-outs not Furnished



Style of Cut-out	Size in inches	½ ½—½ ½ ½″ mains ½″ branches	¾ ½—½ ¾ ¾″ mains ½″ branches
2 to 2-wire or 3 to 2-wire	Catalogue No.	YX1111302	YX2112302
	Standard Pkg.	15	15
	Wt. Std. Pkg.	170 lbs.	180 lbs.
	List Price, ea.	$3.00	$3.15

Style of Cut-out	Size in inches	¾ ¾—¾ ¾ ¾″ mains ¾″ branches	1 ½—½ 1 1″ mains ½″ branches
2 to 2-wire or 3 to 2-wire	Catalogue No.	YX2222302	YX3113302
	Standard Pkg.	15	10
	Wt. Std. Pkg.	170 lbs.	120 lbs.
	List Price, ea.	$3.30	$3.30

Style of Cut-out	Size in inches	1 ¾—¾ 1 1″ mains ¾″ branches	1¼ ½—½ 1¼ 1¼″ mains ½″ branches	1¼ ¾—¾ 1¼ 1¼″ mains ¾″ branches	1½ ½—½ 1½ 1½″ mains ½″ branches	1½ 1—1 1½ 1½″ mains 1″ branches	2 ¾—¾ 2 2″ mains ¾″ branches
2 to 2-wire or 3 to 2-wire	Catalogue No.	YX3223302	YX4114302	YX4224302	YX5115302	YX5335302	YX6226302
	Standard Pkg.	10	10	10	5	5	5
	Wt. Std. Pkg.	160 lbs.	165 lbs.	170 lbs.	110 lbs.	120 lbs.	125 lbs.
	List Price, ea.	$3.40	$3.70	$3.75	$3.80	$3.85	$4.00

Style of Cut-out	Size in inches	¾ ½—½ ¾ ¾″ mains ½″ branches	¾ ¾—¾ ¾ ¾″ mains ¾″ branches	1 ½—½ 1 1″ mains ½″ branches	1 ¾—¾ 1 1″ mains ¾″ branches	1¼ ½—½ 1¼ 1¼″ mains ½″ branches	1¼ ¾—¾ 1¼ 1¼″ mains ¾″ branches
3 to 3-wire	Catalogue No.	YX2112303	YX2222303	YX3113303	YX3223303	YX4114303	YX4224303
	Standard Pkg.	15	15	10	10	10	10
	Wt. Std. Pkg.	290 lbs.	300 lbs.	220 lbs.	230 lbs.	240 lbs.	240 lbs.
	List Price, ea.	$4.35	$4.45	$4.45	$4.55	$4.85	$4.90

Style of Cut-out	Size in inches	1½ ½—½ 1½ 1½″ mains ½″ branches	1½ ¾—¾ 1½ 1½″ mains ¾″ branches	1½ 1—1 1½ 1½″ mains 1″ branches	2 ¾—¾ 2 2″ mains ¾″ branches	2 1—1 2 2″ mains 1″ branches	2 1¼—1¼ 2 2″ mains 1¼″ branch's
3 to 3-wire	Catalogue No.	YX5115303	YX5225303	YX5335303	YX6226303	YX6336303	YX6446303
	Standard Pkg.	5	5	5	5	5	5
	Wt. Std. Pkg.	130 lbs.	130 lbs.	135 lbs.	140 lbs.	150 lbs.	155 lbs.
	List Price, ea.	$4.95	$5.00	$5.05	$5.10	$5.20	$5.30

The universal cut-out fastening plates, furnished, take 30 ampere cut-outs enumerated on the following page. For finishes and assortments, see note on page Cross Reference No. CH91.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH128)

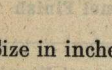
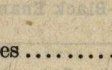
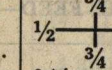
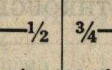
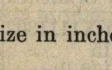
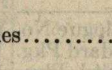
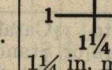
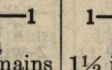
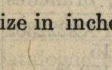
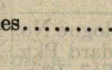
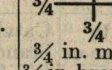
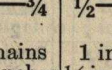
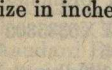
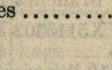
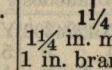
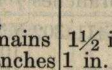
TYPE YX CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TYPE YX CONDULETS—THROUGH FEED—Black Enamel Finish—Continued

For 60 Ampere, 250 Volt, N. E. C. Double Branch Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches				
		¾ in. mains ½ in. branches	¾ in. mains ¾ in. branches	1 in. mains ½ in. branches	1 in. mains ¾ in. branches
2 to 2-wire or 3 to 2-wire	Catalogue Number	YX2112602	YX2222602	YX3113602	YX3223602
	Standard Package	15	15	10	10
	Weight Std. Pkg.	380 lbs.	390 lbs.	290 lbs.	300 lbs.
	List Price, each	$6.45	$6.55	$6.55	$6.75
Style of Cut-out	Size in inches				
		1¼ in. mains 1 in. branches	1½ in. mains 1 in. branches	2 in. mains 1 in. branches	2 in. mains 1½ in. branches
2 to 2-wire or 3 to 2-wire	Catalogue Number	YX4334602	YX5335602	YX6336602	YX6556602
	Standard Package	10	5	5	5
	Weight Std. Pkg.	290 lbs.	200 lbs.	210 lbs.	220 lbs.
	List Price, each	$7.25	$7.45	$7.55	$7.70
Style of Cut-out	Size in inches				
		¾ in. mains ¾ in. branches	1 in. mains ½ in. branches	1 in. mains ¾ in. branches	1¼ in. mains ¾ in. branches
3 to 3-wire	Catalogue Number	YX2222603	YX3113603	YX3223603	YX4224603
	Standard Package	15	10	10	10
	Weight Std. Pkg.	530 lbs.	380 lbs.	390 lbs.	400 lbs.
	List Price, each	$8.45	$8.45	$8.65	$8.90
Style of Cut-out	Size in inches				
		1¼ in. mains 1 in. branches	1½ in. mains 1 in. branches	2 in. mains 1 in. branches	2 in. mains 1½ in. branches
3 to 3-wire	Catalogue Number	YX4334603	YX5335603	YX6336603	YX6556603
	Standard Package	10	5	5	5
	Weight Std. Pkg.	390 lbs.	220 lbs.	230 lbs.	240 lbs.
	List Price, each	$9.45	$9.55	$9.60	$9.70

The universal cut-out fastening plates, furnished with the Condulets listed on this and the preceding page, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1922, (Plug) 62587. **D. & W.**—(Cartridge) 91106. **G. E. CO.**—(Cartridge) 34369, (Plug) 62587. **NOARK**—(Cartridge) 3349. **PAISTE**—(Cartridge) 72587, (Plug) 2587. **SHAWMUT**—(Cartridge) 2085. **TRUMBULL**—(Cartridge) 25873, (Plug) 2587. **WEBER**—(Plug) 62587. **UNION**—(Cartridge) 2025.

3 to 2-Wire: BRYANT—(Cartridge) 1923, (Plug) 62199. **D. & W.**—(Cartridge) 91121. **G. E. CO.**—(Cartridge) 34370, (Plug) 62199. **NOARK**—(Cartridge) 3351. **PAISTE**—(Cartridge) 72199, (Plug) 2199. **SHAWMUT**—(Cartridge) 2087. **TRUMBULL**—(Cartridge) 21993, (Plug) 2199. **WEBER**—(Plug) 62199. **UNION**—(Cartridge) 2027.

3 to 3-Wire: BRYANT—(Cartridge) 1928, (Plug) 62135. **D. & W.**—(Cartridge) 91100. **G. E. CO.**—(Cartridge) 34374, (Plug) 62135. **NOARK**—(Cartridge) 3353. **PAISTE**—(Cartridge) 72135, (Plug) 2135. **SHAWMUT**—(Cartridge) 20835. **TRUMBULL**—(Cartridge) 21353, (Plug) 2135. **WEBER**—(Plug) 62135. **UNION**—(Cartridge) 2029.

60 Ampere, 250 Volt, Cartridge Fuse Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1996. **D. & W.**—(Cartridge) 91113. **G. E. CO.**—(Cartridge) 36806. **NOARK**—(Cartridge) 3350. **PAISTE**—(Cartridge) 82587. **SHAWMUT**—(Cartridge) 2086. **TRUMBULL**—(Cartridge) 25876. **UNION**—(Cartridge) 2026.

3 to 2-Wire: BRYANT—(Cartridge) 1997. **G. E. CO.**—(Cartridge) 36805. **NOARK**—(Cartridge) 3352. **SHAWMUT**—(Cartridge) 2088. **TRUMBULL**—(Cartridge) 21996. **UNION**—(Cartridge) 2028.

3 to 3-Wire: BRYANT—(Cartridge) 1998. **G. E. CO.**—(Cartridge) 36804. **NOARK**—(Cartridge) 3354. **SHAWMUT**—(Cartridge) 20845. **TRUMBULL**—(Cartridge) 21356. **UNION**—(Cartridge) 2030.

For finishes, see note on page Cross Reference No. CH91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

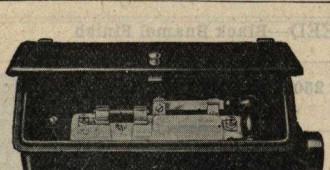
Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH129)

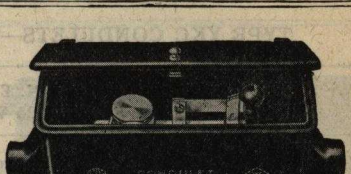
TYPE YK CONDULETS

FOR KNIFE SWITCHES ARRANGED FOR CARTRIDGE OR PLUG FUSES

Furnished with Universal Fastening Plate and all necessary Bolts and Screws



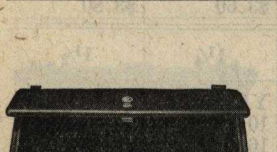
Type YK with Type YKK Switches Installed



Type YKC with Knife Switch, arranged for Plug Fuses, Installed

TYPE YK CONDULETS—DEAD END—Black Enamel Finish

For Knife Switches arranged for N. E. C. 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuses



Style of Switch	Size in inches	½	¾	1
2-pole	Catalogue Number	YK1302	YK2302	YK3302
	Standard Package	10	10	10
	Ship. Weight, Std. Pkg.	120 lbs.	125 lbs.	130 lbs.
	List Price, each	$2.80	$2.95	$3.15
Style of Switch	Size in inches	1¼	1½	2
2-pole	Catalogue Number	YK4302	YK5302	YK6302
	Standard Package	10	10	10
	Ship. Weight, Std. Pkg.	140 lbs.	145 lbs.	160 lbs.
	List Price, each	$3.35	$3.45	$3.60

Style of Switch	Size in inches	½	¾	1	1¼	1½
3-pole	Catalogue Number	YK1303	YK2303	YK3303	YK4303	YK5303
	Standard Package	10	10	10	10	10
	Shipping Weight, Std. Pkg.	130 lbs.	135 lbs.	140 lbs.	150 lbs.	155 lbs.
	List Price, each	$3.70	$3.85	$4.00	$4.15	$4.30

For Knife Switches arranged for 60 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches	¾	1	1¼	1½	2
2-pole	Catalogue Number	YK2602	YK3602	YK4602	YK5602	YK6602
	Standard Package	10	10	10	10	10
	Shipping Weight, Std. Pkg.	170 lbs.	175 lbs.	180 lbs.	190 lbs.	200 lbs.
	List Price, each	$4.40	$4.60	$4.75	$5.05	$5.25
Style of Switch	Size in inches	¾	1	1¼	1½	2
3-pole	Catalogue Number	YK2603	YK3603	YK4603	YK5603	YK6603
	Standard Package	10	10	10	10	10
	Shipping Weight, Std. Pkg.	230 lbs.	235 lbs.	240 lbs.	250 lbs.	260 lbs.
	List Price, each	$5.90	$6.10	$6.45	$6.65	$6.95

Switches are not included in above list prices, but the universal fastening plates, furnished with above Condulets, take Crouse-Hinds type YKK knife switches or the knife switches of other manufacturers, enumerated on following page.

Crouse-Hinds type YKK knife switches arranged for cartridge fuses are listed on page Cross Reference No. CH135.

For finishes and assortments, see note on page Cross Reference No. CH91.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH130)

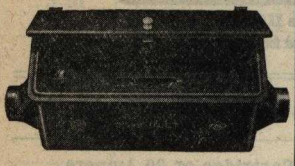
TYPE YKC CONDULETS

FOR KNIFE SWITCHES ARRANGED FOR CARTRIDGE OR PLUG FUSES

Furnished with Universal Fastening Plate and all necessary Bolts and Screws

TYPE YKC CONDULETS—THROUGH FEED—Black Enamel Finish

For Knife Switches arranged for N. E. C. 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuses



Style of Switch	Size in inches...	½	¾	1
2-pole	Catalogue No...	YKC11302	YKC22302	YKC33302
	Standard Pkg...	10	10	10
	Weight Std. Pkg.	125 lbs.	130 lbs.	135 lbs.
	List Price, each.	$2.90	$3.05	$3.25

Style of Switch	Size in inches...	1¼	1½	2
2-pole	Catalogue No...	YKC44302	YKC55302	YKC66302
	Standard Pkg...	10	10	10
	Weight Std. Pkg.	140 lbs.	150 lbs.	160 lbs.
	List Price, each.	$3.45	$3.60	$3.80

Style of Switch	Size in inches	½	¾	1	1¼	1½
3-pole	Catalogue No.....	YKC11303	YKC22303	YKC33303	YKC44303	YKC55303
	Standard Pkg.....	10	10	10	10	10
	Weight Std. Pkg..	140 lbs.	145 lbs.	150 lbs.	160 lbs.	170 lbs.
	List Price, each ..	$3.85	$4.00	$4.15	$4.30	$4.60

For Knife Switches arranged for 60 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches	¾	1	1¼	1½	2
2-pole	Catalogue No.....	YKC22602	YKC33602	YKC44602	YKC55602	YKC66602
	Standard Pkg.....	10	10	10	10	10
	Weight Std. Pkg..	180 lbs.	190 lbs.	200 lbs.	210 lbs.	220 lbs.
	List Price, each ..	$4.50	$4.70	$4.90	$5.15	$5.45

Style of Switch	Size in inches	¾	1	1¼	1½	2
3-pole	Catalogue No.....	YKC22603	YKC33603	YKC44603	YKC55603	YKC66603
	Standard Pkg.....	10	10	10	10	10
	Weight Std. Pkg..	230 lbs.	240 lbs.	250 lbs.	300 lbs.	310 lbs.
	List Price, each ..	$6.05	$6.25	$6.60	$6.85	$7.15

Switches are not included in above list prices, but the universal fastening plates, furnished with Condulets of the YK series, take Crouse-Hinds type YKK knife switches or the knife switches of other manufacturers, as follows:

Switches Arranged for 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuses

2-Pole: **CROUSE-HINDS**—(Cartridge) YKK302. **BRYANT**—(Plug) 1695, 1981. **CONN. ELEC.**—(Plug) 01502. D. & W.—(Plug) 25028. **G. E. CO.**—(Plug) 42869. **PAISTE**—(Plug) 4014, 4016. **TRUMBULL**—(Cartridge) 704, 724, (Plug) 701, 721.

3-Pole: **CROUSE-HINDS**—(Cartridge) YKK303. **BRYANT**—(Plug) 1986. **PAISTE**—(Cartridge) 4033, (Plug) 4025, 4029. **TRUMBULL**—(Cartridge) 725, (Plug) 723.

Switches Arranged for 60 Ampere, 250 Volt, Cartridge Fuses

2-Pole: **CROUSE-HINDS**—(Cartridge) YKK602. **PAISTE**—(Cartridge) 5151.

3-Pole: **CROUSE-HINDS**—(Cartridge) YKK603. **PAISTE**—(Cartridge) 5153.

Crouse-Hinds type YKK knife switches arranged for cartridge fuses are listed on page Cross Reference No. CH135.

For finishes, see page Cross Reference No. CH91.

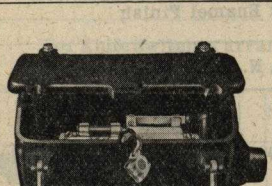
Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.

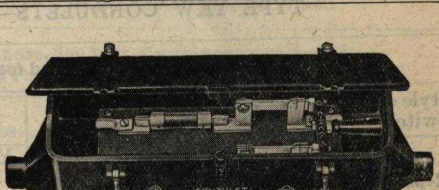
TYPE YKW CONDULETS

WATER-TIGHT—FOR KNIFE SWITCHES ARRANGED FOR CARTRIDGE OR PLUG FUSES

Furnished with Universal Fastening Plate, Gasket and all necessary Bolts and Screws



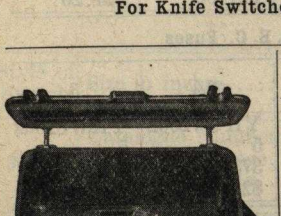
Type YKW with Type YKK Switch Installed



Type YKWC with Type B Switch, Arranged for Cartridge Fuses, Installed

TYPE YKW CONDULETS—DEAD END—Black Enamel Finish

For Knife Switches Arranged for N. E. C. 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuses



Style of Switch	Size in inches	½	¾	1
2-pole	Catalogue Number	YKW1302	YKW2302	YKW3302
	Standard Package	10	10	10
	Weight Std. Pkg.	180 lbs.	185 lbs.	190 lbs.
	List Price, each	$6.60	$6.70	$6.80

Style of Switch	Size in inches	1¼	1½	2
2-pole	Catalogue Number	YKW4302	YKW5302	YKW6302
	Standard Package	10	10	10
	Weight Std. Pkg.	195 lbs.	200 lbs.	210 lbs.
	List Price, each	$6.90	$7.00	$7.10

Style of Switch	Size in inches	½	¾	1	1¼	1½
3-pole	Catalogue Number	YKW1303	YKW2303	YKW3303	YKW4303	YKW5303
	Standard Package	10	10	10	10	10
	Shipping Weight Std. Pkg.	240 lbs.	245 lbs.	250 lbs.	260 lbs.	265 lbs.
	List Price, each	$8.50	$8.60	$8.70	$8.80	$8.90

For Knife Switches Arranged for 60 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches	¾	1	1¼	1½	2
2-pole	Catalogue Number	YKW2602	YKW3602	YKW4602	YKW5602	YKW6602
	Standard Package	10	10	10	10	10
	Shipping Weight Std. Pkg.	270 lbs.	275 lbs.	280 lbs.	290 lbs.	300 lbs.
	List Price, each	$8.80	$8.90	$9.00	$9.10	$9.20

Style of Switch	Size in inches	¾	1	1¼	1½	2
3-pole	Catalogue Number	YKW2603	YKW3603	YKW4603	YKW5603	YKW6603
	Standard Package	10	10	10	10	10
	Shipping Weight Std. Pkg.	300 lbs.	305 lbs.	310 lbs.	315 lbs.	320 lbs.
	List Price, each	$9.40	$9.50	$9.60	$9.70	$9.80

Switches are not included in above list prices, but the universal fastening plates, furnished with above Condulets, take Crouse-Hinds type YKK knife switches or the knife switches of other manufacturers, enumerated on following page.

Crouse-Hinds type YKK knife switches arranged for cartridge fuses are listed on page Cross Reference No. CH135.

For finishes and assortments, see note on page Cross Reference No. CH91.

Padlock is not included in above list prices. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH132)

TYPE YKW CONDULETS

WATER-TIGHT—FOR KNIFE SWITCHES ARRANGED FOR CARTRIDGE FUSES

Condulets Listed Below are not arranged for Universal Fastening Plates, but are furnished with all necessary Screws to Fasten Switches direct to Condulets

TYPE YKW CONDULETS—DEAD END—Black Enamel Finish

For Knife Switches arranged for 100 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches	1	1¼	1½	2
2-pole	Catalogue Number	YKW31002	YKW41002	YKW51002	YKW61002
	Standard Package	5	5	5	5
	Shipping Weight Std. Pkg.	250 lbs.	255 lbs.	260 lbs.	270 lbs.
	List Price, each	$16.60	$16.80	$17.00	$17.20
Style of Switch	Size in inches	1¼	1½	2	2½
3-pole	Catalogue Number	YKW41003	YKW51003	YKW61003	YKW71003
	Standard Package	5	5	5	5
	Shipping Weight Std. Pkg.	340 lbs.	345 lbs.	350 lbs.	355 lbs.
	List Price, each	$20.60	$20.80	$21.00	$21.20

For Knife Switches arranged for 200 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches	1½	2	2½	3
2-pole	Catalogue Number	YKW52002	YKW62002	YKW72002	YKW82002
	Standard Package	5	5	5	5
	Shipping Weight Std. Pkg.	360 lbs.	365 lbs.	375 lbs.	380 lbs.
	List Price, each	$24.00	$24.40	$24.80	$25.20
Style of Switch	Size in inches	1½	2	2½	3
3-pole	Catalogue Number	YKW52003	YKW62003	YKW72003	YKW82003
	Standard Package	5	5	5	5
	Shipping Weight Std. Pkg.	500 lbs.	510 lbs.	520 lbs.	530 lbs.
	List Price, each	$30.80	$31.20	$31.60	$32.00

The universal fastening plates, furnished with Condulets listed on the preceding page, take Crouse-Hinds type YKK knife switches or knife switches of other manufacturers, as follows:

Switches Arranged for 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuses

2-Pole: CROUSE-HINDS—(Cartridge) YKK302. **BRYANT**—(Plug) 1695, 1981. **CONN. ELEC.**—(Plug) 01502. **D. & W.**—(Plug) 25028. **G. E. CO.**—(Plug) 42869. **PAISTE**—(Plug) 4014, 4016. **TRUMBULL**—(Cartridge) 704, 724, (Plug) 701, 721.
3-Pole: CROUSE-HINDS—(Cartridge) YKK303. **BRYANT**—(Plug) 1986. **PAISTE**—(Cartridge) 4033, (Plug) 4025, 4029. **TRUMBULL**—(Cartridge) 725, (Plug) 723.

Switches Arranged for 60 Ampere, 250 Volt, Cartridge Fuses

2-Pole: CROUSE-HINDS—(Cartridge) YKK602. **PAISTE**—(Cartridge) 5151.
3-Pole: CROUSE-HINDS—(Cartridge) YKK603. **PAISTE**—(Cartridge) 5153.

Switches are not included in list prices on this page, but Condulets listed on this page take 100 or 200 ampere, Crouse-Hinds type B knife switches with high clips or knife switches of other manufacturers, as follows:

Switches Arranged for 100 Ampere, 250 Volt, Cartridge Fuses

2-Pole: CROUSE-HINDS—(Cartridge) 31364—Specify high clips. **OTHER MANUFACTURERS**—(Cartridge) Switches conforming with dimensions given on one of the pages listing Type YKWC Condulets.
3-Pole: CROUSE-HINDS—(Cartridge) 31484—Specify high clips. **OTHER MANUFACTURERS**—(Cartridge) Switches conforming with dimensions given on one of the pages listing Type YKWC Condulets.

Switches Arranged for 200 Ampere, 250 Volt, Cartridge Fuses

2-Pole: CROUSE-HINDS—(Cartridge) 31366—Specify high clips. **OTHER MANUFACTURERS**—(Cartridge) Switches conforming with dimensions given on one of the pages listing Type YKWC Condulets.
3-Pole: CROUSE-HINDS—(Cartridge) 31486—Specify high clips. **OTHER MANUFACTURERS**—(Cartridge) Switches conforming with dimensions given on one of the pages listing Type YKWC Condulets.

Crouse-Hinds type YKK knife switches arranged for cartridge fuses are listed on page Cross Reference No. CH135. Crouse-Hinds type B knife switches with high clips arranged for cartridge fuses are enumerated on page Cross Reference No. CH135 and listed in Crouse-Hinds Knife Switch Bulletin. Padlock is not included in above list prices.

For finishes and assortments, see note on page Cross Reference No. CH91.

Condulet reducers are listed on page Cross Reference No. CH171.

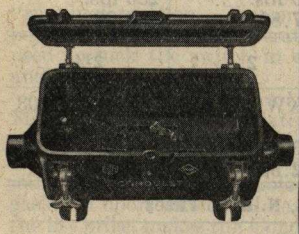
TYPE YKWC CONDULETS

WATER-TIGHT—FOR KNIFE SWITCHES ARRANGED FOR CARTRIDGE OR PLUG FUSES

Furnished with Universal Fastening Plate, Gasket and all necessary Bolts and Screws

TYPE YKWC CONDULETS—THROUGH FEED—Black Enamel Finish

For Knife Switches arranged for N. E. C. 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuses



Style of Switch	Size in inches...	½	¾	1
2-pole	Catalogue No...	YKWC11302	YKWC22302	YKWC33302
	Standard Pkg...	10	10	10
	Weight Std. Pkg.	190 lbs.	195 lbs.	200 lbs.
	List Price, each.	$6.75	$6.85	$6.95

Style of Switch	Size in inches...	1¼	1½	2
2-pole	Catalogue No...	YKWC44302	YKWC55302	YKWC66302
	Standard Pkg...	10	10	10
	Weight Std. Pkg.	205 lbs.	210 lbs.	215 lbs.
	List Price, each.	$7.05	$7.15	$7.25

Style of Switch	Size in inches.....	½	¾	1	1¼	1½
3-pole	Catalogue Number.	YKWC11303	YKWC22303	YKWC33303	YKWC44303	YKWC55303
	Standard Package..	10	10	10	10	10
	Weight Std. Pkg...	240 lbs.	245 lbs.	250 lbs.	255 lbs.	260 lbs.
	List Price, each....	$8.60	$8.70	$8.80	$8.90	$9.00

For Knife Switches arranged for 60 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches.....	¾	1	1¼	1½	2
2-pole	Catalogue Number.	YKWC22602	YKWC33602	YKWC44602	YKWC55602	YKWC66602
	Standard Package..	10	10	10	10	10
	Weight Std. Pkg....	260 lbs.	265 lbs.	270 lbs.	275 lbs.	280 lbs.
	List Price, each....	$9.00	$9.10	$9.20	$9.30	$9.40

Style of Switch	Size in inches.....	¾	1	1¼	1½	2
3-pole	Catalogue Number.	YKWC22603	YKWC33603	YKWC44603	YKWC55603	YKWC66603
	Standard Package..	10	10	10	10	10
	Weight Std. Pkg...	285 lbs.	290 lbs.	295 lbs.	300 lbs.	305 lbs.
	List Price, each....	$9.60	$9.70	$9.80	$9.90	$10.00

Switches are not included in above list prices, but the universal fastening plates, furnished with above Condulets, take Crouse-Hinds type YKK knife switches or knife switches of other manufacturers, as follows:

Switches Arranged for 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuses

2-Pole: CROUSE-HINDS—(Cartridge) YKK302. **BRYANT**—(Plug) 1695, 1981. **CONN. ELEC.**—(Plug) 01502. **D. & W.**—(Plug) 25028. **G. E. CO.**—(Plug) 42869. **PAISTE**—(Plug) 4014, 4016. **TRUMBULL**—(Cartridge) 704, 724, (Plug) 701, 721.

3-Pole: CROUSE-HINDS—(Cartridge) YKK303. **BRYANT**—(Plug) 1986. **PAISTE**—(Cartridge) 4033, (Plug) 4025, 4029. **TRUMBULL**—(Cartridge) 725, (Plug) 723.

Switches Arranged for 60 Ampere, 250 Volt, Cartridge Fuses

2-Pole: CROUSE-HINDS—(Cartridge) YKK602. **PAISTE**—(Cartridge) 5151.
3-Pole: CROUSE-HINDS—(Cartridge) YKK603. **PAISTE**—(Cartridge) 5153.

Crouse-Hinds type YKK knife switches arranged for cartridge fuses are listed on page Cross Reference No. CH135.

Padlock is not included in above list prices.

For finishes, see note on page Cross Reference No. CH91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH134)

TYPE YKWC CONDULETS

WATER-TIGHT—FOR KNIFE SWITCHES ARRANGED FOR CARTRIDGE FUSES

Condulets Listed Below are not arranged for Universal Fastening Plates, but are furnished with Gasket and all necessary Screws to Fasten Switches direct to Condulets

TYPE YKWC CONDULETS—THROUGH FEED—Black Enamel Finish

For Knife Switches arranged for 100 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches..	1	1¼	1½	2
2-pole	Catalogue No..	YKWC331002	YKWC441002	YKWC551002	YKWC661002
	Standard Pkg..	5	5	5	5
	Wt. Std. Pkg..	260 lbs.	265 lbs.	270 lbs.	285 lbs.
	List Price, ea..	$17.00	$17.40	$17.80	$18.20
Style of Switch	Size in inches..	1¼	1½	2	2½
3-pole	Catalogue No..	YKWC441003	YKWC551003	YKWC661003	YKWC771003
	Standard Pkg.	5	5	5	5
	Wt. Std. Pkg..	340 lbs.	345 lbs.	360 lbs.	375 lbs.
	List Price, ea..	$21.50	$21.90	$22.30	$22.70

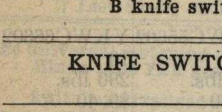
For Knife Switches arranged for 200 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches..	1½	2	2½	3
2-pole	Catalogue No..	YKWC552002	YKWC662002	YKWC772002	YKWC882002
	Standard Pkg..	5	5	5	5
	Wt. Std. Pkg..	375 lbs.	385 lbs.	395 lbs.	410 lbs.
	List Price, ea..	$25.00	$25.50	$26.00	$26.50
Style of Switch	Size in inches..	1½	2	2½	3
3-pole	Catalogue No..	YKWC552003	YKWC662003	YKWC772003	YKWC882003
	Standard Pkg..	5	5	5	5
	Wt. Std. Pkg..	490 lbs.	500 lbs.	510 lbs.	520 lbs.
	List Price, ea..	$32.50	$33.00	$33.50	$34.00

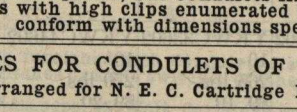
Switches are not included in list prices, but Condulets listed on this page take Crouse-Hinds type B knife switches with high clips enumerated below, or other switches that conform with dimensions specified below

KNIFE SWITCHES FOR CONDULETS OF THE YK AND YKW SERIES

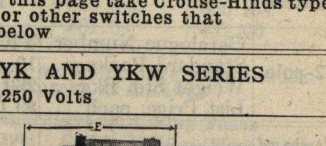
Arranged for N. E. C. Cartridge Fuses—250 Volts



Type YKK Switch



Type B Switch



Dimensional Drawing

Crouse-Hinds Type YKK Knife Switches

	30 Amp.	60 Amp.	Capacity		30 Amp.	60 Amp.
2-pole	YKK302	YKK602	Cat. No.	3-pole	YKK303	YKK603
	10	10	Std. Pkg.		10	10
	$2.25	$3.50	Price, ea.		$3.75	$5.25

Crouse-Hinds Type B Knife Switches

	100Amp.	200Amp.	Capacity		100Amp.	200Amp.
2-pole	31364*	31366*	Cat. No. List Price, ea.	3-pole	31484*	31486*

Switches of Other Manufacturers

Style	2-Pole		3-Pole	
Capacity	100 Amp.	200 Amp.	100 Amp.	200 Amp.
A (Fixed)	7⅛″	8⅝″	7⅛″	8⅝″
B (Max.)	9¼″	10½″	9¼″	10½″
C (Fixed)	5¼″	5¾″	8¾″	9¾″
D (Max.)	6½″	7″	10″	11″
E (Max.)	10⅛″	11⅞″	10⅛″	11⅞″
F (Max.†)	4¾″	6¼″	4¾″	6¼″
G (Max.‡)	5¼″	6¾″	5¼″	6¾″

*Specify high clips when ordering.

For finishes and assortments of Condulets, see note on page Cross Reference No. CH91.

†From bottom of slate base to highest point of clip.

‡From bottom of slate base to highest point of handle.

Any switch with dimensions not exceeding those specified "maximum" and with dimensions the same as those specified "fixed," in above schedule, will fit Condulets of corresponding classification in the YKW series.

(Cross Reference No. CH135)

TYPES MFA AND MFB CONDULETS

SAFETY FIRST MOTOR-STARTING SWITCH CONDULETS

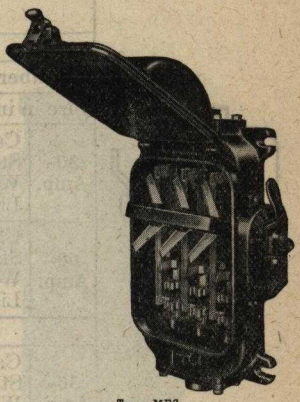
Furnished Complete with Fusible Switch, but without Fuses

The Crouse-Hinds Motor-Starting Switch Condulet of the MF series is a substantial, ironclad, fool-proof switch, designed for starting small three-phase motors. The switch is of the double-throw knife-blade type; its running side is arranged for fuses, but its starting side is without provision for fuse protection.

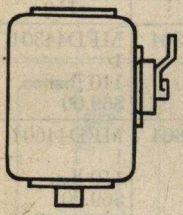
The switch cannot be thrown from "off" to "running" position, without first being thrown to "starting" position. After it has been thrown to "starting" position and the operator has released the handle, a spring automatically snaps the switch to "running" position. This prevents the motor from slowing down perceptibly during the operation of the switch. Padlocks can be used to lock the switch in either "off" or "running" position, and also to lock the door.

The MF series includes types MFA, MFB, MFC, MFD and MFE. Detachable hub plates make possible various conduit hub arrangements and often facilitate installation.

The door of the Condulet is regularly rabbetted, making a joint that, for all practicable purposes, is dust-proof. A special, gasketed door, which will be furnished at an advance of $2.00 in the list price, makes the Condulet moisture-proof.

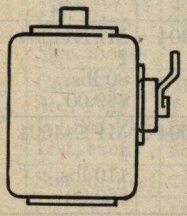


Type MFC



TYPE MFA—Dead End, One Hub at Bottom
Complete with Switch Arranged for Cartridge Fuses

Number of Poles		3-Pole		4-Pole	
Size in inches . . .		1	1½	1¼	2
	250 Volts				
30-Amp.	Cat. No. . .	MFA3303	MFA5303	MFA4304	MFA6304
	Std. Pkg. .	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each .	$55.00	$55.20	$68.90	$69.10
60-Amp.	Cat. No. . .	MFA3603	MFA5603	MFA4604	MFA6604
	Std. Pkg. .	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each .	$55.00	$55.20	$68.90	$69.10
	500 Volts, A. C.				
30-Amp.	Cat. No. . .	MFA33035	MFA53035	MFA43035	MFA63035
	Std. Pkg. .	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each .	$57.00	$57.20	$71.40	$71.60



TYPE MFB—Dead End, One Hub at Top
Complete with Switch Arranged for Cartridge Fuses

Number of Poles		3-Pole		4-Pole	
Size in inches. . .		1	1½	1¼	2
	250 Volts				
30-Amp.	Cat. No. . .	MFB3303	MFB5303	MFB4304	MFB6304
	Std. Pkg. .	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each .	$55.00	$55.20	$68.90	$69.10
60-Amp.	Cat. No. . .	MFB3603	MFB5603	MFB4604	MFB6604
	Std. Pkg. .	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each .	$55.00	$55.20	$68.90	$69.10
	500 Volts, A. C.				
30-Amp.	Cat. No. . .	MFB33035	MFB53035	MFB43045	MFB63045
	Std. Pkg. .	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each .	$57.00	$57.20	$71.40	$71.60

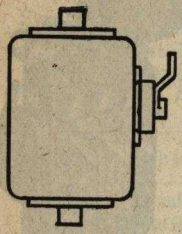
Other sizes of Condulets of the MF series than those listed on this and the following page and separate Condulet bodies and hub plates can be furnished. Complete information on request.

(Cross Reference No. CH135A)

TYPES MFC, MFD AND MFE CONDULETS

SAFETY FIRST MOTOR-STARTING SWITCH CONDULETS

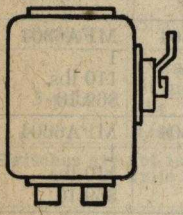
Furnished Complete with Fusible Switch, but without Fuses



TYPE MFC—Through Feed, One Hub at Each End

Complete with Switch Arranged for Cartridge Fuses

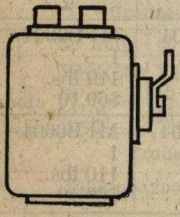
Number of Poles		3-Pole		4-Pole	
Size in inches		¾	1¼	¾	1¼
250 Volts					
30-Amp.	Cat. No.	MFC22303	MFC44303	MFC22304	MFC44304
	Std. Pkg.	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	105 lbs.	115 lbs.
	List, each	$55.30	$55.50	$69.10	$69.30
60-Amp.	Cat. No.	MFC22603	MFC44603	MFC22604	MFC44604
	Std. Pkg.	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	105 lbs.	115 lbs.
	List, each	$55.30	$55.50	$69.10	$69.30
500 Volts, A. C.					
30-Amp.	Cat. No.	MFC223035	MFC443035	MFC223045	MFC443045
	Std. Pkg.	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	105 lbs.	115 lbs.
	List, each	$57.30	$57.50	$71.60	$71.80



TYPE MFD—Dead End, Two Hubs at Bottom

Complete with Switch Arranged for Cartridge Fuses

Number of Poles		3-Pole		4-Pole	
Size in inches		¾	1¼	¾	1¼
250 Volts					
30-Amp.	Cat. No.	MFD22303	MFD44303	MFD22304	MFD44304
	Std. Pkg.	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each	$55.00	$55.20	$68.80	$69.00
60-Amp.	Cat. No.	MFD22603	MFD44603	MFD22604	MFD44604
	Std. Pkg.	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each	$55.00	$55.20	$68.80	$69.00
500 Volts, A. C.					
30-Amp.	Cat. No.	MFD223035	MFD443035	MFD223045	MFD443045
	Std. Pkg.	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each	$57.00	$57.20	$71.30	$71.50



TYPE MFE—Dead End, Two Hubs at Top

Complete with Switch Arranged for Cartridge Fuses

Number of Poles		3-Pole		4-Pole	
Size in inches		¾	1¼	¾	1¼
250 Volts					
30-Amp.	Cat. No.	MFE22303	MFE44303	MFE22304	MFE44304
	Std. Pkg.	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	80 lbs.
	List, each	$55.00	$55.20	$68.80	$69.00
60-Amp.	Cat. No.	MFE22603	MFE44603	MFE22604	MFE44604
	Std. Pkg.	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each	$55.00	$55.20	$68.80	$69.00
500 Volts, A. C.					
30-Amp.	Cat. No.	MFE223035	MFE443035	MFE223045	MFE443045
	Std. Pkg.	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	80 lbs.	100 lbs.	110 lbs.
	List, each	$57.00	$57.20	$71.30	$71.50

Other sizes of Condulets of the MF series than those listed on this and the preceding page and separate Condulet bodies and hub plates can be furnished. Complete Information on request.

TYPE MKA CONDULETS

SAFETY FIRST IRONCLAD SWITCH CONDULETS

Furnished Complete with Knife Switch Arranged for N. E. C. Cartridge Fuses, but without Fuses*

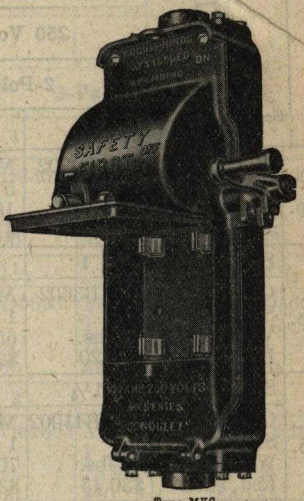
Safety to life, prevention of fire and continuity of service are well served when all electrical apparatus accessible to operators is enclosed. This fact is recognized by all Insurance Companies, and when the insured adopts this idea the premiums usually are reduced.

The points of greatest risk are at the switching devices, as they are placed at convenient points and usually operated by persons who have little or no knowledge of electricity or the results which may occur because of their carelessness in handling these devices.

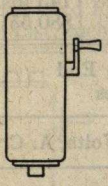
The MK series of Condulets includes types MKA, MKB, MKC, MKD and MKE, and consists of a line of fused knife switches in cast-iron housings, operated by an outside handle. The door over the fuse compartment gives access to the fuses, but as this door is interlocked with the handle, the fuses are accessible only when dead. This interlocking is accomplished by the shape of the moving parts, thus avoiding the use of springs, shoot bolts, et cetera.

Provision for locks has been made so that it is possible to lock the switch in the "off" or "running" position and also prevent unauthorized persons from opening the switch case.

Detachable hub plates make possible various conduit hub arrangements and often facilitate installation.



Type MKC



TYPE MKA—Dead End, One Hub at Bottom
Complete with Switch Arranged for Cartridge Fuses

		250 Volts		250 Volts		500 Volts, A. C.	
		2-Pole		3-Pole			
		¾	1¼	1	1½	1	1½
30-Amp.	Cat. No.	MKA2302	MKA4302	MKA3303	MKA5303	MKA33035	MKA53035
	Std. Pkg.	5	5	5	5	1	1
	Wt.Std.Pkg.	145 lbs.	155 lbs.	180 lbs.	190 lbs.	60 lbs.	70 lbs.
	List, each	$16.55	$16.75	$19.80	$20.00	$27.95	$28.15
	Size, inches.	1	1½	1¼	2	1¼	2
60-Amp.	Cat. No.	MKA3602	MKA5602	MKA4603	MKA6603	MKA46035	MKA66035
	Std. Pkg.	1	1	1	1	1	1
	Wt.Std.Pkg.	55 lbs.	65 lbs.	65 lbs.	75 lbs.	70 lbs.	80 lbs.
	List, each	$23.20	$23.40	$27.40	$27.60	$28.90	$29.10
	Size, inches.	1¼	2	1½	2½	1½	2½
100-Amp.	Cat. No.	MKA41002	MKA61002	MKA51003	MKA71003	MKA510035	MKA710035
	Std. Pkg.	1	1	1	1	1	1
	Wt.Std.Pkg.	60 lbs.	70 lbs.	70 lbs.	80 lbs.	75 lbs.	85 lbs.
	List, each	$30.45	$30.65	$38.80	$39.00	$40.25	$40.45
	Size, inches.	2	3	2½	3½	2½	3½
200-Amp.	Cat. No.	MKA62002	MKA82002	MKA72003	MKA92003	MKA720035	MKA920035
	Std. Pkg.	1	1	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	90 lbs.	85 lbs.	95 lbs.	135 lbs.	145 lbs.
	List, each	$49.30	$49.50	$72.10	$72.30	$80.35	$80.55

*125-volt, 30-ampere, 2 and 3-pole Condulets of the MK series, which are arranged for plug fuses, can be furnished.

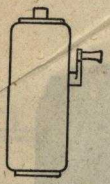
Other sizes of Condulets of the MK series than those listed on this and the following two pages and separate Condulet bodies and hub plates can be furnished. Complete information on request.

(Cross Reference No. CH135C)

TYPES MKB AND MKC CONDULETS

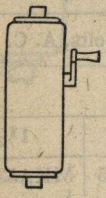
SAFETY FIRST IRONCLAD SWITCH CONDULETS

Furnished Complete with Knife Switch Arranged for N. E. C. Cartridge Fuses, but without Fuses*



TYPE MKB—Dead End, One Hub at Top
Complete with Switch Arranged for Cartridge Fuses

		250 Volts		250 Volts		500 Volts, A. C.	
		2-Pole		3-Pole			
		¾	1¼	1	1½	1	1½
30-Amp.	Cat. No.. .	MKB2302	MKB4302	MKB3303	MKB5303	MKB33035	MKB53035
	Std. Pkg. .	5	5	5	5	1	1
	Wt.Std.Pkg.	145 lbs.	155 lbs.	180 lbs.	190 lbs.	60 lbs.	70 lbs.
	List, each .	$16.55	$16.75	$19.80	$20.00	$27.95	$28.15
	Size, inches.	1	1½	1¼	2	1¼	2
60-Amp.	Cat. No.. .	MKB3602	MKB5602	MKB4603	MKB6603	MKB46035	MKB66035
	Std. Pkg. .	1	1	1	1	1	1
	Wt.Std.Pkg.	55 lbs.	65 lbs.	65 lbs.	75 lbs.	70 lbs.	80 lbs.
	List, each .	$23.20	$23.40	$27.40	$27.60	$28.90	$29.10
	Size, inches.	1¼	2	1½	2½	1½	2½
100-Amp.	Cat. No.. .	MKB41002	MKB61002	MKB51003	MKB71003	MKB510035	MKB710035
	Std. Pkg. .	1	1	1	1	1	1
	Wt.Std.Pkg.	60 lbs.	70 lbs.	70 lbs.	80 lbs.	75 lbs.	85 lbs.
	List, each .	$30.45	$30.65	$38.80	$39.00	$40.25	$40.45
	Size, inches.	2	3	2½	3½	2½	3½
200-Amp.	Cat. No.. .	MKB62002	MKB82002	MKB72003	MKB92003	MKB720035	MKB920035
	Std. Pkg. .	1	1	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	90 lbs.	85 lbs.	95 lbs.	135 lbs.	145 lbs.
	List, each .	$49.30	$49.50	$72.10	$72.30	$80.35	$80.55



TYPE MKC—Through Feed, One Hub at Each End
Complete with Switch Arranged for Cartridge Fuses

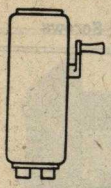
		250 Volts		250 Volts		500 Volts, A. C.	
		2-Pole		3-Pole			
		½	1	½	1	½	1
30-Amp.	Cat. No.. .	MKC1302	MKC3302	MKC1303	MKC3303	MKC13035	MKC33035
	Std. Pkg. .	5	5	5	5	1	1
	Wt.Std.Pkg.	140 lbs.	150 lbs.	180 lbs.	190 lbs.	60 lbs.	70 lbs.
	List, each .	$16.75	$16.95	$19.90	$20.10	$28.05	$28.25
	Size, inches.	¾	1¼	1	1½	1	1½
60-Amp.	Cat. No.. .	MKC2602	MKC4602	MKC3603	MKC5603	MKC36035	MKC56035
	Std. Pkg. .	1	1	1	1	1	1
	Wt.Std.Pkg.	55 lbs.	65 lbs.	65 lbs.	75 lbs.	70 lbs.	80 lbs.
	List, each .	$23.50	$23.70	$27.80	$28.00	$29.30	$29.50
	Size, inches.	1	1½	1¼	2	1¼	2
100-Amp.	Cat. No.. .	MKC31002	MKC51002	MKC41003	MKC61003	MKC410035	MKC610035
	Std. Pkg. .	1	1	1	1	1	1
	Wt.Std.Pkg.	60 lbs.	70 lbs.	70 lbs.	80 lbs.	70 lbs.	80 lbs.
	List, each .	$30.85	$31.05	$39.30	$39.50	$40.75	$40.95
	Size, inches.	1½	2½	1½	2½	1½	2½
200-Amp.	Cat. No.. .	MKC52002	MKC72002	MKC52003	MKC72003	MKC520035	MKC720035
	Std. Pkg. .	1	1	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	90 lbs.	85 lbs.	95 lbs.	135 lbs.	145 lbs.
	List, each .	$49.90	$50.10	$72.60	$72.80	$80.85	$81.05

*See note on preceding page.

TYPES MKD AND MKE CONDULETS

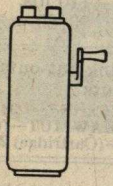
SAFETY FIRST IRONCLAD SWITCH CONDULETS

Furnished Complete with Knife Switch Arranged for N. E. C. Cartridge Fuses, but without Fuses*



TYPE MKD—Dead End, Two Hubs at Bottom
Complete with Switch Arranged for Cartridge Fuses

		250 Volts		250 Volts		500 Volts, A. C.	
		2-Pole		3-Pole			
		½	1	½	1	½	1
30-Amp.	Cat. No.	MKD1302	MKD3302	MKD1303	MKD3303	MKD13035	MKD33035
	Std. Pkg.	5	5	5	5	1	1
	Wt.Std.Pkg.	145 lbs.	155 lbs.	190 lbs.	200 lbs.	60 lbs.	70 lbs.
	List, each	$16.55	$16.75	$19.70	$19.90	$27.85	$28.05
	Size, inches	¾	1¼	1	1½	1	1½
60-Amp.	Cat. No.	MKD2602	MKD4602	MKD3603	MKD5603	MKD36035	MKD56035
	Std. Pkg.	1	1	1	1	1	1
	Wt.Std.Pkg.	55 lbs.	65 lbs.	65 lbs.	75 lbs.	70 lbs.	80 lbs.
	List, each	$23.20	$23.40	$27.40	$27.60	$28.90	$29.10
	Size, inches	1	1½	1¼	2	1¼	2
100-Amp.	Cat No.	MKD31002	MKD51002	MKD41003	MKD61003	MKD410035	MKD610035
	Std. Pkg.	1	1	1	1	1	1
	Wt.Std.Pkg.	60 lbs.	70 lbs.	70 lbs.	80 lbs.	75 lbs.	85 lbs.
	List, each	$30.45	$30.65	$38.80	$39.00	$40.25	$40.45
	Size, inches	1½	2½	1½	2½	1½	2½
200-Amp.	Cat. No.	MKD52002	MKD72002	MKD52003	MKD72003	MKD520035	MKD720035
	Std. Pkg.	1	1	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	90 lbs.	85 lbs.	95 lbs.	135 lbs.	145 lbs.
	List, each	$49.30	$49.50	$72.00	$72.20	$80.25	$80.45



TYPE MKE—Dead End, Two Hubs at Top
Complete with Switch Arranged for Cartridge Fuses

		250 Volts		250 Volts		500 Volts, A. C.	
		2-Pole		3-Pole			
		½	1	½	1	½	1
30-Amp.	Cat. No.	MKE1302	MKE3302	MKE1303	MKE3303	MKE13035	MKE33035
	Std. Pkg.	5	5	5	5	1	1
	Wt.Std.Pkg.	145 lbs.	155 lbs.	190 lbs.	200 lbs.	60 lbs.	70 lbs.
	List, each	$16.55	$16.75	$19.70	$19.90	$27.85	$28.05
	Size, inches	¾	1¼	1	1½	1	1½
60-Amp.	Cat. No.	MKE2602	MKE4602	MKE3603	MKE5603	MKE36035	MKE56035
	Std. Pkg.	1	1	1	1	1	1
	Wt.Std.Pkg.	55 lbs.	65 lbs.	65 lbs.	75 lbs.	70 lbs.	80 lbs.
	List, each	$23.20	$23.40	$27.40	$27.60	$28.90	$29.10
	Size, inches	1	1½	1¼	2	1¼	2
100-Amp.	Cat. No.	MKE31002	MKE51002	MKE41003	MKE61003	MKE410035	MKE610035
	Std. Pkg.	1	1	1	1	1	1
	Wt.Std.Pkg.	60 lbs.	70 lbs.	70 lbs.	80 lbs.	75 lbs.	85 lbs.
	List, each	$30.45	$30.65	$38.80	$39.00	$40.25	$40.45
	Size, inches	1½	2½	1½	2½	1½	2½
200-Amp.	Cat. No.	MKE52002	MKE72002	MKE52003	MKE72003	MKE520035	MKE720035
	Std. Pkg.	1	1	1	1	1	1
	Wt.Std.Pkg.	80 lbs.	90 lbs.	85 lbs.	95 lbs.	135 lbs.	145 lbs.
	List, each	$49.30	$49.50	$72.00	$72.20	$80.25	$80.45

*See note on second preceding page.

(Cross Reference No. CH135E)

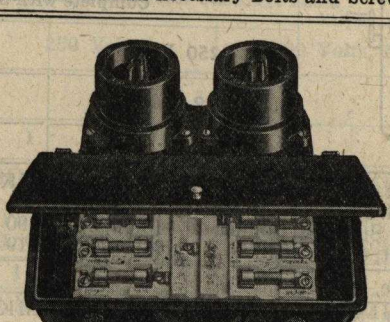
TYPES ZGC AND ZGU CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS AND GENERAL ELECTRIC 2 H. P., 250-VOLT, THREE-PHASE, SNAP SWITCH 151394 WITH PROTECTIVE COVER FOR TEXTILE MILL INSTALLATIONS

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws



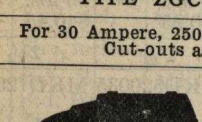
Type ZGC Condulet
Showing Snap Switch and Cartridge Fuse Cut-out Installed



Type ZGU Condulet
Showing Snap Switches and Cartridge Fuse Cut-out Installed

TYPE ZGC CONDULETS—THROUGH FEED—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Main Line Cut-outs and G. E. Switch 151394—Cut-out and Switch not Furnished



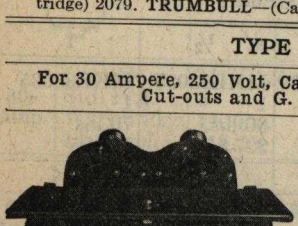
Style of Cut-out	Size in inches	½——½	¾——¾	1——1
3-wire	Cat. No.....	ZGC11303	ZGC22303	ZGC33303
	Std. Pkg.....	15	15	10
	Wt. Std. Pkg.	155 lbs.	160 lbs.	110 lbs.
	List Price, ea.	$3.60	$3.70	$3.80

The universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:
30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

3-Wire: BRYANT—(Cartridge) 1924, (Plug) 62165. **D. & W.**—(Cartridge) 91103. **G. E. CO.**—(Cartridge) 34372, (Plug) 62165. **NOARK**—(Cartridge) 3328. **PAISTE**—(Cartridge) 72165, (Plug) 2165. **SHAWMUT**—(Cartridge) 2079. **TRUMBULL**—(Cartridge) 21653, (Plug) 2165. **WEBER**—(Plug) 62165. **UNION**—(Cartridge) 2012.

TYPE ZGU CONDULETS—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Double Branch Cut-outs and G. E. Switch 151394—Cut-out and Switches not Furnished



Style of Cut-out	Size in inches	½ ¾ ½ — ¾″ main ½″ branches	½ 1 ½ — 1″ main ½″ branches	½ 1¼ ½ — 1¼″ main ½″ branches
3 to 3-wire	Cat. No.....	ZGU121303	ZGU131303	ZGU141303
	Std. Pkg.....	15	10	10
	Wt. Std. Pkg.	225 lbs.	110 lbs.	165 lbs.
	List Price, ea.	$6.40	$6.50	$6.90

The universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:
30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

3 to 3-Wire: BRYANT—(Cartridge) 1928, (Plug) 62135. **D. & W.**—(Cartridge) 91100. **G. E. CO.**—(Cartridge) 34374, (Plug) 62135. **NOARK**—(Cartridge) 3353. **PAISTE**—(Cartridge) 72135, (Plug) 2135. **SHAWMUT**—(Cartridge) 20835. **TRUMBULL**—(Cartridge) 21353, (Plug) 2135. **WEBER**—(Plug) 62135. **UNION**—(Cartridge) 2029.

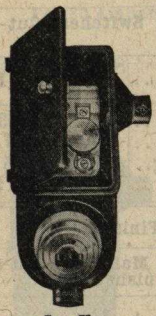
Types ZGC and ZGU Condulets have been referred to in previous literature as Types ZCG and ZUG, respectively.

For finishes and assortments see note on page Cross Reference No. CH91.

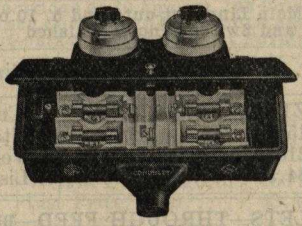
TYPES Z, ZC, ZL, ZR, ZS, ZU, ZD, AND ZX CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS AND SNAP OR PULL SWITCHES

Furnished with Universal Cut-out Fastening Plate, Adjustable Bar and Adapting Rings for Switches and all necessary Bolts and Screws



Type ZL
With Snap Switch and Plug Fuse Cut-out Installed



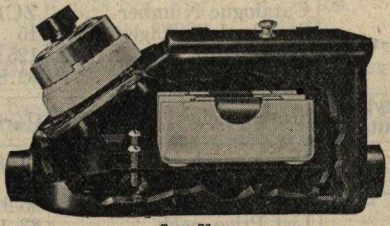
Type ZU
With Snap Switches and Cartridge Fuse Cut-out Installed



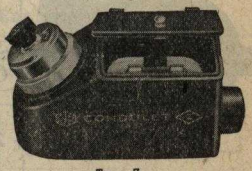
Type ZR
With Snap Switch and Cartridge Fuse Cut-out Installed



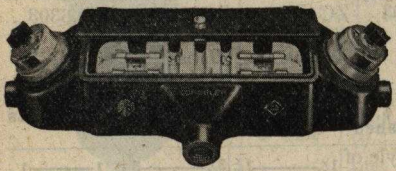
Type ZS
With Snap Switch and Plug Fuse Cut-out Installed



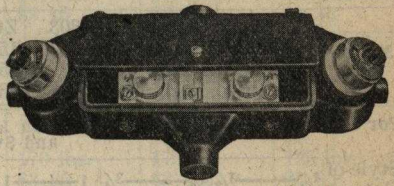
Type ZC
With Snap Switch and Cartridge Fuse Cut-out Installed
(Broken-away View, Showing Cut-out)



Type Z
With Snap Switch and Cartridge Fuse Cut-out Installed



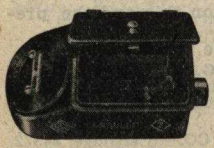
Type ZD
With Snap Switches and Cartridge Fuse Cut-out Installed



Type ZX
With Snap Switches and Plug Fuse Cut-out Installed

TYPE Z CONDULETS—DEAD END—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Main Line Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished



Style of Cut-out	Size in inches	½	¾	1
2-wire	Catalogue Number	Z1302	Z2302	Z3302
	Standard Package	15	15	10
	Ship. Wt. Std. Pkg	120 lbs.	125 lbs.	85 lbs.
	List Price, each	$2.55	$2.65	$2.75
Style of Cut-out	Size in inches	½	¾	1
3-wire	Catalogue Number	Z1303	Z2303	Z3303
	Standard Package	15	15	10
	Ship. Wt. Std. Pkg	145 lbs.	150 lbs.	105 lbs.
	List Price, each	$3.00	$3.10	$3.20

For important information concerning Condulets listed above, see notes on page Cross Reference No. CH91. Condulet reducers are listed on page Cross Reference No. CH171.

TYPES Z AND ZC CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS AND SNAP OR PULL SWITCHES

Furnished with Universal Cut-out Fastening Plate, Adjustable Bar and Adapting Rings for Switches and all necessary Bolts and Screws

TYPE Z CONDULETS—DEAD END—Black Enamel Finish—Continued

For 30 Ampere, 600 Volt, N. E. C. Main Line Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished



Style of Cut-out	½	¾	1	...Size in inches...	Style of Cut-out	1
1-wire	Z13016 15 210 lbs. $4.30	Z23016 15 220 lbs. $4.40	Z33016 10 150 lbs. $4.50	...Catalogue No.... ...Standard Pkg.... ..Weight Std. Pkg.. ..List Price, each ..	3-wire	Z33036 10 205 lbs. $5.90

TYPE ZC CONDULETS—THROUGH FEED—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Main Line Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished



Style of Cut-out	Size in inches	½——½	¾——¾	1——1
2-wire	Catalogue Number ..... Standard Package ..... Weight Std. Pkg..... List Price, each	ZC11302 15 125 lbs. $2.80	ZC22302 15 130 lbs. $2.90	ZC33302 10 90 lbs. $3.00
Style of Cut-out	Size in inches	1¼——1¼	1½——1½	2——2
2-wire	Catalogue Number ..... Standard Package ..... Weight Std. Pkg..... List Price, each	ZC44302 10 95 lbs. $3.10	ZC55302 5 55 lbs. $3.20	ZC66302 5 60 lbs. $3.30

Style of Cut-out	Size in inches...	½——½	¾——¾	1——1	1¼——1¼	1½——1½	2——2
3-wire	Catalogue No... Standard Pkg... Weight Std. Pkg. List Price, each.	ZC11303 15 145 lbs. $3.25	ZC22303 15 150 lbs. $3.35	ZC33303 10 105 lbs. $3.45	ZC44303 10 110 lbs. $3.55	ZC55303 5 60 lbs. $3.65	ZC66303 5 65 lbs. $3.75

For 30 Ampere, 600 Volt, N. E. C. Main Line Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

Style of Cut-out	½——½	¾——¾	1——1	.Size, inches.	Style of Cut-out	½——½	¾——¾	1——1
1-wire	ZC113016 15 230 lbs. $4.60	ZC223016 15 235 lbs. $4.70	ZC333016 10 160 lbs. $4.80	..Cat. No... ..Std. Pkg.. Wt. Std. Pkg. ..List, each..	3-wire	ZC113036 15 290 lbs. $6.80	ZC223036 15 295 lbs. $6.90	ZC333036 10 210 lbs. $7.00

The adjustable bar, furnished with each Condulet listed on this and the preceding page, permits the proper mounting of any snap or pull switch enumerated on pages Cross Reference Nos. CH62 or CH63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

The universal cut-out fastening plates, furnished with the Condulets listed on this and the preceding page, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2-Wire: **BRYANT**—(Cartridge) 1917, (Plug) 62965. **D. & W.**—(Cartridge) 91102. **G. E. CO.**—(Cartridge) 34367, (Plug) 62965. **NOARK**—(Cartridge) 3327. **PAISTE**—(Cartridge) 72965, (Plug) 2965. **SHAWMUT**—(Cartridge) 2077. **TRUMBULL**—(Cartridge) 29653, (Plug) 2965. **WEBER**—(Plug) 62965. **UNION**—(Cartridge) 2010.

3-Wire: **BRYANT**—(Cartridge) 1924, (Plug) 62165. **D. & W.**—(Cartridge) 91103. **G. E. CO.**—(Cartridge) 34372, (Plug) 62165. **NOARK**—(Cartridge) 3328. **PAISTE**—(Cartridge) 72165, (Plug) 2165. **SHAWMUT**—(Cartridge) 2079. **TRUMBULL**—(Cartridge) 21653, (Plug) 2165. **WEBER**—(Plug) 62165. **UNION**—(Cartridge) 2012.

30 Ampere, 600 Volt, Cartridge Fuse Cut-outs

1-Wire: **BRYANT**—(Cartridge) 1937. **D. & W.**—(Cartridge) 28076. **G. E. CO.**—(Cartridge) 34991. **NOARK**—(Cartridge) 5600. **SHAWMUT**—(Cartridge) 20735. **UNION**—(Cartridge) 4003.

3-Wire: Mount three 1-wire cut-outs, side by side.

For finishes and assortments, see note on page Cross Reference No. CH91.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH137)

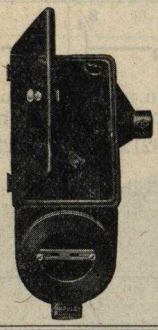
TYPES ZL AND ZR CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS AND SNAP OR PULL SWITCHES

Furnished with Universal Cut-out Fastening Plate, Adjustable Bar and Adapting Ring for Switches and all necessary Bolts and Screws

TYPE ZL CONDULETS—THROUGH FEED—Black Enamel Finish

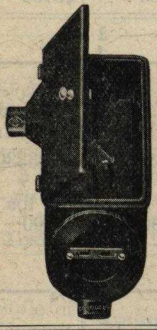
For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Main Line or Single Branch Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished



Style of Cut-out	Size in inches	½ × ½	¾ × ¾	1 × 1
2-wire	Catalogue Number	ZL11302	ZL22302	ZL33302
	Standard Package	15	15	10
	Weight Std. Pkg.	150 lbs.	155 lbs.	110 lbs.
	List Price, each	$3.15	$3.25	$3.35
Style of Cut-out	Size in inches	½ × ½	¾ × ¾	1 × 1
3-wire	Catalogue Number	ZL11303	ZL22303	ZL33303
	Standard Package	15	15	10
	Weight Std. Pkg.	170 lbs.	175 lbs.	125 lbs.
	List Price, each	$3.65	$3.75	$3.85

TYPE ZR CONDULETS—THROUGH FEED—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Main Line or Single Branch Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished



Style of Cut-out	Size in inches	½ × ½	¾ × ¾	1 × 1
2-wire	Catalogue Number	ZR11302	ZR22302	ZR33302
	Standard Package	15	15	10
	Weight Std. Pkg.	150 lbs.	155 lbs.	110 lbs.
	List Price, each	$3.15	$3.25	$3.35
Style of Cut-out	Size in inches	½ × ½	¾ × ¾	1 × 1
3-wire	Catalogue Number	ZR11303	ZR22303	ZR33303
	Standard Package	15	15	10
	Weight Std. Pkg.	170 lbs.	175 lbs.	125 lbs.
	List Price, each	$3.65	$3.75	$3.85

The adjustable bar, furnished with each Condulet, permits the mounting of any snap or pull switch enumerated on pages Cross Reference Nos. CH62 or CH63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Main Line Cut-outs

2-Wire: BRYANT—(Cartridge) 1917, (Plug) 62965. **D. & W.**—(Cartridge) 91102. **G. E. CO.**—(Cartridge) 34367, (Plug) 62965. **NOARK**—(Cartridge) 3327. **PAISTE**—(Cartridge) 72965, (Plug) 2965. **SHAWMUT**—(Cartridge) 2077. **TRUMBULL**—(Cartridge) 29653, (Plug) 2965. **WEBER**—(Plug) 62965. **UNION**—(Cartridge) 2010.

3-Wire: BRYANT—(Cartridge) 1924, (Plug) 62165. **D. & W.**—(Cartridge) 91103. **G. E. CO.**—(Cartridge) 34372, (Plug) 62165. **NOARK**—(Cartridge) 3328. **PAISTE**—(Cartridge) 72165, (Plug) 2165. **SHAWMUT**—(Cartridge) 2079. **TRUMBULL**—(Cartridge) 21653, (Plug) 2165. **WEBER**—(Plug) 62165. **UNION**—(Cartridge) 2012.

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Single Branch Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1919, (Plug) 61935. **D. & W.**—(Cartridge) 91104. **G. E. CO.**—(Cartridge) 34368, (Plug) 61935. **NOARK**—(Cartridge) 3345. **PAISTE**—(Cartridge) 71935, (Plug) 1935. **SHAWMUT**—(Cartridge) 2081. **TRUMBULL**—(Cartridge) 19353, (Plug) 1935. **WEBER**—(Plug) 61935. **UNION**—(Cartridge) 2020.

3 to 3-Wire: BRYANT—(Cartridge) 1926, (Plug) 8042. **D. & W.**—(Cartridge) 91105. **G. E. CO.**—(Cartridge) 34373, (Plug) 8042. **NOARK**—(Cartridge) 3346. **PAISTE**—(Cartridge) 78042, (Plug) 8042. **SHAWMUT**—(Cartridge) 2083. **TRUMBULL**—(Cartridge) 80423, (Plug) 8042. **WEBER**—(Plug) 8042. **UNION**—(Cartridge) 2022.

For finishes, see page Cross Reference No. CH91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.
(Cross Reference No. CH138)

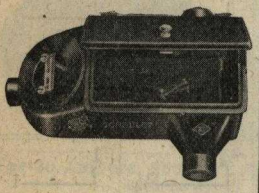
TYPE ZS CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS AND SNAP OR PULL SWITCHES

Furnished with Universal Cut-out Fastening Plate, Adjustable Bar and Adapting Ring for Switches and all necessary Bolts and Screws

TYPE ZS CONDULETS—THROUGH FEED—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Single Branch Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished



Style of Cut-out	Size in inches					
		½ – ½	½ – ¾	¾ – ¾		
		½ in. mains ½ in. branch	¾ in. mains ½ in. branch	¾ in. mains ¾ in. branch		
2 to 2-wire	Catalogue Number	ZS111302	ZS212302	ZS222302		
	Standard Package	15	15	15		
	Weight Std. Pkg.	160 lbs.	165 lbs.	170 lbs.		
	List Price, each	$3.35	$3.45	$3.50		
Style of Cut-out	Size in inches	1 – ½	1 – 1	1¼ – ½	1¼ – ¾	1½ – ½	1½ – ¾
		1 in. mains ½ in. branch	1 in. mains 1 in. branch	1¼ in. mains ½ in. branch	1¼ in. mains ¾ in. branch	1½ in. mains ½ in. branch	1½ in. mains ¾ in. branch
2 to 2-wire	Catalogue No.	ZS313302	ZS333302	ZS414302	ZS424302	ZS515302	ZS525302
	Standard Pkg.	10	10	10	10	5	5
	Weight Std. Pkg.	120 lbs.	125 lbs.	130 lbs.	135 lbs.	75 lbs.	80 lbs.
	List Price, each.	$3.55	$3.60	$3.65	$3.75	$3.85	$3.95
Style of Cut-out	Size in inches	½ – ½	¾ – ¾	¾ – ¾	1 – 1	1 – 1	1 – 1
		½ in. mains ½ in. branch	¾ in. mains ¾ in. branch	¾ in. mains ¾ in. branch	1 in. mains ½ in. branch	1 in. mains ¾ in. branch	1 in. mains 1 in. branch
3 to 3-wire	Catalogue No.	ZS111303	ZS212303	ZS222303	ZS313303	ZS323303	ZS333303
	Standard Pkg.	15	15	15	10	10	10
	Weight Std. Pkg.	180 lbs.	185 lbs.	190 lbs.	135 lbs.	140 lbs.	145 lbs.
	List Price, each.	$3.70	$3.75	$3.80	$3.85	$3.90	$4.00
Style of Cut-out	Size in inches	1¼ – ½	1¼ – ¾	1½ – ½	1½ – ¾	2 – ¾	2 – 1¼
		1¼ in. mains ½ in. branch	1¼ in. mains ¾ in. branch	1½ in. mains ½ in. branch	1½ in. mains ¾ in. branch	2 in. mains ¾ in. branch	2 in. mains 1¼ in. branch
3 to 3-wire	Catalogue No.	ZS414303	ZS424303	ZS515303	ZS525303	ZS626303	ZS646303
	Standard Pkg.	10	10	5	5	5	5
	Weight Std. Pkg.	150 lbs.	155 lbs.	80 lbs.	80 lbs.	85 lbs.	90 lbs.
	List Price, each.	$4.00	$4.10	$4.25	$4.35	$4.45	$4.65

The adjustable bar, furnished with each Condulet, permits the mounting of any snap or pull switch enumerated on pages Cross Reference Nos. CH62 or CH63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1919, (Plug) 61935. **D. & W.**—(Cartridge) 91104. **G. E. CO.**—(Cartridge) 34368, (Plug) 61935. **NOARK**—(Cartridge) 3345. **PAISTE**—(Cartridge) 71935, (Plug) 1935. **SHAWMUT**—(Cartridge) 2081. **TRUMBULL**—(Cartridge) 19353, (Plug) 1935. **WEBER**—(Plug) 61935. **UNION**—(Cartridge) 2020.

3 to 3-Wire: BRYANT—(Cartridge) 1926, (Plug) 8042. **D. & W.**—(Cartridge) 91105. **G. E. CO.**—(Cartridge) 34373, (Plug) 8042. **NOARK**—(Cartridge) 3346. **PAISTE**—(Cartridge) 78042, (Plug) 8042. **SHAWMUT**—(Cartridge) 2083. **TRUMBULL**—(Cartridge) 80423, (Plug) 8042. **WEBER**—(Plug) 8042. **UNION**—(Cartridge) 2022.

For finishes, see note on page Cross Reference No. CH91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH139)

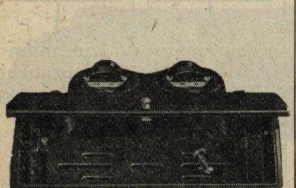
TYPE ZU CONDULETS*

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS AND SNAP OR PULL SWITCHES

Furnished with Universal Cut-out Fastening Plate, Adjustable Bars and Adapting Rings for Switches and all necessary Bolts and Screws

TYPE ZU CONDULETS—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug N. E. C. Double Branch Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished



	Style of Cut-out	Size in inches	½ ½ / ½ / ½ in. main ½ in. branches	½ ½ / ¾ / ¾ in. main ½ in. branches
	2 to 2-wire or 3 to 2-wire	Catalogue Number	ZU111302	ZU121302
		Standard Package	15	15
		Shipping Weight Std. Pkg.	200 lbs.	205 lbs.
		List Price, each	$4.70	$4.80
	Style of Cut-out	Size in inches	¾ ¾ / ¾ / ¾ in. main ¾ in. branches	½ ½ / 1 / 1 in. main ½ in. branches
	2 to 2-wire or 3 to 2-wire	Catalogue Number	ZU222302	ZU131302
		Standard Package	15	10
		Shipping Weight Std. Pkg.	210 lbs.	105 lbs.
		List Price, each	$4.90	$5.00
Style of Cut-out	Size in inches	¾ ¾ / 1 / 1 in. main ¾ in. branches	½ ½ / 1¼ / 1¼ in. main ½ in. branches	¾ ¾ / 1¼ / 1¼ in. main ¾ in. branches	1 1 / 1¼ / 1¼ in. main 1 in. branches	½ ½ / 1½ / 1½ in. main ½ in. branches
2 to 2-wire or 3 to 2-wire	Catalogue No.	ZU232302	ZU141302	ZU242302	ZU343302	ZU151302
	Standard Package	10	10	10	10	5
	Weight Std. Pkg.	110 lbs.	110 lbs.	115 lbs.	120 lbs.	90 lbs.
	List Price, each	$5.10	$5.20	$5.30	$5.40	$5.50
Style of Cut-out	Size in inches	¾ ¾ / 1½ / 1½ in. main ¾ in. branches	1 1 / 1½ / 1½ in. main 1 in. branches	½ ½ / 2 / 2 in. main ½ in. branches	¾ ¾ / 2 / 2 in. main ¾ in. branches	1 1 / 2 / 2 in. main 1 in. branches
2 to 2-wire or 3 to 2-wire	Catalogue No.	ZU252302	ZU353302	ZU161302	ZU262302	ZU363302
	Standard Package	5	5	5	5	5
	Weight Std. Pkg.	125 lbs.	130 lbs.	130 lbs.	135 lbs.	140 lbs.
	List Price, each	$5.60	$5.70	$5.80	$5.90	$6.00

*These Condulets can be furnished with covers hinged on side opposite switches, and then have the letter E inserted after U in catalogue number, as ZUE111302.

The adjustable bars, furnished with each Condulet, permit the proper mounting of any snap or pull switch enumerated on pages Cross Reference Nos. CH62 or CH63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2 to 2-Wire: **BRYANT**—(Cartridge) 1922, (Plug) 62587. **D. & W.**—(Cartridge) 91106. **G. E. CO.**—(Cartridge) 34369, (Plug) 62587. **NOARK**—(Cartridge) 3349. **PAISTE**—(Cartridge) 72587, (Plug) 2587. **SHAWMUT**—(Cartridge) 2085. **TRUMBULL**—(Cartridge) 25873, (Plug) 2587. **WEBER**—(Plug) 62587. **UNION**—(Cartridge) 2025.

3 to 2-Wire: **BRYANT**—(Cartridge) 1923, (Plug) 62199. **D. & W.**—(Cartridge) 91121. **G. E. CO.**—(Cartridge) 34370, (Plug) 62199. **NOARK**—(Cartridge) 3351. **PAISTE**—(Cartridge) 72199, (Plug) 2199. **SHAWMUT** (Cartridge) 2087. **TRUMBULL**—(Cartridge) 21993, (Plug) 2199. **WEBER**—(Plug) 62199. **UNION**—(Cartridge) 2027.

For finishes and assortments, see note on page Cross Reference No. CH91.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH140)

TYPE ZU CONDULETS*

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS AND SNAP OR PULL SWITCHES

Furnished with Universal Cut-out Fastening Plate, Adjustable Bars and Adapting Rings for Switches and all necessary Bolts and Screws

TYPE ZU CONDULETS—Black Enamel Finish—Continued

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Double Branch Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

Style of Cut-out	Size in inches.....	½ ½ ½ ½ in. main ½ in. branches	½ ½ ¾ ¾ in. main ½ in. branches	¾ ¾ ¾ ¾ in. main ¾ in. branches	½ ½ 1 1 in. main ½ in. branches
3 to 3-wire	Catalogue Number.....	ZU111303	ZU121303	ZU222303	ZU131303
	Standard Package.....	15	15	15	10
	Shipping Weight Std. Pkg.	210 lbs.	215 lbs.	220 lbs.	155 lbs.
	List Price, each.....	$5.70	$5.80	$5.90	$6.00
Style of Cut-out	Size in inches.....	¾ ¾ 1 1 in. main. ¾ in. branches	1 1 1 1 in. main 1 in. branches	½ ½ 1¼ 1¼ in. main ½ in. branches	¾ ¾ 1¼ 1¼ in. main ¾ in. branches
3 to 3-wire	Catalogue Number.....	ZU232303	ZU333303	ZU141303	ZU242303
	Standard Package.....	10	10	10	10
	Shipping Weight Std. Pkg.	160 lbs.	165 lbs.	160 lbs.	170 lbs.
	List Price, each.....	$6.10	$6.15	$6.20	$6.30
Style of Cut-out	Size in inches.....	1 1 1¼ 1¼ in. main 1 in. branches	1¼ 1¼ 1¼ 1¼ in. main 1¼ in. branches	½ ½ 1½ 1½ in. main ½ in. branches	¾ ¾ 1½ 1½ in. main ¾ in. branches
3 to 3-wire	Catalogue Number.....	ZU343303	ZU444303	ZU151303	ZU252303
	Standard Package.....	10	10	5	5
	Shipping Weight Std. Pkg.	170 lbs.	170 lbs.	95 lbs.	95 lbs.
	List Price, each.....	$6.40	$6.50	$6.55	$6.60
Style of Cut-out	Size in inches.....	1 1 1½ 1½ in. main 1 in. branches	½ ½ 2 2 in. main ½ in. branches	¾ ¾ 2 2 in. main ¾ in. branches	1 1 2 2 in. main 1 in. branches
3 to 3-wire	Catalogue Number.....	ZU353303	ZU161303	ZU262303	ZU363303
	Standard Package.....	5	5	5	5
	Shipping Weight Std. Pkg.	100 lbs.	105 lbs.	100 lbs.	105 lbs.
	List Price, each.....	$6.70	$6.80	$6.90	$7.00

*These Condulets can be furnished with covers hinged on side opposite switches, and then have the letter E inserted after U in catalogue number, as ZUE111303.

The adjustable bars, furnished with each Condulet, permit the proper mounting of any snap or pull switch enumerated on pages Cross Reference Nos. CH62 or CH63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

The universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

3 to 3-Wire: **BRYANT**—(Cartridge) 1928, (Plug) 62135. **D. & W.**—(Cartridge) 91100. **G. E. CO.**—(Cartridge) 34374, (Plug) 62135. **NOARK**—(Cartridge) 3353. **PAISTE**—(Cartridge) 72135, (Plug) 2135. **SHAWMUT**—(Cartridge) 20835. **TRUMBULL**—(Cartridge) 21353, (Plug) 2135. **WEBER**—(Plug) 62135. **UNION**—(Cartridge) 2029.

For finishes, see note on page Cross Reference No. CH91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH141)

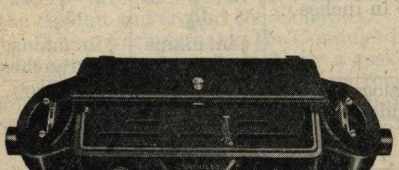
TYPE ZD CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS AND SNAP OR PULL SWITCHES

Furnished with Universal Cut-out Fastening Plate, Adjustable Bars and Adapting Rings for Switches and all necessary Bolts and Screws

TYPE ZD CONDULETS—DEAD END—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Double Branch Cut outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished



Style of Cut-out	Size in inches ...	½—½ ½ ½ in. main ½ in. branches	½—½ ¾ ¾ in. main ½ in. branches
2 to 2-wire or 3 to 2-wire	Catalogue No...	ZD111302	ZD121302
	Standard Pkg...	15	15
	Weight Std. Pkg.	215 lbs.	215 lbs.
	List Price, each .	$4.85	$4.95
Style of Cut-out	Size in inches ...	¾—¾ ¾ ¾ in. main ¾ in. branches	½—½ 1 1 in. main ½ in. branches
2 to 2-wire or 3 to 2-wire	Catalogue No...	ZD222302	ZD131302
	Standard Pkg...	15	10
	Weight Std. Pkg.	220 lbs.	150 lbs.
	List Price, each.	$5.05	$5.15

Style of Cut-out	Size in inches	¾—¾ 1 1 in. main ¾ in. branches	½—½ 1¼ 1¼ in. main ½ in. branches	¾—¾ 1¼ 1¼ in. main ¾ in. branches	½—½ 1½ 1½ in. main ½ in. branches	¾—¾ 1½ 1½ in. main ¾ in. branches
2 to 2-wire or 3 to 2-wire	Catalogue No.....	ZD232302	ZD141302	ZD242302	ZD151302	ZD252302
	Standard Pkg.....	10	10	10	5	5
	Weight Std. Pkg..	150 lbs.	155 lbs.	160 lbs.	90 lbs.	95 lbs.
	List Price, each...	$5.20	$5.25	$5.30	$5.40	$5.50

Style of Cut-out	Size in inches	½—½ ¾ ¾ in. main ½ in. branches	¾—¾ ¾ ¾ in. main ¾ in. branches	½—½ 1 1 in. main ½ in. branches	¾—¾ 1 1 in. main ¾ in. branches	½—½ 1¼ 1¼ in. main ½ in. branches
3 to 3-wire	Catalogue No....	ZD121303	ZD222303	ZD131303	ZD232303	ZD141303
	Standard Pkg....	15	15	10	10	10
	Weight Std. Pkg..	235 lbs.	235 lbs.	180 lbs.	180 lbs.	185 lbs.
	List Price, each..	$5.85	$5.95	$6.05	$6.15	$6.25
Style of Cut-out	Size in inches....	¾—¾ 1¼ 1¼ in. main ¾ in. branches	½—½ 1½ 1½ in. main ½ in. branches	¾—¾ 1½ 1½ in. main ¾ in. branches	¾—¾ 2 2 in. main ¾ in. branches	1¼—1¼ 2 2 in. main 1¼″ branches
3 to 3-wire	Catalogue No....	ZD242303	ZD151303	ZD252303	ZD262303	ZD464303
	Standard Pkg....	10	5	5	5	5
	Weight Std. Pkg.	185 lbs.	100 lbs.	100 lbs.	110 lbs.	115 lbs.
	List Price, each..	$6.30	$6.40	$6.50	$6.60	$6.80

The universal cut-out fastening plates, furnished with the above Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2 to 2-Wire: **BRYANT**—(Cartridge) 1922, (Plug) 62587. **D. & W.**—(Cartridge) 91106. **G. E. CO.**—(Cartridge) 34369, (Plug) 62587. **NOARK**—(Cartridge) 3349. **PAISTE**—(Cartridge) 72587, (Plug) 2587. **SHAWMUT**—(Cartridge) 2085. **TRUMBULL**—(Cartridge) 25873, (Plug) 2587. **WEBER**—(Plug) 62587. **UNION**—(Cartridge) 2025.

3 to 2-Wire: **BRYANT**—(Cartridge) 1923, (Plug) 62199. **D. & W.**—(Cartridge) 91121. **G. E. CO.**—(Cartridge) 34370, (Plug) 62199. **NOARK**—(Cartridge) 3351. **PAISTE**—(Cartridge) 72199, (Plug) 2199. **SHAWMUT**—(Cartridge) 2087. **TRUMBULL**—(Cartridge) 21993, (Plug) 2199. **WEBER**—(Plug) 62199. **UNION**—(Cartridge) 2027.

3 to 3-Wire: **BRYANT**—(Cartridge) 1928, (Plug) 62135. **D. & W.**—(Cartridge) 91100. **G. E. CO.**—(Cartridge) 34374, (Plug) 62135. **NOARK**—(Cartridge) 3353. **PAISTE**—(Cartridge) 72135, (Plug) 2135. **SHAWMUT**—(Cartridge) 20835. **TRUMBULL**—(Cartridge) 21353, (Plug) 2135. **WEBER**—(Plug) 62135. **UNION**—(Cartridge) 2029.

For finishes and assortments, see note on page Cross Reference No. CH91.
Condulet reducers are listed on page Cross Reference No. CH171.

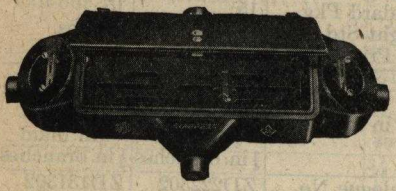
TYPE ZX CONDULETS

FOR CARTRIDGE OR PLUG FUSE CUT-OUTS AND SNAP OR PULL SWITCHES

Furnished with Universal Cut-out Fastening Plate, Adjustable Bars and Adapting Rings for Switches and all necessary Bolts and Screws

TYPE ZX CONDULETS—THROUGH FEED—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Double Branch Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished



Style of Cut-out	Size in inches...	½ ½ ½ ½	¾ ¾ ¾ ¾
		½ in. mains ½ in. branches	¾ in. mains ½ in. branches
2 to 2-wire or 3 to 2-wire	Catalogue No...	ZX1111302	ZX2112302
	Standard Pkg...	15	15
	Wt. Std. Pkg....	225 lbs.	230 lbs.
	List Price, each.	$5.10	$5.20
Style of Cut-out	Size in inches...	¾ ¾ ¾ ¾	1 ½ ½ 1
		¾ in. mains ¾ in. branches	1 in. mains ½ in. branches
2 to 2-wire or 3 to 2-wire	Catalogue No...	ZX2222302	ZX3113302
	Standard Pkg...	15	10
	Wt. Std. Pkg....	235 lbs.	160 lbs.
	List Price, each.	$5.30	$5.40

Style of Cut-out	Size in inches.....	1 ¾ ¾ 1	1¼ ½ ½ 1¼	1¼ ¾ ¾ 1¼	1½ ½ ½ 1½	1½ ¾ ¾ 1½
		1 in. mains ¾ in. branches	1¼ in. mains ½ in. branches	1¼ in. mains ¾ in. branches	1½ in. mains ½ in. branches	1½ in. mains ¾ in. branches
2 to 2-wire or 3 to 2-wire	Catalogue No....	ZX3223302	ZX4114302	ZX4224302	ZX5115302	ZX5225302
	Standard Package	10	10	10	5	5
	Weight Std. Pkg..	160 lbs.	165 lbs.	165 lbs.	100 lbs.	100 lbs.
	List Price, each...	$5.45	$5.55	$5.60	$5.75	$5.85

Style of Cut-out	Size in inches.....	¾ ½ ½ ¾	¾ ¾ ¾ ¾	1 ½ ½ 1	1 ¾ ¾ 1	1¼ ½ ½ 1¼
		¾ in. mains ½ in. branches	¾ in. mains ¾ in. branches	1 in. mains ½ in. branches	1 in. mains ¾ in. branches	1¼ in. mains ½ in. branches
3 to 3-wire	Catalogue No....	ZX2112303	ZX2222303	ZX3113303	ZX3223303	ZX4114303
	Standard Package	15	15	10	10	10
	Weight Std. Pkg..	230 lbs.	235 lbs.	180 lbs.	180 lbs.	190 lbs.
	List Price, each ..	$6.10	$6.20	$6.30	$6.35	$6.45
Style of Cut-out	Size in inches.....	1¼ ¾ ¾ 1¼	1½ ½ ½ 1½	1½ ¾ ¾ 1½	2 ¾ ¾ 2	2 1¼ 1¼ 2
		1¼ in. mains ¾ in. branches	1½ in. mains ½ in. branches	1½ in. mains ¾ in. branches	2 in. mains ¾ in. branches	2 in. mains 1¼″ branches
3 to 3-wire	Catalogue No....	ZX4224303	ZX5115303	ZX5225303	ZX6226303	ZX6446303
	Standard Package	10	5	5	5	5
	Weight Std. Pkg..	190 lbs.	105 lbs.	105 lbs.	120 lbs.	120 lbs.
	List Price, each...	$6.50	$6.65	$6.75	$6.85	$7.00

The adjustable bars, furnished with each Condulet, permit the mounting of any snap or pull switch enumerated on pages Cross Reference Nos. CH62 or CH63.
Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.
The universal cut-out fastening plates, furnished with the above Condulets, take cut-outs enumerated on preceding page.
For finishes and assortments, see note on page Cross Reference No. CH91.
Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH143)

TYPES PRC, PRT AND PRX CONDULETS

Inside Dimensions—Diameter, 6⅛ Inches; Depth, 2⅜ Inches
Furnished with Cast Cover, Gasket and Cap Screws for Cover



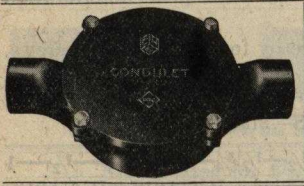
Condulets of the PR series are for use where durable, water-tight junction boxes of medium size are required, as in railroad yards and shops. They are also suitable for underneath or overhead car wiring installations.

The hubs on these Condulets are so designed as to insure a clearance of at least three-quarters of an inch between the surface wired over and the conduit.

These Condulets, where used on car roofs, give no opportunity for the accumulation of cinders—a feature which prevents the otherwise rapid deterioration of the roof covering along the conduit and around the Condulet.

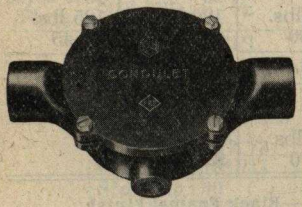
The cover overhangs the Condulet body and is held in place by four heavy brass cap screws. The joint is made water-tight by a gasket.

The bottom of the Condulet is reinforced at the center, to allow drilling and tapping for an extra conduit or for the suspension of a center lamp fixture of pedestal design.



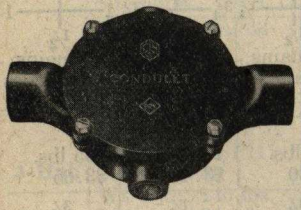
TYPE PRC CONDULETS—Black Enamel Finish

Size in inches....	1—1	1¼—1¼	1½—1½	2—2
Catalogue No....	PRC33	PRC44	PRC55	PRC66
Standard Pkg....	15	15	10	5
Wt. Std. Pkg.....	175 lbs.	180 lbs.	125 lbs.	130 lbs.
List Price, each..	$4.75	$4.95	$5.15	$5.55



TYPE PRT CONDULETS—Black Enamel Finish

Size in inches....	1—1 (1) 1" mains 1" branches	1¼—1¼ (1¼) 1¼" mains 1¼" branches	1½—1½ (1¼) 1¼" mains 1¼" branches	2—2 (1½) 2" mains 1½" branches
Catalogue No....	PRT333	PRT444	PRT545	PRT656
Standard Pkg....	15	15	10	5
Wt. Std. Pkg.....	150 lbs.	160 lbs.	105 lbs.	70 lbs.
List Price, each..	$4.85	$5.05	$5.20	$6.45



TYPE PRX CONDULETS—Black Enamel Finish

Size in inches ...	½ 1—1 ½ 1" mains ½" branches	¾ 1—1 ¾ 1" mains ¾" branches	1 1—1 1 1" mains 1" branches	½ 1¼—1¼ ½ 1¼" mains ½" branches
Catalogue No....	PRX3113	PRX3223	PRX3333	PRX4114
Standard Pkg....	15	15	15	15
Wt. Std. Pkg.....	210 lbs.	215 lbs.	220 lbs.	225 lbs.
List Price, each..	$4.95	$5.05	$5.10	$5.15

Size in inches.....	¾ 1¼—1¼ ¾ 1¼" mains ¾" branches	1¼ 1¼—1¼ 1¼ 1¼" mains 1¼" branches	½ 1½—1½ ½ 1½" mains ½" branches	¾ 1½—1½ ¾ 1½" mains ¾" branches	½ 2—2 ½ 2" mains ½" branches	1 2—2 1 2" mains 1" branches
Catalogue Number	PRX4224	PRX4444	PRX5115	PRX5225	PRX6116	PRX6336
Standard Package.....	15	15	10	10	5	5
Ship. Wt. Std. Pkg.....	230 lbs.	235 lbs.	160 lbs.	165 lbs.	90 lbs.	95 lbs.
List Price, each.....	$5.25	$5.35	$5.45	$5.55	$5.75	$5.85

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish.

Gasket is listed separately on page Cross Reference No. CH177. Condulet reducers are listed on page Cross Reference No. CH171.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

(Cross Reference No. CH144a)

TYPES PJCA AND PJX CONDULETS

Inside Dimensions: Length, both Types, 5 Inches; Width, both Types, 3½ Inches; Depth, Type PJCA, 2½ Inches; Depth, Type PJX, 3⅛ Inches

Furnished Complete with Cast Cover, Cover Gasket and Fastening Screws for Cover

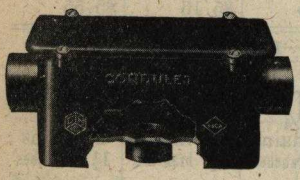
These Condulets are made to meet the demand for a substantial, rectangular junction box of medium size, and can be used to great advantage in car wiring.

Type PJCA Condulet is made with a ½-inch threaded hub in the bottom, in addition to main hubs, to permit a short length of conduit being run from the under side of the Condulet through the head lining of a car to the center fixture.

Type PJX Condulet is arranged with two main hubs and two branch hubs, tapped for conduit of various sizes, as noted in the schedule.

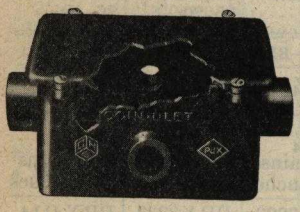
The hubs on these Condulets are so located as to insure a clearance of at least an inch between the surface wired over and the conduit. When these Condulets are used on car roofs, this feature of construction prevents the accumulation of cinders and consequent deterioration of car covering along the line of conduit.

The cover overhangs the Condulet body and is held in place by four heavy brass screws. The joint is made water-tight by a gasket.



TYPE PJCA CONDULETS—Black Enamel Finish

Size in inches	½—½—½	¾—½—¾	1—½—1
Catalogue Number	PJCA111	PJCA212	PJCA313
Standard Package	15	15	15
Shipping Weight Std. Pkg.	110 lbs.	120 lbs.	125 lbs.
List Price, each	$3.00	$3.10	$3.45
Size in inches	1¼—½—1¼	1½—½—1½	
Catalogue Number	PJCA414	PJCA515	
Standard Package	15	15	
Shipping Weight Std. Pkg.	130 lbs.	140 lbs.	
List Price, each	$3.70	$3.85	



TYPE PJX CONDULETS—Black Enamel Finish

Size in inches	½ / ½—½ / ½ mains ½″ branches	½ / ¾—¾ / ½ mains ¾″ branches	¾ / ¾—¾ / ¾ mains ¾″ branches	½ / 1—1 / ½ 1″ mains ½″ branches
Catalogue No.	PJX1111	PJX2112	PJX2222	PJX3113
Standard Pkg.	15	15	15	15
Wt. Std. Pkg.	115 lbs.	125 lbs.	130 lbs.	135 lbs.
List Price, each.	$3.20	$3.30	$3.40	$3.65

Size in inches	¾ / 1—1 / ¾ 1″ mains ¾″ branches	½ / 1¼—1¼ / ½ 1¼″ mains ½″ branches	¾ / 1¼—1¼ / ¾ 1¼″ mains ¾″ branches	½ / 1½—1½ / ½ 1½″ mains ½″ branches	¾ / 1½—1½ / ¾ 1½″ mains ¾″ branches
Catalogue Number	PJX3223	PJX4114	PJX4224	PJX5115	PJX5225
Standard Package	15	15	15	15	15
Shipping Weight Standard Package	135 lbs.	140 lbs.	145 lbs.	150 lbs.	160 lbs.
List Price, each	$3.70	$3.80	$3.90	$4.10	$4.10

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package.

Gasket is listed separately on page Cross Reference No. CH177. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH145.)

TYPES RS (8½x8½x4), RSM (8½x4½x4) AND RSS (4½x4½x4) CONDULET BODIES

Furnished with Cast Cover, Cover Gasket and Fastening Screws for Cover



Type RS Body with Cover

CONDULET BODIES—Black Enamel Finish

Types	RS	RSM	RSS
Inside Dimen., inches	8½x8½x4	8½x4½x4	4½x4½x4
Catalogue Number...	RS1	RSM1	RSS1
Standard Package....	10	10	10
Ship. Wt. Std. Pkg...	190 lbs.	120 lbs.	105 lbs.
List Price, each.....	$6.00	$4.25	$3.75

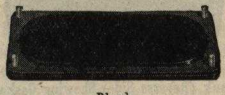
CAST SIDE PLATES FOR TYPES RS, RSM, AND RSS CONDULET BODIES

Black Enamel Finish

Furnished with Gaskets and Fastening Screws


One Hub


Blank
Reverse Side, Showing Gasket


Blank
Reverse Side, Showing Gasket


One Hub


Two Hubs

Side Plates for 8½x4-inch Sides of Types RS and RSM Condulet Bodies

Style of Plate	Size hub	½	¾	1	1¼	1½	2	2½
1-Hub	Cat No..	RSP1	RSP2	RSP3	RSP4	RSP5	RSP6	RSP7
	Std. Pkg.	40	40	40	40	40	40	40
	Wt. Pkg.	120 lbs.	125 lbs.	130 lbs.	140 lbs.	145 lbs.	150 lbs.	155 lbs.
	List, each	$1.85	$1.90	$1.95	$2.00	$2.05	$2.10	$2.25
2-Hub	Size hubs	½-½	¾-¾	1-½	1-1	1¼-¾	1¼-1	1¼-1¼
	Cat. No.	RSP11	RSP22	RSP31	RSP33	RSP42	RSP43	RSP44
	Std. Pkg.	40	40	40	40	40	40	40
	Wt. Pkg.	125 lbs.	140 lbs.	145 lbs.	150 lbs.	155 lbs.	160 lbs.	165 lbs.
	List, each	$1.95	$2.05	$2.15	$2.15	$2.25	$2.25	$2.25
	Size hubs	1½-1	1½-1¼	1½-1½	2-¾	2-1	2-1½	2-2
	Cat. No.	RSP53	RSP54	RSP55	RSP62	RSP63	RSP65	RSP66
	Std. Pkg.	40	40	40	40	40	40	40
	Wt. Pkg.	165 lbs.	165 lbs.	170 lbs.	175 lbs.	175 lbs.	180 lbs.	185 lbs.
	List, each	$2.40	$2.40	$2.40	$2.60	$2.60	$2.60	$2.60
3-Hub	Size hubs	½-½-½	¾-¾-¾	1-1-1	1¼-1¼-¾	1¼-1¼-1¼	1½-1½-1	1½-1½-1½
	Cat. No.	RSP111	RSP222	RSP333	RSP442	RSP444	RSP553	RSP555
	Std. Pkg.	40	40	40	40	40	40	40
	Wt. Pkg.	145 lbs.	150 lbs.	155 lbs.	160 lbs.	165 lbs.	170 lbs.	185 lbs.
	List, each	$2.05	$2.20	$2.35	$2.50	$2.50	$2.75	$2.75

Side Plates for 4½x4-inch Sides of Types RSM and RSS Condulet Bodies

	Size hub	½	¾	1	1¼	1½	2	2½
1-Hub	Cat. No.	RSMP1	RSMP2	RSMP3	RSMP4	RSMP5	RSMP6	RSMP7
	Std. Pkg.	40	40	40	40	40	40	40
	Wt. Pkg.	60 lbs.	65 lbs.	70 lbs.	70 lbs.	75 lbs.	80 lbs.	85 lbs.
	List, each	$1.25	$1.30	$1.35	$1.40	$1.45	$1.50	$1.65

Cast Covers—with Gasket

For Condulet Bodies	RS	RSM	RSS
Catalogue Number..	RSP8800	RSP8400	RSP4400
Std. Pkg.(not ass't'd)	10	10	10
Ship. Wt. Std. Pkg..	75 lbs.	45 lbs.	35 lbs.
List Price, each.....	$2.00	$1.25	$ .90

Cast Blank Side Plates

Dimensions in inches	8½x4	4½x4
Catalogue Number.	RSP84400	RSP44400
Standard Package..	40	40
Ship. Wt. Std. Pkg.	120 lbs.	60 lbs.
List Price, each.....	$1.80	$1.20

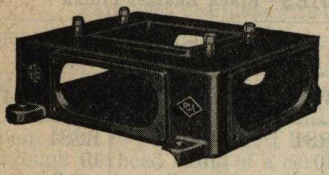
For finishes and assortments of Condulet bodies, see page Cross Reference No. CH144a. Above side plates with black enameled or galvanized finish may be assorted to make up a standard package, regardless of style of plates. Gaskets are listed on page Cross Reference No. CH177. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH146)

TYPE RSA CONDULET BODY

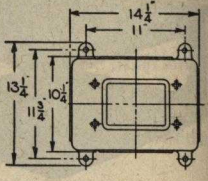
Takes G. E. Co. Type F, Form K20 Oil Switch

Furnished with Fastening Screws for Switch



TYPE RSA CONDULET BODY
Black Enamel Finish

Catalogue Number ...	RSA1
Standard Package....	10
Ship. Wt. Std. Pkg....	350 lbs.
List Price, each	$15.00



CAST SIDE PLATES—FOR ABOVE CONDULET BODY

Furnished with Gaskets and Fastening Screws



One Hub



Blank (Reverse Side) Showing Gasket



Two Hubs

One-Hub Plates—Black Enamel Finish

Size Hub	½	¾	1	1¼	1½	2	2½
Catalogue Number	RSP1	RSP2	RSP3	RSP4	RSP5	RSP6	RSP7
Standard Package	40	40	40	40	40	40	40
Ship. Wt. Std. Pkg.	120 lbs.	125 lbs.	130 lbs.	140 lbs.	145 lbs.	150 lbs.	155 lbs.
List Price, each ..	$1.85	$1.90	$1.95	$2.00	$2.05	$2.10	$2.25

Two-Hub Plates—Black Enamel Finish

Size Hub	½-½	¾-¾	1-½	1-1	1¼-1	1¼-1¼	1½-1
Catalogue Number	RSP11	RSP22	RSP31	RSP33	RSP43	RSP44	RSP53
Standard Package	40	40	40	40	40	40	40
Ship. Wt. Std. Pkg.	125 lbs.	140 lbs.	145 lbs.	150 lbs.	160 lbs.	165 lbs.	165 lbs.
List Price, each ..	$1.95	$2.05	$2.15	$2.15	$2.25	$2.25	$2.40

Size Hub	1½-1¼	1½-1½	2-¾	2-1	2-1½	2-2	2½-1
Catalogue Number	RSP54	RSP55	RSP62	RSP63	RSP65	RSP66	RSP73
Standard Package	40	40	40	40	40	40	40
Ship. Wt. Std. Pkg.	165 lbs.	170 lbs.	175 lbs.	175 lbs.	180 lbs.	185 lbs.	190 lbs.
List Price, each ..	$2.40	$2.40	$2.60	$2.60	$2.60	$2.60	$2.80

Three-Hub Plates—Black Enamel Finish

Size Hub	½-½-½	¾-¾-¾	1-1-1	1¼-1¼-¾	1¼-1¼-1¼	1½-1½-1	1½-1½-1½
Catalogue Number	RSP111	RSP222	RSP333	RSP442	RSP444	RSP553	RSP555
Standard Package	40	40	40	40	40	40	40
Ship. Wt. Std. Pkg.	145 lbs.	150 lbs.	155 lbs.	160 lbs.	165 lbs.	170 lbs.	185 lbs.
List Price, each ..	$2.05	$2.20	$2.35	$2.50	$2.50	$2.75	$2.75

Blank Plate

Catalogue Number	RSP84400
Standard Package	40
Ship. Wt. Std. Pkg.	120 lbs.
List Price, each ..	$1.80

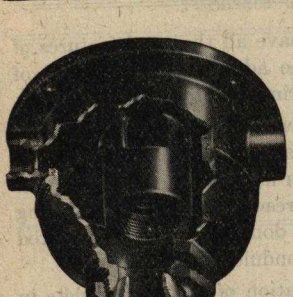
Finishes: Black enamel is the standard finish for Condulet bodies and side plates and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies, and all galvanized finish on side plates will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special metals and special finishes, see page Cross Reference No. CH182. Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment of Condulet bodies is allowed. Black enameled and galvanized side plates may be assorted to make up a standard package, regardless of style of plate.

(Cross Reference No. CH1000E33)

TYPES DB, DBB AND DBC CONDULETS

FOR POSTAL CAR CEILING LIGHT INSTALLATIONS

Furnished Complete as Shown in Illustrations



Body and Canopy of Type DBC
(Broken-away View)

These Condulets are especially designed postal car lighting fixtures and possess all the features essential to such fixtures, as follows:

Strength, rigidity, easy and quick removal of reflectors, ample wiring room, free access to electrical connections, and as pleasing an appearance as is consistent with the conditions imposed.

They comprise a body, canopy, stem, lamp receptacle, reflector holder and reflector.

The body is provided with threaded hubs for conduit and is fastened to car ceiling by four screws.

The canopy screws into the body and is clamped to the stem, forming a rigid construction which cannot become loosened by vibration.

The reflector holder is extremely simple and rugged. The reflector is released by one-half turn of the clamping ring.

Ample wiring room is provided in the body, and the removable canopy allows ready access to the connections without disturbing any other part of the Condulet.

Plans showing the proper location of these Condulets in postal cars, to meet Post Office Department specifications, will be furnished upon request.



Reflector Holder
(Broken-away View)







TYPE	DB			DBB (Angular)			DBC		
Size in inches.....	½	¾	1	½	¾	1	½	¾	1
Catalogue Number....	DB1	DB2	DB3	DBB1	DBB2	DBB3	DBC11	DBC22	DBC33
Standard Package	5	5	5	5	5	5	5	5	5
Ship. Wt. Std. Pkg....	150 lbs.	155 lbs.	160 lbs.	150 lbs.	155 lbs.	160 lbs.	160 lbs.	165 lbs.	170 lbs.
List Price, each.....	$20.00	$20.50	$21.00	$20.50	$21.00	$21.50	$21.00	$21.50	$22.00

In ordering, the following data must be furnished:

First: Location of Condulet in car; i. e., letter case, bag-rack or storage. Second: Wattage of lamp. Third: Style of lamp bulb. Fourth: Distance from floor to ceiling at point where Condulet is to be installed. Fifth: Finish of reflector—porcelain enamel or aluminumized. Sixth: Curvature of car ceiling, which can best be given by a cross section drawing of the car.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Gray lead finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies gray lead finish. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulets with plain and special finishes, see page Cross Reference No. CH182.

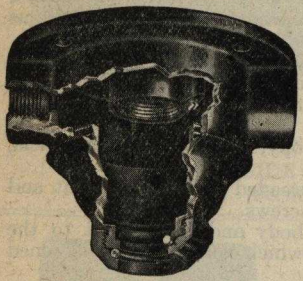
Black enameled, gray lead and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page Cross Reference No. CH171.
(Cross Reference No. CH147)

TYPES DA, DAC, DAL AND DAT CONDULETS

For Postal Car Ceiling Light Installations

Furnished Complete as Shown in Illustration of Type DAC Condulet, Including Lamp Receptacle and Lead Wires



Body and Canopy of Type DAC (Broken-away View)

Condulets of the DA series have all the good features of those of the DB series with the additional advantages of reduced weight and improved wiring facilities.

Receptacle leads enter the stem through insulating bushings near its upper end. This makes it possible to screw the stem into the body, after the latter has been installed, without twisting the leads, which are then ready at hand for connecting to the circuit wires. After this is done, the canopy is secured in position, the same as with a Condulet of the DB series.

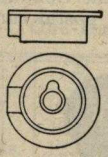
Plans showing the proper location of these Condulets in postal cars, to meet Post Office Department specifications, will be furnished upon request.



Type DAC

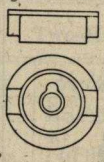


Reflector Holder (Broken-away View)



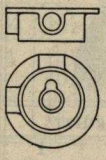
TYPE DA CONDULETS

Size in inches.....	½	¾	1
Catalogue Number....	DA1	DA2	DA3
Standard Package.....	5	5	5
Ship. Wt. Std. Pkg....	90 lbs.	95 lbs.	100 lbs.
List Price, each.....	$16.50	$16.75	$17.00



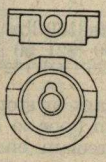
TYPE DAC CONDULETS

Size in inches.....	½	¾	1
Catalogue Number....	DAC11	DAC22	DAC33
Standard Package.....	5	5	5
Ship. Wt. Std. Pkg....	95 lbs.	100 lbs.	105 lbs.
List Price, each.....	$16.75	$17.00	$17.25



TYPE DAL CONDULETS

Size in inches.....	½	¾	1
Catalogue Number....	DAL11	DAL22	DAL33
Standard Package.....	5	5	5
Ship. Wt. Std. Pkg....	95 lbs.	100 lbs.	105 lbs.
List Price, each.....	$16.75	$17.00	$17.25



TYPE DAT CONDULETS

Size in inches.....	½	¾	1
Catalogue Number....	DAT111	DAT222	DAT333
Standard Package.....	5	5	5
Ship. Wt. Std. Pkg....	100 lbs.	105 lbs.	110 lbs.
List Price, each.....	$17.00	$17.25	$17.50

In ordering, the following data must be furnished:

First: Location of Condulet in car; i. e., letter case, bag-rack or storage section. Second: Wattage of lamp. Third: Style of lamp bulb. Fourth: Distance from floor to ceiling at point where Condulet is to be installed. Fifth: Finish of reflector—porcelain enameled or aluminumized. Sixth: Curvature of car ceiling, which can best be given by a cross section drawing of the car.

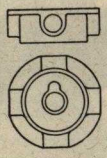
For finishes and assortments, see note on page Cross Reference No. CH1000E20.

Lamp receptacle PE55 for Condulets of the DA and DB series is listed separately on page Cross Reference No. CH1000E29.

TYPES DAX, DAB, DABC, DADA, DADB AND DADC CONDULETS

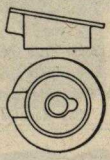
For Postal Car Ceiling Light Installations

Furnished Complete as Shown in Illustration on Preceding Page



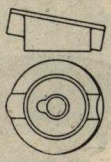
TYPE DAX CONDULETS

Size in inches	½	¾	1
Catalogue Number	DAX1111	DAX2222	DAX3333
Standard Package	5	5	5
Shipping Weight Std. Pkg.	105 lbs.	110 lbs.	115 lbs.
List Price, each	$17.25	$17.50	$17.75



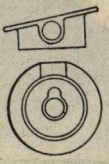
TYPE DAB CONDULETS—Angular

Size in inches	½	¾	1
Catalogue Number	DAB1	DAB2	DAB3
Standard Package	5	5	5
Shipping Weight Std. Pkg.	90 lbs.	95 lbs.	100 lbs.
List Price, each	$16.50	$16.75	$17.00



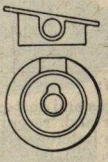
TYPE DABC CONDULETS—Angular

Size in inches	½	¾	1
Catalogue Number	DABC11	DABC22	DABC33
Standard Package	5	5	5
Shipping Weight Std. Pkg.	95 lbs.	100 lbs.	105 lbs.
List Price, each	$16.75	$17.00	$17.25



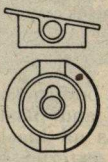
TYPE DADA CONDULETS—Angular

Size in inches	½	¾	1
Catalogue Number	DADA1	DADA2	DADA3
Standard Package	5	5	5
Shipping Weight Std. Pkg.	90 lbs.	95 lbs.	100 lbs.
List Price, each	$16.50	$16.75	$17.00



TYPE DADB CONDULETS—Angular

Size in inches	½	¾	1
Catalogue Number	DADB1	DADB2	DADB3
Standard Package	5	5	5
Shipping Weight Std. Pkg.	90 lbs.	95 lbs.	100 lbs.
List Price, each	$16.50	$16.75	$17.00



TYPE DADC CONDULETS—Angular

Size in inches	½	¾	1
Catalogue Number	DADC11	DADC22	DADC33
Standard Package	5	5	5
Shipping Weight Std. Pkg.	95 lbs.	100 lbs.	105 lbs.
List Price, each	$16.75	$17.00	$17.25

In ordering, the following data must be furnished:

First: Location of Condulet in car; i. e., letter case, bag-rack or storage section. Second Wattage of lamp. Third: Style of lamp bulb. Fourth: Distance from floor to ceiling at point where Condulet is to be installed. Fifth: Finish of reflector—porcelain enameled or aluminumized. Sixth: Curvature of car ceiling, which can best be given by a cross section drawing of the car.

For finishes and assortments, see note on page Cross Reference No. CH1000E20.

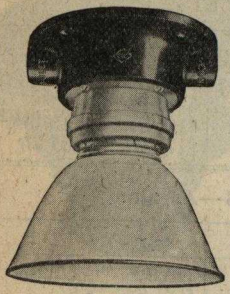
Lamp receptacle PE55 for Condulets of the DA and DB series is listed separately on page Cross Reference No. CH1000E29.

LO, CL AND LP SERIES CONDULET BODIES

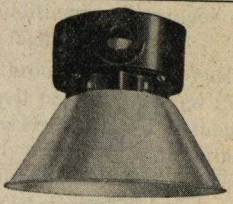
LO SERIES—TYPES LO, LOA, LOC, LOL, LOCA, LOT AND LOX
CL SERIES—TYPES CL, CLA, CLC, CLL, CLT AND CLX
LP SERIES—TYPES LP, LPC AND LPT

FOR CEILING LAMP OUTLETS

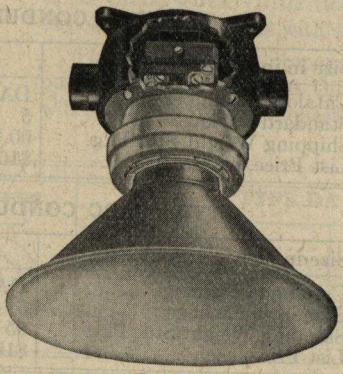
Take Fittings or Fixtures Enumerated Below



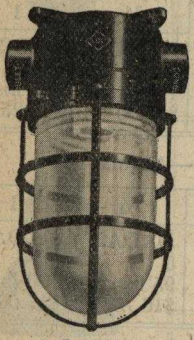
Type CLC
Showing Crouse-Hinds Combination Reflector Holder and Socket Equipment CRSE1 and Reflector Mounted



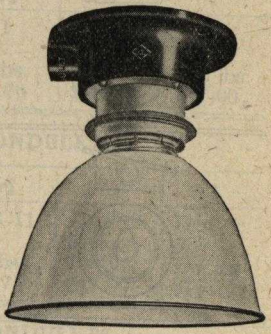
Type LP
Showing Crouse-Hinds Reflector and Receptacle Holder SRH2, Reflector SH25 and Norbitt Conduletto Clamp Receptacle C337 Mounted



Type LOC
Showing Crouse-Hinds Combination Reflector Holder and Socket Equipment CRSE1, Terminal Block CF101 and Reflector Mounted
(Broken-away View)



Type LOC
Showing Crouse-Hinds Vapor, Gas and Dust-Proof Equipment VGDE1 Mounted



Type CL
Showing S. C. H. and L. Co. Pendant No. 8294 and Reflector Mounted

Condulet bodies of the LO, CL and LP series take the following fittings or fixtures:

CROUSE-HINDS—Combination reflector holder and socket equipment CRSE1, and vapor, gas and dust-proof equipments VGDE1 and VGDE2, listed on page Cross Reference No. CH160a; reflector and receptacle holder SRH2, listed on page Cross Reference No. CH160a; reflector SH25; listed on page Cross Reference No. CH160a, and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH190. Receptacle mounting plate RMP1, listed on page Cross Reference No. CH160a and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH190; terminal block CF101 bodies listed on page Cross Reference No. CH160a; blank covers, listed on page Cross Reference No. CH150a. Gaskets for blank covers LOB00 and LOB000 are listed seperately on page Cross Reference No. CH177.

ADAMS & WESTLAKE CO.—Fixtures S-912, 17080, and 18010.

SAFETY CAR HEATING AND LIGHTING CO.—Pendant 8294.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Gray lead finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies gray lead finish. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. Special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, can be furnished on special order.

Black enameled, gray lead and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet bodies of the LO series are listed on page Cross Reference No. CH149.
Condulet bodies of the CL series are listed on page Cross Reference No. CH150.
Condulet bodies of the LP series are listed on page Cross Reference No. CH150a.
Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH148)

TYPES LO, LOA, LOC, LOL, LOCA, LOT AND LOX CONDULET BODIES

FOR CEILING LAMP OUTLETS



TYPE LO CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LO1	LO2	LO3
Standard Package	50	35	25
Shipping Weight Std. Pkg.	120 lbs.	100 lbs.	80 lbs.
List Price, each	$1.15	$1.25	$1.35



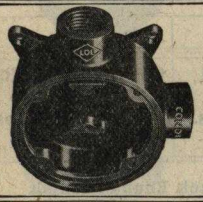
TYPE LOA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LOA1	LOA2	LOA3
Standard Package	50	35	25
Shipping Weight Std. Pkg.	125 lbs.	100 lbs.	85 lbs.
List Price, each	$1.25	$1.35	$1.45



TYPE LOC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LOC11	LOC22	LOC33
Standard Package	50	35	25
Shipping Weight Std. Pkg.	125 lbs.	100 lbs.	85 lbs.
List Price, each	$1.25	$1.35	$1.45



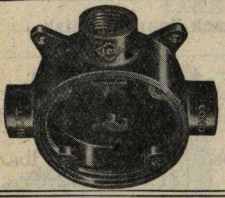
TYPE LOL CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LOL11	LOL22	LOL33
Standard Package	50	35	25
Shipping Weight Std. Pkg.	125 lbs.	100 lbs.	85 lbs.
List Price, each	$1.25	$1.35	$1.45



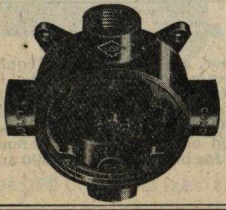
TYPE LOCA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LOCA111	LOCA222	LOCA333
Standard Package	50	35	25
Shipping Weight Std. Pkg.	130 lbs.	110 lbs.	90 lbs.
List Price, each	$1.35	$1.45	$1.55



TYPE LOT CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LOT111	LOT222	LOT333
Standard Package	50	35	25
Shipping Weight Std. Pkg.	125 lbs.	100 lbs.	85 lbs.
List Price, each	$1.30	$1.40	$1.50



TYPE LOX CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LOX1111	LOX2222	LOX3333
Standard Package	50	35	25
Shipping Weight Std. Pkg.	130 lbs.	110 lbs.	90 lbs.
List Price, each	$1.40	$1.50	$1.60

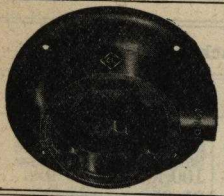
Fixture fastening screw holes are drilled and tapped for 10–30 screws.

(Cross Reference No. CH149)

CL, CLA, CLC, CLL, CLT AND CLX CONDULET BODIES

FOR CEILING LAMP OUTLETS

Take Fittings or Fixtures Enumerated Below



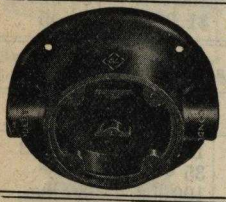
TYPE CL CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	CL1	CL2	CL3
Standard Package	50	35	25
Shipping Weight Standard Package	200 lbs.	140 lbs.	110 lbs.
List Price, each	$1.60	$1.70	$1.80



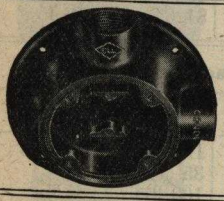
TYPE CLA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	CLA1	CLA2	CLA3
Standard Package	50	35	25
Shipping Weight Standard Package	200 lbs.	140 lbs.	110 lbs.
List Price, each	$1.70	$1.80	$1.90



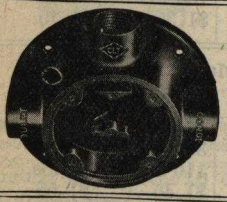
TYPE CLC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	CLC11	CLC22	CLC33
Standard Package	50	35	25
Shipping Weight Standard Package	210 lbs.	145 lbs.	115 lbs.
List Price, each	$1.70	$1.80	$1.90



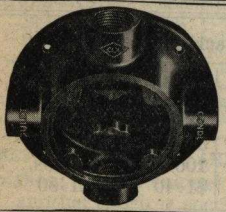
TYPE CLL CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	CLL11	CLL22	CLL33
Standard Package	50	35	25
Shipping Weight Standard Package	210 lbs.	145 lbs.	115 lbs.
List Price, each	$1.70	$1.80	$1.90



TYPE CLT CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	CLT111	CLT222	CLT333
Standard Package	50	35	25
Shipping Weight Standard Package	215 lbs.	150 lbs.	120 lbs.
List Price, each	$1.75	$1.85	$1.95



TYPE CLX CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	CLX1111	CLX2222	CLX3333
Standard Package	50	35	25
Shipping Weight Standard Package	220 lbs.	155 lbs.	125 lbs.
List Price, each	$1.85	$1.95	$2.05

Fixture fastening screw holes are drilled and tapped for 10-32 screws.

Condulet bodies of the CL series take the following fittings or fixtures:

CROUSE-HINDS—Combination reflector holder and socket equipment CRSE1, and vapor, gas and dust-proof equipments VGDE1 and VGDE2, listed on page Cross Reference No. CH160a; reflector and receptacle holder SRH2, listed on page Cross Reference No. CH160a; reflector SH25, listed on page Cross Reference No. CH160a, and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH190. Receptacle mounting plate RMP1, listed on page Cross Reference No. CH160a, and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH190; terminal block CF101, listed on page Cross Reference No. CH160a; blank covers, listed on page Cross Reference No. CH150a. Gaskets for blank covers LOB00 and LOB000 are listed separately on page Cross Reference No. CH177.

ADAMS & WESTLAKE CO.—Fixtures S-912, 17080 and 18010.

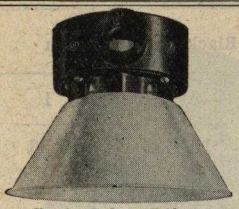
SAFETY CAR HEATING AND LIGHTING CO.—Pendant 8294.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH150)

TYPES LP, LPC AND LPT CONDULET BODIES

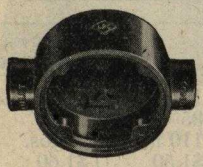
Take Fittings or Fixtures Enumerated on Preceding Page



Showing Reflector Holder, Reflector and Receptacle Installed
Not included in prices for Conduit Body

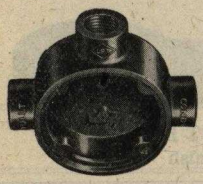
TYPE LP CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LP1	LP2	LP3
Standard Package	50	35	25
Ship. Weight Std. Pkg.	100 lbs.	80 lbs.	60 lbs.
List Price, each	$1.15	$1.25	$1.35



TYPE LPC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LPC11	LPC22	LPC33
Standard Package	50	35	25
Ship. Weight Std. Pkg.	110 lbs.	90 lbs.	65 lbs.
List Price, each	$1.25	$1.35	$1.45



TYPE LPT CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LPT111	LPT222	LPT333
Standard Package	50	35	25
Ship. Weight Std. Pkg.	120 lbs.	100 lbs.	75 lbs.
List Price, each	$1.30	$1.40	$1.50



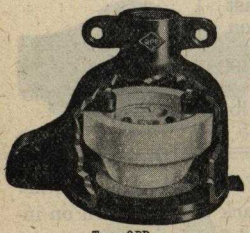
BLANK COVERS FOR LO, LP AND CL SERIES OF CONDULET BODIES

Furnished with Cover Fastening Screws and Gasket

Style	Cast	Sheet Metal
Catalogue Number	LOB00	LOB000
Standard Package	100	100
Shipping Weight Std. Pkg.	90 lbs.	65 lbs.
List Price, each	$ .50	$ .30

TYPE QPB CONDULETS

TAKE PLUG RECEPTACLES ENUMERATED BELOW



Type QPB
(Broken-away View)
Showing Plug Receptacle Mounted
(Receptacle not included in List Price)

Condulets of this series are both weatherproof and dustproof, making them equally serviceable for outdoor or indoor installations. The door is held closed by a strong spring, when the plug is not inserted in receptacle.

TYPE QPB CONDULETS—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	QPB1	QPB2	QPB3
Standard Package	50	35	25
Shipping Weight Std. Pkg	180 lbs.	135 lbs.	105 lbs.
List Price, each	$1.90	$2.00	$2.20

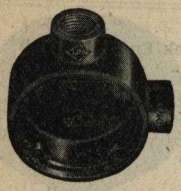
Type QPB Condulets take the following plug receptacles:

CUTLER-HAMMER—7618 (6 Amp.). **G. E. CO.**—49489, 102700 (10 Amp.). **HUBBELL**—5617, 5624 (10 Amp.) 5621 (20 Amp., Polarity).

(Cross Reference No. CH150a)

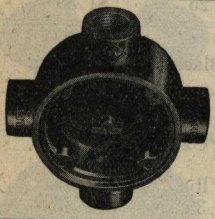
TYPES LPL AND LPX CONDULET BODIES

Take Fittings or Fixtures Illustrated and Enumerated on Page Cross Reference No. CH148



TYPE LPL CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	LPL11	LPL22	LPL33
Standard Package	50	35	25
Shipping Weight Std. Pkg.	110 lbs.	90 lbs.	65 lbs.
List Price, each	$1.25	$1.35	$1.45

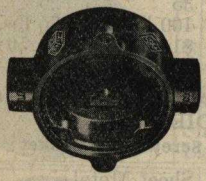


TYPE LPX CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Cataolgue Number	LPX1111	LPX2222	LPX3333
Standard Package	50	35	25
Shipping Weight Std. Pkg.	130 lbs.	110 lbs.	90 lbs.
List Price, each	$1.40	$1.50	$1.60

TYPE LQC CONDULET BODIES

Take Fittings or Fixtures Illustrated and Enumerated on Page Cross Reference No. CH148



TYPE LQC CONDULET BODIES
Black Enamel Finish

Size in inches	1	1¼
Catalogue Number	LQC33	LQC44
Standard Package	25	25
Shipping Weight Std. Pkg.	85 lbs.	90 lbs.
List Price, each	$1.45	$1.55

COVERS

For All the Above Condulet Bodies and Those of the LO, CL and BO Series
Furnished with Cover Fastening Screws and Gasket



Blank Covers		Style	Cover with Hub for ⅜-inch Conduit
Cast Iron	Sheet Metal		Cast Iron
LOB00	LOB000	Catalogue Number	LOB008
100	100	Standard Package	100
90 lbs.	65 lbs.	Shipping Weight Std. Pkg.	160 lbs.
$ .50	$ .30	List Price, each	$ .65



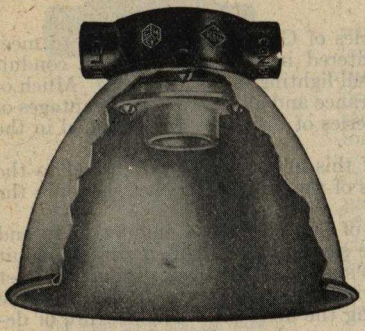
Finishes: Black enamel is the standard finish for Condulets and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special metals and finishes, see page Cross Reference No. CH182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet bodies of LO, CL and BO series are listed respectively on pages Cross Reference Nos. CH149, CH150 and CH151.

TYPES RF, RFC, RFA AND RFCA CONDULET BODIES

Take Elliptical Conduletto Receptacle RK527 and Reflector SH3



Type RFC
With Receptacle RK527 and Reflector SH3
(Broken-away View)

All the requirements of a car vestibule light installation are fully met in the combination of a Condulet body of the RF series, reflector SH3 and Elliptical Conduletto receptacle RK527. A bezel (Cat. No. Bezel 1), which is fastened by screws to the edge of the opening in the ceiling finish, hides any irregularity in the shape of the hole and makes a neat job. This bezel should always be used to give proper finish to the installation.

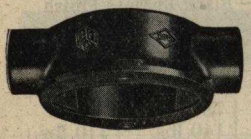
With this form of installation, either the receptacle or the reflector can easily be removed independently of each other.

Any G18½ bulb lamp can be used in reflector SH3.



TYPE RF CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RF1	RF2	RF3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	145 lbs.	115 lbs.	100 lbs.
List Price, each	$ .60	$ .70	$1.00



TYPE RFC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RFC11	RFC22	RFC33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	150 lbs.	120 lbs.	95 lbs.
List Price, each	$ .70	$ .80	$1.10



TYPE RFA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RFA1	RFA2	RFA3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	170 lbs.	140 lbs.	110 lbs.
List Price, each	$ .60	$ .70	$1.00



TYPE RFCA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RFCA111	RFCA222	RFCA333
Standard Package	100	75	50
Shipping Weight Std. Pkg.	175 lbs.	145 lbs.	115 lbs.
List Price, each	$ .80	$ .90	$1.20



REFLECTOR FOR ABOVE CONDULET BODIES
Porcelain Enamel Finish
Furnished with Fastening Screws

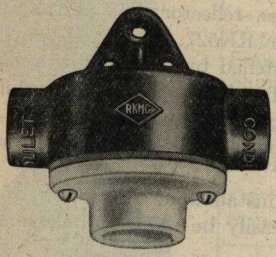
Catalogue Number	SH3
Standard Package	50
Shipping Weight Std. Pkg.	65 lbs.
List Price, each	$1.50

For finishes and assortments, see notes on page Cross Reference No. CH1000E20.
Elliptical Conduletto receptacle RK527 is listed on page Cross Reference No. CH188a.
Bezel 1 is listed on page Cross Reference No. CH160a.

TYPES RKMA, RKMB AND RKMC CONDULET BODIES

WITH ELLIPTICAL OPENINGS

Take Elliptical Conduletto Fittings or Elliptical Covers

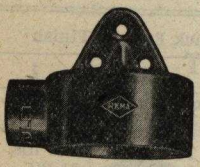


Type RKMC
With Elliptical Receptacle RK527 Mounted

The RKM series of Condulets is designed to meet conditions encountered in installing exposed conduit systems for deck sill lighting in railway cars. Much of the general appearance and all the wiring advantages of the RJ and RK series of Condulets are retained in the RKM series.

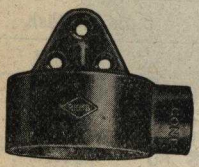
A Condulet of this newer series is attached to the deck sill by means of the integral bracket shown in the illustration.

Back surfaces of hub or hubs, Condulet body and bracket are in the same plane. This permits conduit to run next to the surface of the deck sill and to enter a Condulet hub without the necessity of offsetting the conduit or recessing the deck sill. This feature of design also imparts a good appearance, insures great rigidity and materially reduces the work of installing.



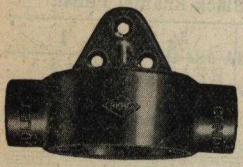
TYPE RKMA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RKMA1	RKMA2	RKMA3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	160 lbs.	140 lbs.	110 lbs.
List Price, each	$ .60	$ .70	$1.00



TYPE RKMB CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RKMB1	RKMB2	RKMB3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	160 lbs.	140 lbs.	110 lbs.
List Price, each	$ .60	$ .70	$1.00



TYPE RKMC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RKMC11	RKMC22	RKMC33
Standard Package	100	75	50
Shipping Weight Std. Pkg.	175 lbs.	155 lbs.	125 lbs.
List Price, each	$ .70	$ .80	$1.10

TYPE RKE CONDULET BODIES*

WITH ELLIPTICAL OPENINGS

Take Elliptical Conduletto Fittings or Elliptical Covers



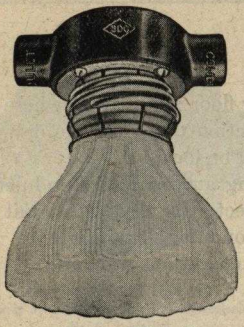
TYPE RKE CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	RKE1	RKE2	RKE3
Standard Package	100	75	50
Shipping Weight Std. Pkg.	140 lbs.	100 lbs.	80 lbs.
List Price, each	$ .50	$ .60	$ .90

*For other Condulet bodies of this series, see pages Cross Reference Nos. CH69 to CH72, inclusive.
For finishes and assortments, see page Cross Reference No. CH1000E20.
Elliptical Conduletto fittings are listed on page Cross Reference No. CH188a.
Elliptical covers are listed on page Cross Reference No. CH73.

TYPES SD AND SDC CONDULET BODIES

Take Receptacle PE56 and Shade Holder SDH1, Listed Below

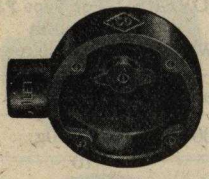


Type SDC
With Shade Holder SDH1 and Shade Mounted

When it is desired to use reflectors with incandescent lamps where head room is limited, as in show windows or in cars with low ceilings, satisfactory results can only be secured by using the shallowest possible fitting consistent with good wiring practice. The combination of a Condulet body of the SD series, SDH1 shade holder and PE56 receptacle is designed for just such locations.

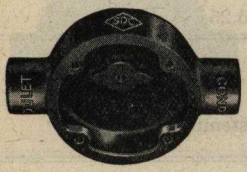
In car installations it is possible to conceal the conduit and Condulet body behind the headlining, and as the shade holder partially telescopes the Condulet body, a minimum projection of lamp and reflector is secured. The headlining is firmly clamped between the rim of the Condulet body and the flange on the shade holder.

For show windows, where the conduit is concealed, a similar method of installation can be used.



TYPE SD CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SD1	SD2	SD3
Standard Package	75	50	25
Shipping Weight Std. Pkg.	140 lbs.	105 lbs.	60 lbs.
List Price, each	$ .65	$ .75	$ .95



TYPE SDC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SDC11	SDC22	SDC33
Standard Package	75	50	25
Shipping Weight Std. Pkg.	150 lbs.	115 lbs.	65 lbs.
List Price, each	$ .75	$ .80	$1.05

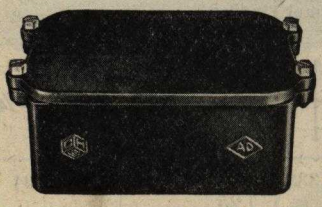


RECEPTACLE		SHADE HOLDER
For Above Condulet Bodies		
PE56	Catalogue Number	SDH1
200	Standard Package	50
95 lbs.	Ship. Wt. Std. Pkg.	30 lbs.
$ .40	List Price, each	$2.00



TYPE AD JUNCTION BOX—Cast Iron

Inside Dimensions—Length 8 inches, Width 6 inches, Depth (inside) 3¼ inches. Furnished with Cast-Iron Cover and Fastening Bolts



Type AD Junction Box with Cover Attached

Cover has putty groove which makes possible a watertight joint.

Walls of box are 7/16-inch thick and can be tapped to take five threads on sizes of conduit up to and including 2-inch.

Type AD		List Prices for Tapping *			
Catalogue Number	AD1	Conduit Size (Inches)	½ ¾	1 1¼	1½ 2
Stand. Package	10				
Wt. Stand. Pkg.	250 lbs.	List Price Per Hole	$ .35	$ .50	$ .85
List Price, each	$8.20				

*To determine the discount which applies to type AD junction box tapped, add price of tapping to price of junction box.

For finishes and assortments, see notes on page Cross Reference No. CH1000E20.

TYPE FJC FLOOR JUNCTION CONDULET BODIES

Take Cast-Brass Cover FJ000 or Cast-Iron Cover FJ00g, Listed Below

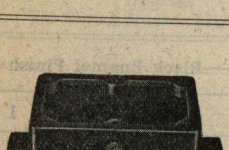


Type FJC
With Cast-Brass Cover FJ000

This Condulet is designed for floor installation where it is desired to make electrical connection to a machine or where it is expected that a machine will be located.

It is general practice, in using a type FJC Condulet, to drill the cover and attach a connector for flexible conduit and then run the wires through the conduit to the machine.

Rigid conduit can be used, if conditions warrant.



TYPE FJC CONDULET BODIES Black Enamel Finish			COVERS—For Type FJC Condulet Bodies With Gasket and Screws	
Size in inches	1¼	1½	Cast Brass	Cast Iron
CatalogueNo.	FJC44	FJC55	FJ000	FJ00g
Std. Pkg. . . .	10	10	10	10
Wt. Std.Pkg.	85 lbs.	90 lbs.	60 lbs.	45 lbs.
List, each. . .	$3.75	$3.85	$6.25	$2.25

TYPE PNX CONDULETS

Furnished with Blank Cast-Iron Cover, Gasket and Cover Fastening Screws*



Type PNX with Cover

Type PNX is a water-tight, marine junction box. It is thoroughly gasketed and has blind screw holes.

Outside dimensions: Diameter, 4⅜ inches; height, 2⁹⁄₁₆ inches.

TYPE PNX CONDULETS—Black Enamel Finish

Size in inches	¾ / ¾ — ¾ / ¾	¾ / 1 — 1 / ¾	1 / 1 — 1 / 1	¾ / 1¼ — 1¼ / ¾	1 / 1¼ — 1¼ / 1
Catalogue Number	PNX2222	PNX3223	PNX3333	PNX4224	PNX4334
Standard Package.	25	25	25	25	25
Shipping Weight Std. Pkg. . .	125 lbs.	130 lbs.	130 lbs.	140 lbs.	145 lbs.
List Price, each.	$2.70	$2.80	$2.85	$2.90	$3.00

*Type PNX Condulets will, if specifically ordered, be furnished with cast-iron covers with ½-inch hub, instead of with blank cast-iron covers, at an advance of $0.25 list.

For finishes and assortments, see page Cross Reference No. CH1000E28.

TYPES MS AND MSC CONDULET BODIES

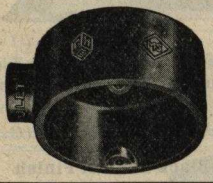
Take Benjamin Plate and Cover No. 36256 and Benjamin Receptacle No. 6C



Type MSC
Showing Benjamin Plate and Cover No. 36256 and Benjamin Receptacle No. 6C Installed

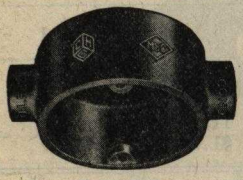
Types MS and MSC Condulet bodies are primarily intended for use back of the headlining in cars. The cover and the receptacle are flush with the car finish, and make a very neat appearance.

These Condulet bodies with the Benjamin fitting and cover also make an efficient and attractive form of lamp outlet installation for exposed conduit.



TYPE MS CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	MS1	MS2	MS3
Standard Package	75	50	25
Shipping Weight Std. Pkg.	135 lbs.	100 lbs.	55 lbs.
List Price, each	$ .60	$ .70	$ .85



TYPE MSC CONDULET BODIES—Black Enamel Finish

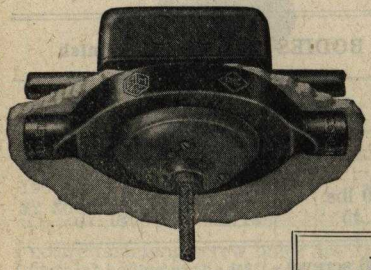
Size in inches	½	¾	1
Catalogue Number	MSC11	MSC22	MSC33
Standard Package	75	50	25
Shipping Weight Std. Pkg.	140 lbs.	105 lbs.	60 lbs.
List Price, each	$ .75	$ .85	$1.00

CANOPIES—Sheet Steel

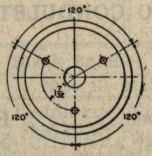
Blank Canopy and Canopy with ⅜-Inch Cord Bushing

For Condulets of PH and PHM Series

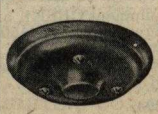
Furnished with all Necessary Fastening Screws



Installation of
Type PHC Condulet and
Canopy PH081



All Condulets of the PH and PHM series are now furnished tapped for canopy screws. The diagram at the left shows how to tap the webs of PH and PHM series Condulets sold prior to the bringing out of the canopies. Three No. 6-32 screws are furnished with each canopy.

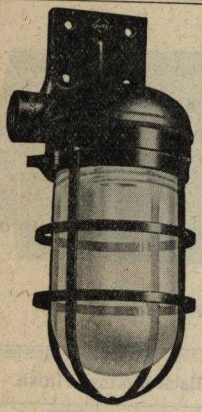
BLANK CANOPY		CANOPY WITH BUSHING
	Black Finish	
		
PH00	Cat. No.	PH081
50	Std. Pkg.	50
30 lbs.	Wt. Std. Pkg.	30 lbs.
$1.00	List, each	$1.25

For finishes and assortments, see page Cross Reference No. CH1000E28.
Condulets of the PH and PHM series are listed on pages Cross Reference Nos. CH84a and CH86a.

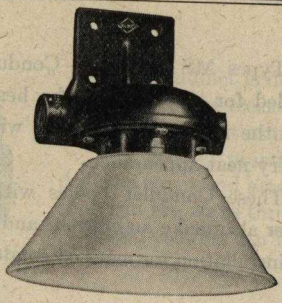
TYPES BLMA, BLMB AND BLMC CONDULET BODIES

FOR DECK SILL AND SIDE WALL LAMP OUTLETS

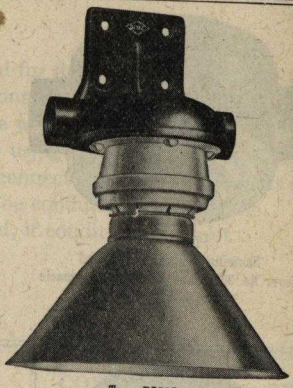
Take Fittings or Fixtures Enumerated Below



Type BLMA
Showing Crouse-Hinds Vapor, Gas and Dust-Proof Equipment VGDE1 Mounted



Type BLMC
Showing Crouse-Hinds Reflector and Receptacle Holder SRH2, Reflector SH25 and Norbitt Conduletto Clamp Receptacle C337 Mounted



Type BLMC
Showing Crouse-Hinds Combination Reflector Holder and Socket Equipment CRSE1 and Reflector Mounted



TYPE BLMA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	BLMA1	BLMA2	BLMA3
Standard Package	50	35	25
Shipping Weight Std. Pkg.	145 lbs.	110 lbs.	90 lbs.
List Price, each	$1.35	$1.50	$1.65



TYPE BLMB CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	BLMB1	BLMB2	BLMB3
Standard Package	50	35	25
Shipping Weight Std. Pkg.	145 lbs.	110 lbs.	90 lbs.
List Price, each	$1.35	$1.50	$1.65



TYPE BLMC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	BLMC11	BLMC22	BLMC33
Standard Package	50	35	25
Shipping Weight Std. Pkg.	150 lbs.	120 lbs.	100 lbs.
List Price, each	$1.45	$1.60	$1.75

Fixture fastening screw holes are drilled and tapped for 10-32 screws.

Condulet bodies of the BLM series take the following fittings or fixtures:

CROUSE-HINDS—Combination reflector holder and socket equipment CRSE1, and vapor, gas and dust-proof equipments VGDE1 and VGDE2, listed on page Cross Reference No. CH160a; reflector and receptacle holder SRH2, listed on page Cross Reference No. CH160a, reflector SH25 listed on page Cross Reference No. CH160a, and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH160a.

ADAMS & WESTLAKE CO.—Fixtures S-912, 17080 and 18010.

SAFETY CAR HEATING AND LIGHTING CO.—Pendant 8294.

For finishes and assortments, see note on page Cross Reference No. CH148.

Condulet reducers are listed on page Cross Reference No. CH171.

TYPES DSOA, DSOB, DSOC, DSPA, DSPB AND DSPC CONDULET BODIES

FOR DECK SILL AND SIDE WALL LAMP OUTLETS

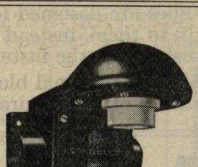
Take Fittings or Fixtures Enumerated Below

Condulet Bodies of the DSO Series are furnished with Cover and Cover Fastening Screws





Type DSOA
Showing Crouse-Hinds Combination Reflector Holder and Socket Equipment CRSE1 and Shade Mounted

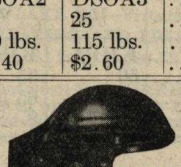


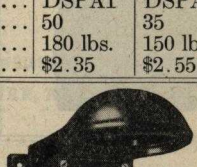
Type DSPC
Showing Receptacle Mounting Plate RMP1 and Norbitt Conduletto Receptacle C337 Mounted

Condulet Bodies of the DSP Series are furnished with Cover, Cover Gasket and Cover Fastening Screws

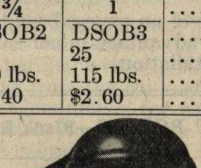


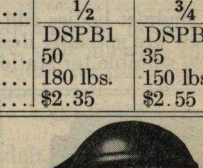
Type DSOA			Black Enamel Finish	Type DSPA		
½	¾	1	Size in inches	½	¾	1
DSOA1	DSOA2	DSOA3	Catalogue Number	DSPA1	DSPA2	DSPA3
50	35	25	Standard Package	50	35	25
180 lbs.	150 lbs.	115 lbs.	Shipping Weight Std. Pkg.	180 lbs.	150 lbs.	110 lbs.
$2.20	$2.40	$2.60	List Price, each	$2.35	$2.55	$2.75





Type DSOB			Black Enamel Finish	Type DSPB		
½	¾	1	Size in inches	½	¾	1
DSOB1	DSOB2	DSOB3	Catalogue Number	DSPB1	DSPB2	DSPB3
50	35	25	Standard Package	50	35	25
180 lbs.	150 lbs.	115 lbs.	Shipping Weight Std. Pkg.	180 lbs.	150 lbs.	110 lbs.
$2.20	$2.40	$2.60	List Price, each	$2.35	$2.55	$2.75





Type DSOC			Black Enamel Finish	Type DSPC		
½	¾	1	Size in inches	½	¾	1
DSOC11	DSOC22	DSOC33	Catalogue Number	DSPC11	DSPC22	DSPC33
50	35	25	Standard Package	50	35	25
190 lbs.	160 lbs.	120 lbs.	Shipping Weight Std. Pkg.	190 lbs.	160 lbs.	120 lbs.
$2.30	$2.50	$2.70	List Price, each	$2.45	$2.65	$2.85

Fixture fastening screw holes are drilled and tapped for 10-30 screws.

Condulet bodies of the DSO and DSP series take the following fittings or fixtures:

CROUSE HINDS—Combination reflector holder and socket equipment CRSE1, and vapor, gas and dust-proof equipment VGDE1, listed on page Cross Reference No. CH160a, reflector and receptacle holder SRH2, listed on page Cross Reference No. CH160a; reflector SH25, listed on page Cross Reference No. CH160a, and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH190. Receptacle mounting plate RMP1, listed on page Cross Reference No. CH160a, and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH190; terminal block CF101, listed on page Cross Reference No. CH160a.

ADAMS & WESTLAKE CO.—Fixtures S-912, 17080 and 18010.

SAFETY CAR HEATING AND LIGHTING CO.—Pendant 8294.

For finishes and assortments, see note on page Cross Reference No. CH158.

Gasket for Cover DSP series of Condulet bodies is listed separately on page Cross Reference No. CH177.

Condulet reducers are listed on page Cross Reference CH171.

(Cross Reference No. CH153)

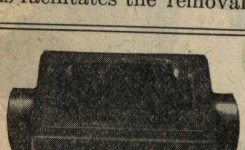
TYPES JRR AND KRR CONDULET BODIES

FOR SIDE BRACKET FIXTURES

Take Crouse-Hinds Types JRRH or JRRV Side Bracket Hoods; Crouse-Hinds Terminal Block CF101, and Safety Car Heating and Lighting Co. Fixtures Nos. 8211 or 8825

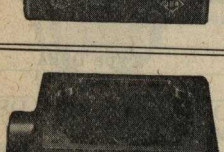
These Condulet bodies are designed for mounting back of car finish; and fittings or fixtures may be screwed directly to them, instead of to the finish of the car; therefore, it is unnecessary to reinforce the car finish where the fastening screws enter.

The use of Crouse-Hinds terminal block CF101 eliminates the necessity of soldering joints. This facilitates the removal of the fixture for refinishing.



TYPE JRR CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	JRR11	JRR22	JRR33
Standard Package	50	35	25
Shipping Weight Std. Pkg.	85 lbs.	70 lbs.	60 lbs.
List Price, each	$ .80	$ .90	$1.05



TYPE KRR CONDULET BODIES—Black Enamel Finish

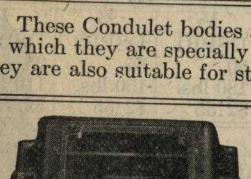
Size in inches	½	¾	1
Catalogue Number	KRR1	KRR2	KRR3
Standard Package	50	35	25
Shipping Weight Std. Pkg	80 lbs.	65 lbs.	60 lbs.
List Price, each	$ .75	$ .85	$1.10

TYPES JRM AND KRM CONDULET BODIES

FOR SIDE BRACKET FIXTURES

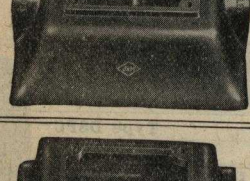
Take Crouse-Hinds Types JRRH or JRRV Side Bracket Hoods; Crouse-Hinds Terminal Block CF101, and Safety Car Heating and Lighting Co. Fixtures Nos. 8211 or 8825

These Condulet bodies add materially to the appearance of an exposed conduit installation, for which they are specially designed. They can be used to advantage in car saloons or toilets. They are also suitable for stations, platforms and similar installations.



TYPE JRM CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	JRM11	JRM22	JRM33
Standard Package	50	35	25
Shipping Weight Std. Pkg	190 lbs.	150 lbs.	110 lbs.
List Price, each	$2.00	$2.20	$2.40



TYPE KRM CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	KRM1	KRM2	KRM3
Standard Package	50	35	25
Shipping Weight Std. Pkg	185 lbs.	145 lbs.	100 lbs.
List Price, each	$1.90	$2.10	$2.30

Screw holes for fastening side bracket hoods to Condulet bodies are drilled and tapped for 10-30 screws.

For finishes and assortments, see note on page Cross Reference No. CH158.

Types JRRH and JRRV side bracket hoods are listed on page Cross Reference No. CH155a. Gasket for use between types JRRH and JRRV side bracket hoods and above Condulet bodies is listed on page Cross Reference No. CH177. Condulet reducers are listed on page Cross Reference No. CH171. Terminal block CF101 is listed on page Cross Reference No. CH160a.

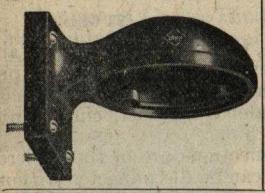
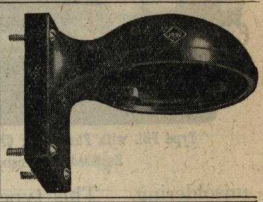
(Cross Reference No. CH154)

TYPES JRRH AND JRRV SIDE BRACKET HOODS

For Types JRR, KRR, JRM and KRM Condulet Bodies

Take Fittings or Fixtures Enumerated Below

Furnished with Screws for Fastening to Condulet Body

TYPE JRRH SIDE BRACKET HOOD For Condulet Body Installed in Horizontal Position			TYPE JRRV SIDE BRACKET HOOD For Condulet Body Installed in Vertical Position
	JRRH123	..Catalogue No...	JRRV123
	50	..Standard Pkg...	50
	125 lbs.	Ship. Wt. Std. Pkg.	125 lbs.
	$1.10	.List Price, each.	$1.10
			

Fixture fastening screw holes are drilled and tapped for 10–30 screws.

Types JRRH and JRRV side bracket hoods take the following fittings or fixtures:

CROUSE-HINDS—Combination reflector holder and socket equipment CRSE1, and vapor, gas and dust-proof equipments VGDE1, listed on page Cross Reference No. CH160a; reflector and receptacle holder SRH2, listed on page Cross Reference No. CH160a; reflector SH25, listed on page Cross Reference No. CH160a, and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH190. Receptacle mounting plate RMP1, listed on page Cross Reference No. CH160a, and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH190.

ADAMS & WESTLAKE CO.—Fixtures S-912, 17080 and 18010.

SAFETY CAR HEATING AND LIGHTING CO.—Pendant 8294.

Condulet bodies that take types JRRH or JRRV side bracket hoods are listed on page Cross Reference No. CH154.

Gasket for use between types JRRH or JRRV side bracket hoods and JRR, KRR, JRM and KRM Condulet bodies is listed on page Cross Reference No. CH177.

Condulet reducers are listed on page Cross Reference No. CH171.

TYPES LBA AND LBV CONDULET BODIES

WITH OBROUND OPENINGS

Take Obround Covers and Obround Conduletto Fittings

In type LBA Condulet the hub through the flange is at an angle of 18 degrees from the perpendicular, to compensate for the curvature of the car roof, thus allowing the conduit to enter the car parallel with the side finish. It is exceptionally suited for use where it is desired to bring conduit from the car roof to side brackets or berth lights.

Type LBV Condulet is for use where the conduit makes a right angle turn and passes through the roof or floor of a car.

The flange completely covers the opening made for the conduit, and, by the use of a gasket, this opening is made water-tight.



TYPE LBA (Angular) CONDULET BODIES—Black Enamel Finish

Size in inches..	½	¾	1	1¼	1½	2
Catalogue No.	LBA11	LBA22	LBA33	LBA44	LBA55	LBA66
Standard Pkg.	50	35	25	15	10	5
Wt. Std. Pkg..	100 lbs.	80 lbs.	70 lbs.	60 lbs.	55 lbs.	40 lbs.
List Price, each	$ .80	$ .90	$1.10	$1.80	$2.00	$3.00



TYPE LBV CONDULET BODIES—Black Enamel Finish

Size in inches..	½	¾	1	1¼	1½	2
Catalogue No.	LBV11	LBV22	LBV33	LBV44	LBV55	LBV66
Standard Pkg.	50	35	25	15	10	5
Wt. Std. Pkg..	100 lbs.	80 lbs.	70 lbs.	60 lbs.	55 lbs.	40 lbs.
List Price, each	$ .80	$ .90	$1.10	$1.80	$2.00	$3.00

Obround covers are listed on pages Cross Reference Nos. CH30, CH31 and CH32. Obround Conduletto fittings are listed on page Cross Reference No. CH184a.

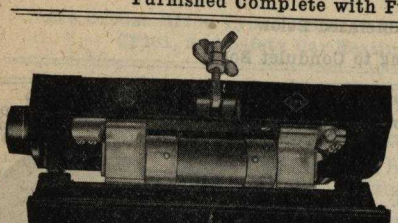
Gaskets for Obround covers are listed separately on page Cross Reference No. CH176.

Black enameled, gray lead and galvanized Condulet bodies or side bracket hoods of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

TYPES FBL AND FBR CONDULETS

HOUSINGS FOR BATTERY FUSES

Furnished Complete with Fuse Block for 250 Volt Fuse, but without Fuse



Type FBL with Fuse Block CFB200E, Showing Enclosed Fuse Installed



Type FBL Condulet



Type FBR Condulet

These Condulets are of substantial design and suited to meet the most severe service. They are provided with a close fitting hinged cover which protects the contents of the Condulet from dust, cinders, and the weather.

The wire terminal connections are of the soldered sleeve type and, therefore, can be disconnected without unsoldering. This type of wire terminal construction permits the easy disconnection of the battery lead and eliminates the use of a hand connector within the battery box.

CONDULETS FOR N. E. C. CARTRIDGE FUSES

101 to 200 Ampere—Complete Except Fuse

FBL—Left Hand		FBR—Right Hand		Type
¾	1	¾	1	Size in inches
FBL22E	FBL33E	FBR22E	FBR33E	Catalogue No.
15	15	15	15	Standard Pkg.
300 lbs.	310 lbs.	300 lbs.	310 lbs.	Wt. Std. Pkg.
$9.30	$9.50	$9.30	$9.50	List Price,each

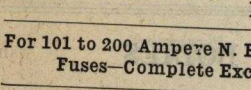
CONDULETS FOR OPEN LINK FUSES

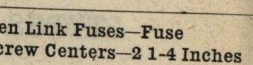
Complete Except Fuse

FBL—Left Hand		FBR—Right Hand
¾	1	¾	1
FBL22N	FBL33N	FBR22N	FBR33N
15	15	15	15
300 lbs.	310 lbs.	300 lbs.	310 lbs.
$8.80	$9.00	$8.80	$9.00

FUSE BLOCKS—For FBL and FBR Condulets

For 101 to 200 Ampere N. E. C. Cartridge Fuses—Complete Except Fuse	..... Style	For Open Link Fuses—Fuse Fastening Screw Centers—2 1-4 Inches
CFB200E	..Catalogue No..	CFB200N
15	..Standard Pkg..	15
40 lbs.	..Wt. Std. Pkg..	40 lbs.
$5.00	. List Price, each.	$4.65



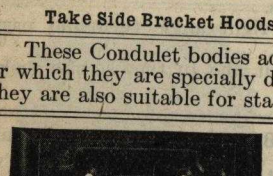


CONDULET BODIES—SO SERIES—FOR SIDE WALL INSTALLATIONS

TYPES SO AND SOC

Take Side Bracket Hoods Types MOH or MOV; also Crouse-Hinds Terminal Block CF101

These Condulet bodies add materially to the appearance of an exposed conduit installation, for which they are specially designed. They can be used to advantage in car saloons or toilets. They are also suitable for stations, platforms and similar installations.



TYPE SO CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SO1	SO2	SO3
Standard Package	50	35	25
Shipping Weight Std. Pkg	115 lbs.	100 lbs.	90 lbs.
List Price, each	$1.40	$1.70	$2.00



TYPE SOC CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	SOC11	SOC22	SOC33
Standard Package	50	35	25
Shipping Weight Std. Pkg	145 lbs.	115 lbs.	90 lbs.
List Price, each	$1.60	$1.90	$2.10

For finishes and assortments, see note on page Cross Reference No. CH158. Side bracket hoods types MOH and MOV are listed on page Cross Reference No. CH157. Gasket for use between types MOH or MOV side bracket hoods and types SO and SOC Condulet bodies is listed on page Cross Reference No. CH177. Crouse-Hinds terminal block CF101 is listed on page Cross Reference No. CH160a.

TYPE MOC CONDULET BODIES

FOR DECK SILL INSTALLATIONS

Take Crouse-Hinds Types MOH or MOV Side Bracket Hoods; also Take Crouse-Hinds Terminal Block CF101

These Condulet bodies are designed for mounting back of deck sill molding, and side bracket hoods may be screwed directly to them, instead of to the molding of the car; therefore, it is unnecessary to reinforce the molding where the fastening screws enter.

The use of Crouse-Hinds terminal block CF101 eliminates the necessity of soldering joints. This facilitates the removal of the side bracket hoods.



TYPE MOC CONDULET BODY—Black Enamel Finish		
Size in inches	3/4	
Catalogue Number	MOC2	
Standard Package	50	
Shipping Weight Standard Package	110 lbs.	
List Price, each	$2.00	

TYPES MOH AND MOV SIDE BRACKET HOODS

FOR TYPES SO, SOC, AND MOC CONDULET BODIES

Take Fittings or Fixtures Enumerated Below
Furnished with Screws for Fastening to Condulet Body



Type SO Condulet Body
Showing Type MOH Hood, S. C. H. and L. Co. Pendant 8294 and Shade Mounted



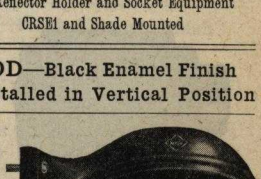
Type MOC Condulet Body
Showing Type MOH Hood, Crouse-Hinds Reflector and Receptacle Holder SRH2, Reflector SH25 and Norbitt Conduletto Clamp Receptacle C337 Mounted



Type MOC Condulet Body
Showing Type MOH Hood, Crouse-Hinds Combination Reflector Holder and Socket Equipment CRSE1 and Shade Mounted

TYPE MOH HOOD—Black Enamel Finish For Condulet Body Installed in Horizontal Position		TYPE MOV HOOD—Black Enamel Finish For Condulet Body Installed in Vertical Position
MOH123	Cat. No.	MOV123
50	Std. Pkg.	50
125 lbs.	Ship. Wt. Std. Pkg.	130 lbs.
$1.60	List Price, ea.	$1.60





Fixture fastening screw holes are drilled and tapped for 10–30 screws.

Types MOH and MOV side bracket hoods take the following fittings or fixtures:

CROUSE-HINDS—Combination reflector holder and socket equipment CRSE1, and vapor, gas, and dust-proof equipment VGDE1, listed on page Cross Reference No. CH160a; reflector and receptacle holder SRH2, listed on page Cross Reference No. CH160a, reflector SH25, listed on page Cross Reference No. CH160a, and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH190. Receptacle mounting plate RMP1, listed on page Cross Reference No. CH160a, and Norbitt Conduletto clamp receptacle C337, listed on page Cross Reference No. CH190.

ADAMS & WESTLAKE CO.—Fixtures S-912, 17080, and 18010.

SAFETY CAR HEATING AND LIGHTING CO.—Pendant 8294.

For finishes and assortments, see note on page Cross Reference No. CH158. Condulet bodies that take types MOH and MOV side bracket hoods are listed on this and the preceeding page.

Terminal block CF101 is listed on a page Cross Reference No. CH160a.

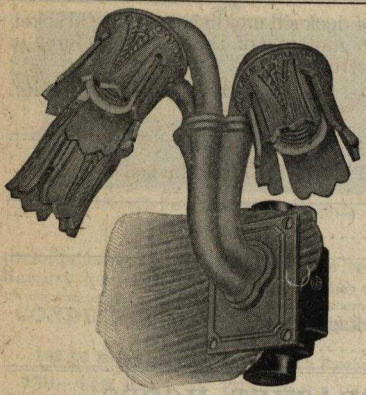
Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH157)

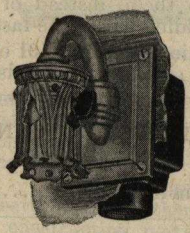
TYPES JRS AND KRS CONDULET BODIES

FOR SIDE BRACKET FIXTURES

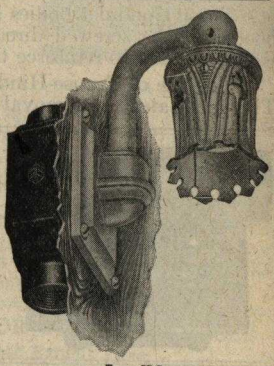
Take Safety Car Heating and Lighting Co. Fixtures Enumerated Below; also Take Crouse-Hinds Terminal Block CF101



Type JRS
Showing Safety Car Heating and Lighting Co. Fixture No. 2491 Mounted



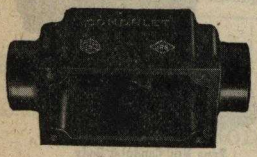
Type KRS
Showing Safety Car Heating and Lighting Co. Fixture No. 1982 Mounted



Type JRS
Showing Safety Car Heating and Lighting Co. Fixture No. 2328 Mounted

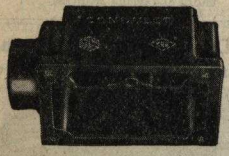
These Condulet bodies are designed for mounting back of car finish, and fittings or fixtures may be screwed directly to them, instead of to the finish of the car; therefore, it is unnecessary to reinforce the car finish where the fastening screws enter.

The use of Crouse-Hinds terminal block CF101 eliminates the necessity of soldering joints and thus facilitates the removal of the fixture for refinishing.



TYPE JRS CONDULET BODIES—Black Enamel Finish

Size in inches.....	½	¾	1
Catalogue Number.....	JRS11	JRS22	JRS33
Standard Package	50	35	25
Ship. Wt. Std. Pkg.....	100 lbs.	75 lbs.	60 lbs.
List Price, each.....	$1.15	$1.25	$1.35



TYPE KRS CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number.....	KRS1	KRS2	KRS3
Standard Package.....	50	35	25
Ship. Wt. Std. Pkg.....	110 lbs.	80 lbs.	65 lbs.
List Price, each.....	$1.05	$1.15	$1.25

Fixture fastening screw holes are drilled and tapped for 10-30 screws.

The above Condulet bodies take the following fittings or fixtures:

SAFETY CAR HEATING AND LIGHTING CO.—Nos. 1982, 2328, 2329, 2330, 2331, 2332, 2491, 2495, 2497, 2498, 3816.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Gray lead finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies gray lead finish. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulet bodies with plain and special finishes, aluminum Condulet bodies with plain and black enamel finish, see page Cross Reference No. CH182.

Black enameled, gray lead and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

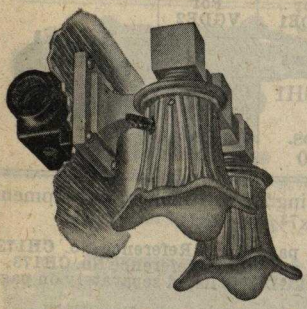
Terminal block CF101 is listed on page Cross Reference No. CH160a.

Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH158)

TYPES JRY, JRYA, KRY AND KRYA CONDULET BODIES

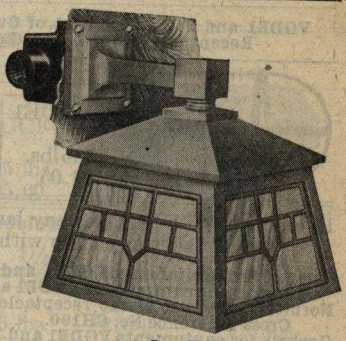
Take Norbitt Conduletto Fittings; Crouse-Hinds Terminal Block CF101, or Fixtures of Other Manufacturers Enumerated Below. Type KRYA forms a Part of the Crouse-Hinds Car Vestibule Lamp Equipment Illustrated Below



Type KRY
Showing Safety Car Heating and Lighting Co. Fixture No. 1933 Mounted

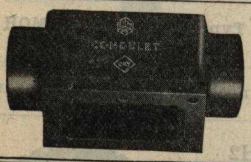


Crouse-Hinds Car Vestibule Lamp Equipment Consisting of Type KRYA, Crouse-Hinds Reflector Holder SRH3, Reflector SH25, Norbitt Receptacle C227 and Bezel



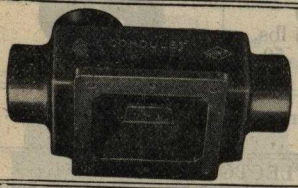
Type KRY
Showing Adams & Westlake Co. Fixture No. 11480 Mounted

These Condulet bodies are mounted back of the car finish and provide a rigid support for the fixtures.



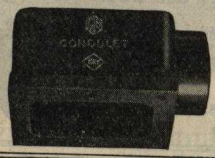
TYPE JRY CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	JRY11	JRY22	JRY33
Standard Package	50	35	25
Shipping Weight Std. Pkg.	75 lbs.	60 lbs.	45 lbs.
List Price, each	$ .70	$ .80	$ .90



TYPE JRYA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	JRYA111	JRYA222	JRYA333
Standard Package	50	35	25
Shipping Weight Std. Pkg.	120 lbs.	95 lbs.	75 lbs.
List Price, each	$ .85	$ .95	$1.05



TYPE KRY CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	KRY1	KRY2	KRY3
Standard Package	50	35	25
Shipping Weight Std. Pkg.	75 lbs.	60 lbs.	45 lbs.
List Price, each	$ .65	$ .75	$ .85



TYPE KRYA CONDULET BODIES—Black Enamel Finish

Size in inches	½	¾	1
Catalogue Number	KRYA1	KRYA2	KRYA3
Standard Package	50	35	25
Shipping Weight Std. Pkg.	80 lbs.	60 lbs.	45 lbs.
List Price, each	$ .70	$ .80	$ .90

Fixture fastening screw holes are drilled and tapped for 10–30 screws.

The above Condulet bodies take the following fixtures:

ADAMS & WESTLAKE CO.—Nos. 9030, 9280, 9430, 9800, 9990, 10000, 10010, 10340, 10710, 10750, 10760, 11060, 11070, 11230, 11360, 11370, 11390, 11480.

SAFETY CAR HEATING AND LIGHTING CO.—Nos. 1929, 1930, 1931, 1933, 1936, 1980, 2036, 2037, 2116, 2117, 2147, 2148, 2176, 2177, 2178, 2231, 2368, 2369, 2442, 2451, 2452, 2481, 2482, 3734, 3735, 3826, 3828, 3829, 3839, 8079, 8080, 8099, 8183, 8184, 8185, 8289, 8373, 8458, 8466, 8820, 8883, 9012, 9298.

Norbitt Conduletto fittings are listed on two following pages. Crouse-Hinds reflector holder SRH3 is listed on the following page. Reflector SH25, for use with reflector holder SRH3, is listed on the following page. Bezel for use with reflector SH25 is listed on the following page.

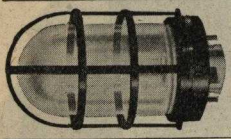
Terminal block CF101 is listed on the following page.

(Cross Reference No. CH159a)

CONDULET EQUIPMENTS AND ATTACHMENTS

CROUSE-HINDS VAPOR, GAS, AND DUST-PROOF EQUIPMENTS

VGDE1 and VGDE2 Consist of Guard, Globe, Receptacle, Holder and Gaskets



Furnished with Fastening Screws

VGDE1	VGDE2	...Cat. No...	CRSH1	CRSH2
35	35	...Std. Pkg...	35	35
145 lbs.	180 lbs.	Wt. Std. Pkg.	60 lbs.	75 lbs.
$4.05	$4.70	List Price, ea.	$1.10	$1.30

HOLDERS FOR GLOBE, GUARD AND RECEPTACLE

For VGDE1	For VGDE2



Equipment VGDE1 takes any lamp with dimensions not exceeding 2¾x5¼ inches. Equipment VGDE2 takes any lamp with dimensions not exceeding 3¾x7¾ inches.

Guards for equipments VGDE1 and VGDE2 are listed separately on page Cross Reference No. CH173.
Globes for equipments VGDE1 and VGDE2 are listed separately on page Cross Reference No. CH173.
Norbitt Conduletto clamp receptacle C337 for equipments VGDE1 or VGDE2 is listed separately on page Cross Reference No. CH190.
Gaskets for equipments VGDE1 and VGDE2 are listed separately on page Cross Reference No. CH177.
VGDE1 is for the BLM, DSO, DSP, CL, LO and LP Series of Condulet Bodies and types JRRH, JRRV, MOH and MOV Side Bracket Hoods. VGDE2 is for the BLM, CL, LO and LP Series of Condulet Bodies.

COMBINATION REFLECTOR HOLDER AND SOCKET EQUIPMENT—Bronze

For the BLM, DSO, DSP, CL, LO and LP Series of Condulet Bodies and Types JRRH, JRRV, MOH and MOV Side Bracket Hoods

Furnished Complete with Socket and necessary Fastening Screws



CRSE1	...Catalogue Number...
20	....Standard Package....
70 lbs.	...Ship. Wt. Std. Pkg...
$6.00	.....List Price, each.....

REFLECTOR AND RECEPTACLE HOLDER

Furnished with necessary Fastening Screws

SRH2
50
45 lbs.
$ .50



Norbitt Conduletto clamp receptacle C337 for Crouse-Hinds reflector and receptacle holder SRH2, is listed on page Cross Reference No. CH190.

REFLECTOR FOR HOLDERS SRH2, SRH3

Porcelain Enamel Finish



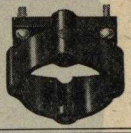
Furnished with necessary Fastening Screws

SH25	...Catalogue Number...
50	....Standard Package....
55 lbs.	...Ship. Wt. Std. Pkg...
$1.50	.....List Price, each.....

REFLECTOR HOLDER

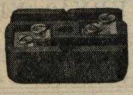
For Types JRY, KRY and KRYA Condulet Bodies

SRH3
50
60 lbs.
$ .75



TERMINAL BLOCK

For the DSO, DSP, CL, LO, LP and SO Series of Condulet Bodies and Types JRR, KRR, JRM, KRM, JRS, KRS, JRY, KRY, KRYA and MOC Condulet Bodies



Furnished with necessary Fastening Screws

CF101	...Catalogue Number...
50	....Standard Package....
25 lbs.	...Ship. Wt. Std. Pkg...
$ .50	.....List Price, each.....

RECEPTACLE MOUNTING PLATE

For the DSO, DSP, CL, LO and LP Series of Condulet Bodies and Types JRRH, JRRV, MOH and MOV Side Bracket Hoods

RMP1
50
30 lbs.
$ .25



Norbitt Conduletto clamp receptacle C337 for Crouse-Hinds receptacle mounting plate RMP1, is listed on page Cross Reference No. CH190.



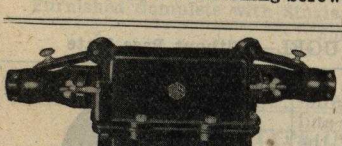
BEZEL—Brass—For Reflector SH25

...Catalogue Number...	Bezel 1
....Standard Package....	50
...Ship. Wt. Std. Pkg...	50 lbs.
.....List Price, each.....	$1.00

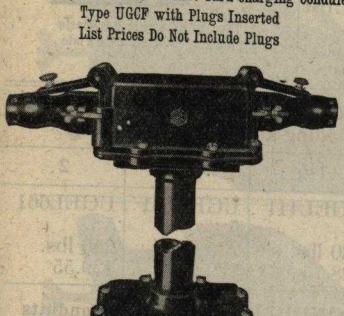
TYPES UGCF, UGXF, UGCD, UGXD AND UGEM CONDULETS

YARD CHARGING CONDULETS, DOUBLE OUTLET

Furnished Complete with Two 100-Ampere Rectangular Receptacles BR100, Spring Doors and necessary Gaskets and Fastening Screws, but without Plugs or 2-inch Conduit Stem. See note below*



Surface Style of Double Outlet Yard Charging Condulet
Type UGCF with Plugs Inserted
List Prices Do Not Include Plugs



Underground Style of Double Outlet Yard Charging Condulet
Type UGCD with Plugs Inserted
List Prices Do Not Include Plugs or Conduit Stem

SURFACE STYLE

Type UGCF Condulets—For Two Conduits

Size, in...	1	1¼	1½	2
Cat. No..	UGCF33	UGCF44	UGCF55	UGCF66
Std. Pkg.	5	5	5	5
Wt. Pkg.	190 lbs.	195 lbs.	200 lbs.	205 lbs.
List, ea..	$34.60	$35.00	$35.40	$35.80

Type UGXF Condulets—For Four Conduits

Size, in...	1	1¼	1½	2
Cat. No..	UGXF3333	UGXF4444	UGXF5555	UGXF6666
Std. Pkg.	5	5	5	5
Wt. Pkg.	200 lbs.	205 lbs.	210 lbs.	215 lbs.
List, ea..	$34.80	$35.20	$35.60	$36.00

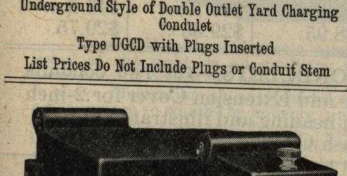
UNDERGROUND STYLE

Type UGCD Condulets—For Two Conduits

Size, in...	1	1¼	1½	2
Cat. No..	UGCD33	UGCD44	UGCD55	UGCD66
Std. Pkg.	5	5	5	5
Wt. Pkg.	300 lbs.	300 lbs.	305 lbs.	310 lbs.
List, ea..	$41.60	$42.00	$42.40	$42.80

Type UGXD Condulets—For Four Conduits

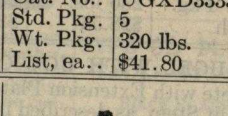
Size, in...	1	1¼	1½	2
Cat. No..	UGXD3333	UGXD4444	UGXD5555	UGXD6666
Std. Pkg.	5	5	5	5
Wt. Pkg.	320 lbs.	320 lbs.	325 lbs.	330 lbs.
List, ea..	$41.80	$42.20	$42.60	$43.00



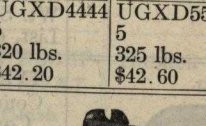
TYPE UGEM CONDULET

Black Enamel Finish

Complete as Illustrated Directly Above	
Catalogue Number...	UGEM100
Standard Package....	5
Weight Std. Pkg	200 lbs.
List Price, each.....	$33.75



Type BPF



Type BPFA



Type BPB
(Short Circuiting)

PLUGS FOR YARD CHARGING RECEPTACLES

100 Ampere Capacity

Type	BPF (Rectangular)	BPFA (Round)	BPB (Rectangular)
Use	Charging	Charging	Short Circuiting
Cat. No.....	BPF100	BPFA100	BPB100
Std. Pkg.	10	10	10
Wt. Std. Pkg..	75 lbs.	90 lbs.	50 lbs.
List, each.....	$12.00	$9.50	$4.00

*Condulets listed above are regularly furnished with two rectangular receptacles BR100, requiring the use of rectangular plugs BPF100 or BPB100, but if specifically ordered, two round receptacles BRA100, requiring the use of round plugs BPFA100 or M. C. B. standard plugs, will be furnished, at an advance of $5.50 in the list price. Spring doors are regularly furnished on receptacle housings, but if specifically ordered, removable doors will be furnished, at the same price.

Rectangular receptacle BR100 and round receptacle BRA100 are listed separately on page Cross Reference No. CH166.

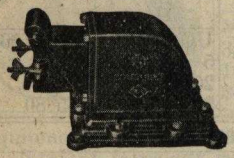
Gaskets are listed separately on page Cross Reference No. CH177. Condulet reducers are listed separately on page Cross Reference No. CH171.

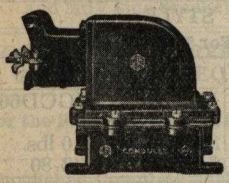
(Cross Reference No. CH163a)

TYPE UGEL CONDULETS

YARD CHARGING, SINGLE RECEPTACLE HOUSING

Furnished Complete with 100-Ampere, 2-Pole Rectangular Receptacle BR100, Spring Door and Gaskets, but without Plugs*

TYPE UGEL—With Base Plate		TYPE UGEL—Without Base Plate
 Type UGEL Single Receptacle Housing with Base Plate	Complete as described above and illustrated at the left.	Complete as described above and illustrated at the right.  Type UGEL Single Receptacle Housing without Base Plate
UGEL1010	Catalogue No.	UGEL101
5	Standard Pkg.	5
145 lbs.	Wt. Std. Pkg.	120 lbs.
$24.50	List, each	$22.00

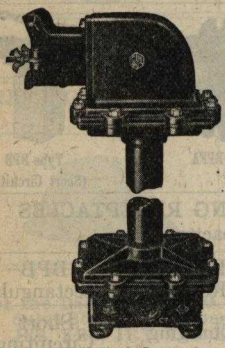

Type UGEL Single Receptacle Housing with Type UGC Condulet Body

TYPE UGEL WITH UGC CONDULETS—For Two Conduits
Complete as described in heading and illustrated at left.

Size in inches..	1	1¼	1½	2
Catalogue No..	UGEL331	UGEL441	UGEL551	UGEL661
Standard Pkg..	5	5	5	5
Wt. Std. Pkg..	225 lbs.	230 lbs.	235 lbs.	240 lbs.
List, each.....	$28.35	$28.75	$29.15	$29.55

TYPE UGEL WITH UGX CONDULETS—For Four Conduits
Complete as described in heading and illustrated at left.

Catalogue No..	UGEL33331	UGEL44441	UGEL55551	UGEL66661
Standard Pkg..	5	5	5	5
Wt. Std. Pkg..	230 lbs.	235 lbs.	240 lbs.	245 lbs.
List, each.....	$28.55	$28.95	$29.35	$29.75


Type UGEL Single Receptacle Housing with Type UGC Condulet Body, Extension Plate CXH6, Extension Cover CX6 and 2-inch Stem (Stem not furnished)

TYPE UGEL WITH UGC CONDULETS—For Two Conduits
Complete with Extension Plate and Extension Cover for 2-inch Conduit Stem, as described in heading and illustrated at left. We do not furnish Conduit Stem.

Size in inches..	1	1¼	1½	2
Catalogue No..	UGEL3361	UGEL4461	UGEL5561	UGEL6661
Standard Pkg..	5	5	5	5
Wt. Std. Pkg..	240 lbs.	245 lbs.	250 lbs.	255 lbs.
List, each.....	$36.10	$36.50	$36.90	$37.30

TYPE UGEL WITH UGX CONDULETS—For Four Conduits
Complete with Extension Plate and Extension Cover for 2-inch Conduit Stem, as described in heading and illustrated at left. We do not furnish Conduit Stem.

Size in inches..	1	1¼	1½	2
Catalogue No..	UGEL33361	UGEL44461	UGEL55561	UGEL66661
Standard Pkg..	5	5	5	5
Wt. Std. Pkg..	245 lbs.	250 lbs.	255 lbs.	260 lbs.
List, each.....	$36.30	$36.70	$37.10	$37.50

*Condulets listed on this page are regularly furnished with rectangular receptacle BR100, requiring use of rectangular plug BPF100 or BPB100, but if specifically ordered, round receptacle BRA100, requiring use of round plug BPFA100 or any other M. C. B. standard plug, will be furnished, at an advance of $2.75 in list price. Spring doors are regularly furnished on receptacle housings, but if specifically ordered, removable doors will be furnished, at same price.

Rectangular receptacle BR100 and round receptacle BRA100 are listed on page Cross Reference No. CH166. Rectangular plugs BPF100 and BPB100 and round plug BPFA100 are listed on page Cross Reference No. CH163a. Types UGC and UGX Condulet bodies are listed separately on page Cross Reference No. CH165. Gaskets are listed separately on page Cross Reference No. CH177.

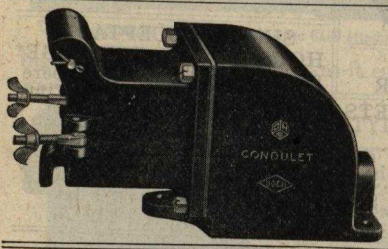
TYPE UGEN CONDULETS

YARD CHARGING CONDULETS, FOR SURFACE CONDUIT INSTALLATIONS

Furnished Complete with Single Receptacle Housing, One 100-Ampere Rectangular Receptacle BR100, Spring Door, Fastening Screws and Gasket

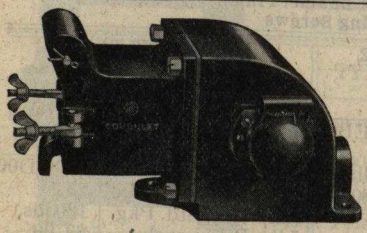
See note below*

TYPE UGEN CONDULETS—Black Enamel Finish

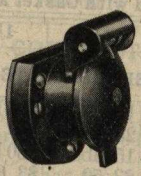


Complete as Illustrated at Left of Listings

Size in inches.....	1¼	1½	2
Catalogue Number.....	UGEN4	UGEN5	UGEN6
Standard Package	5	5	5
Ship. Wt. Std. Pkg.....	140 lbs.	145 lbs.	155 lbs.
List Price, each.....	$18.50	$18.75	$19.00



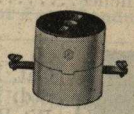
Type QD plug receptacle attachment, listed at the right, is an auxiliary weather-proof housing, which can be attached, as shown in above illustration, to any Condulet having a flat surface to which the housing can be fastened, provided there is sufficient wiring space in the interior. The surface to which type QD attachment is to be fastened must be properly drilled and tapped for mounting. If specifically ordered this drilling and tapping will be done at the factory, without extra charge. The receptacle is of Hubbell type and will take standard 10-ampere Hubbell plug caps. In railroad use, the attachment is used chiefly to provide connections for vacuum cleaners and portable hand lamps.



TYPE QD PLUG RECEPTACLE ATTACHMENT
Black Enamel Finish

Complete with Hubbell 10-Ampere Plug Receptacle

Catalogue No.....	QD10
Standard Package	5
Weight Std. Pkg...	10 lbs.
List Price, each...	$3.25



Hubbell 10-Ampere Plug Receptacle
For QD10

Furnished with Mounting Straps and Fastening Screws

Catalogue No.....	C5614
Standard Package .	50
Weight Std. Pkg...	25 lbs.
List Price, each...	$ .65

*Type UGEN Condulet is regularly furnished with rectangular receptacle BR100, requiring the use of rectangular plug BPF100 or BPB100, but if specifically ordered, round receptacle BRA100, requiring the use of round plug BPFA100 or any M. C. B. standard plug, will be furnished, at an advance of $2.75 in the list price. A spring door is regularly furnished with above Condulet, but if specifically ordered, removable door will be furnished, at the same price.

The wire terminals of receptacle BR100 are drilled $\frac{11}{32}$ of an inch in diameter and will take any size cable up to and including No. 1 B. & S. gauge.

If specified on the order, 200-ampere rectangular receptacle BR200 will be furnished with type UGEN Condulet, at an advance of $1.25 in above list prices. When so arranged, the Condulet is suitable for low voltage electric welding machines of 200-ampere capacity.

The wire terminals of receptacle BR200 are drilled $\frac{15}{32}$ of an inch in diameter and will take any size cable up to and including 00 B. & S. gauge.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish.

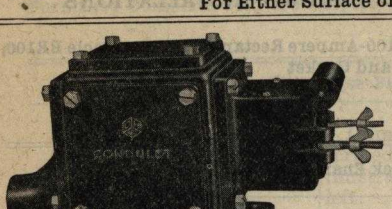
Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Receptacles and plugs for type UGEN Condulets are listed on page Cross Reference No. CH166.
Plugs for type UGEN Condulets are listed on page Cross Reference No. CH163a.

YARD CHARGING CONDULETS

SINGLE OUTLET

Frame, Receptacle Housing and Plates Required for Making Up Type UGE Condulets
For Either Surface or Underground Conduit Installations



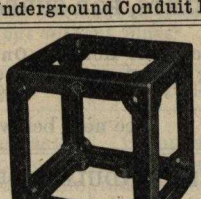
Style of Single Outlet Yard Charging Condulet

Type UGE

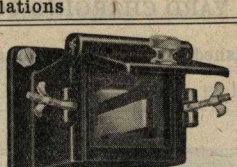
One of Many Possible Combinations

Made up From Material Listed Below

Consists of Frame UGE100, Single Receptacle Housing UGEJ100, Supporting Plate UGED00, One Offset Hub Plate UGEE and Three Blank Plates UGEB00



FRAME FOR UGE CONDULETS



SINGLE RECEPTACLE HOUSING FOR TYPE UGE*
Furnished with one 100 Ampere Rectangular Receptacle, Spring Door, Fastening Screws and Gasket

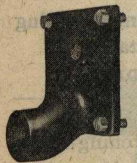
UGE100	....Catalogue Number....	UGEJ100
5	....Standard Package....	5
70 lbs.	....Ship. Wt. Std. Pkg....	80 lbs.
$4.85	.....List Price, each.....	$12.75

PLATES FOR UGE FRAME—Black Enamel Finish
Furnished with Gasket and Fastening Screws



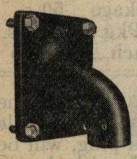
CENTER HUB PLATE

Size in inches.....	1	1¼	1½	2
Cat. No..	UGEB3	UGEB4	UGEB5	UGEB6
Std. Pkg.	25	25	25	25
Wt. Pkg..	150 lbs.	155 lbs.	160 lbs.	165 lbs.
List, each	$3.35	$3.50	$3.65	$3.80



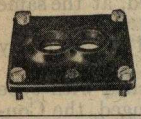
OFFSET HUB PLATE

Cat. No..	UGEE3	UGEE4	UGEE5	UGEE6
Std. Pkg..	25	25	25	25
Wt. Pkg..	160 lbs.	165 lbs.	170 lbs.	175 lbs.
List, each	$3.55	$3.70	$3.85	$4.00



90° HUB PLATE

Cat. No..	UGEF3	UGEF4	UGEF5	UGEF6
Std. Pkg.	25	25	25	25
Wt. Pkg..	190 lbs.	195 lbs.	200 lbs.	210 lbs.
List, each	$3.90	$4.05	$4.20	$4.35



TWO HUB PLATE

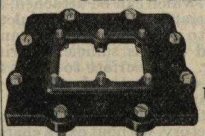
Cat. No..	UGEB33	UGEB44	UGEB55	UGEB66
Std. Pkg.	25	25	25	25
Wt. Pkg..	180 lbs.	185 lbs.	190 lbs.	195 lbs.
List, each	$3.60	$3.80	$4.00	$4.20



SUPPORTING PLATE

For Surface Mounting of Type UGE Condulets

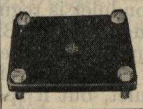
Catalogue Number	UGED00
Standard Package	25
Ship. Wt. Std. Pkg.	180 lbs.
List Price, each...	$3.90



FLANGE PLATE

For Mounting Type UGE Condulets on a Type UGC or UGX Condulet Body

Catalogue Number	UGEH00
Standard Package	25
Ship. Wt. Std. Pkg.	135 lbs.
List Price, each...	$3.75



BLANK CAST PLATE

Catalogue Number	UGEB00
Standard Package	25
Ship. Wt. Std. Pkg.	145 lbs.
List Price, each...	$3.00

*Rectangular receptacle BR100, requiring the use of rectangular plug BPF100 or BPB100, is regularly furnished on orders for single receptacle housing UGEJ100, but if specifically ordered, round receptacle BRA100, requiring the use of round plug BPFA100 or M. C. B. standard plugs, will be furnished, at an advance of $2.75 in the list price. A spring door is regularly furnished on above receptacle housing, but if specifically ordered, removable door will be furnished, at the same price.

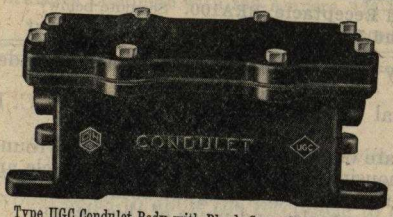
Finishes and assortments for frame UGE100 and housing UGEJ100 are the same as specified on following page. Above plates with black enameled or galvanized finish may be assorted to make up a standard package, regardless of style of plates.

Rectangular receptacle BR100 and round receptacle BRA100 are listed on page Cross Reference No. CH166. Rectangular plugs BPF100 and BPB100 and round plug BPFA100 are listed on page Cross Reference No. CH163a. Gaskets are listed seperately on page Cross Reference No. CH177. Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH164)

TYPES UGC AND UGX CONDULET BODIES

Inside Dimensions: 6⅞x6⅞x3 Inches

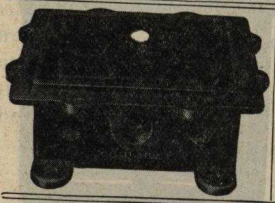


Type UGC Condulet Body with Blank Cover CX00 Attached

Types UGC and UGX Condulets, being extra heavy, are particularly suited for use in railroad yards, manholes, subways, around coast defense fortifications and wherever a rugged water-tight Condulet is desired.

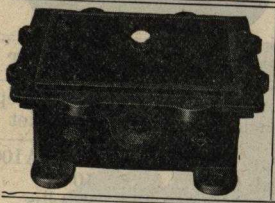
They can be used in combination with the yard charging Condulets, illustrated and listed on the two preceding pages, either for surface or underground conduit installations.

The cover is firmly held in place by brass cap screws, and a heavy gasket of high grade rubber securely seals the opening. The use of brass cap screws and a high grade rubber gasket makes it easy to take off and replace the cover.



TYPE UGC CONDULET BODIES—For Two Conduits

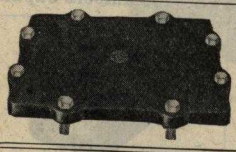
Size in inches.....	1	1¼	1½	2
Catalogue Number..	UGC33	UGC44	UGC55	UGC66
Standard Package...	5	5	5	5
Weight Std. Pkg.....	110 lbs.	115 lbs.	120 lbs.	125 lbs.
List Price, each.....	$5.60	$6.00	$6.40	$6.80



TYPE UGX CONDULET BODIES—For Four Conduits

Size in inches.....	1	1¼	1½	2
Catalogue Number..	UGX3333	UGX4444	UGX5555	UGX6666
Standard Package...	5	5	5	5
Weight Std. Pkg.....	115 lbs.	120 lbs.	125 lbs.	130 lbs.
List Price, each.....	$5.80	$6.20	$6.60	$7.00

BLANK CAST COVER

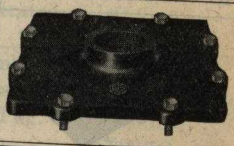


FOR TYPES UGC AND UGX CONDULET BODIES

Furnished with Gasket and Fastening Screws

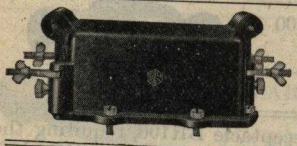
CX00	.Catalogue Number.	CX6
5	..Standard Package..	5
45 lbs.	.Ship. Wt. Std. Pkg.	50 lbs.
$3.25	...List Price, each...	$4.00

EXTENSION COVER—For Two-Inch Conduit Stem



DOUBLE RECEPTACLE HOUSING

For use with Types UGC and UGX Condulet Bodies Complete with Two 100 Ampere Rectangular Receptacles BR100, Spring Doors, Gasket and Fastening Screws. See note below.*



CHXS100	.....Cat. No.....	CXH6
5	.....Std. Pkg.....	5
140 lbs.	Ship. Wt. Std. Pkg.	65 lbs.
$29.00	..List Price, each..	$3.00

EXTENSION PLATE

For Two-Inch Conduit Stem For Receptacle Housing CHXS100



*Receptacle housing listed above is regularly furnished with two rectangular receptacles BR100, requiring the use of rectangular plugs BPF100 or BPB100, but if specifically ordered, two round receptacles BRA100, requiring the use of round plugs BPFA100 or M. C. B. standard plugs, will be furnished, at an advance of $5.50 in the list price. Spring doors are regularly furnished on receptacle housings, but if specifically ordered, removable doors will be furnished at the same price.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package.

Gasket is listed separately on page Cross Reference No. CH171. Cross Reference No. CH177. Condulet reducers are listed on page

TYPES BRHS, BRH AND BRHA CONDULETS

BATTERY CHARGING, SWIVEL MOUNTING

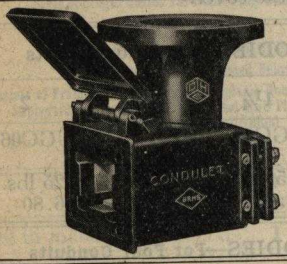
Type BRHS is furnished Complete with 100 Ampere Rectangular Receptacle, BR100. See note below*
Type BRH is furnished Complete with 100 Ampere Round Receptacle, BRA100. See note below†
Type BRHA is furnished Complete with 100 Ampere Round Receptacle, BRA100. See note below†

These Condulets are designed for storage battery charging, and are particularly intended for railroad cars and electric vehicles.

Two styles are made, one having swivel pedestal support and the other the M. C. B. standard bracket.

The receptacles furnished with these Condulets are of two types—rectangular and round. These receptacles are interchangeable in the different housings. The rectangular receptacle and plug are designed for extra heavy duty. The round receptacle and plug are so designed as to overcome the defects which have heretofore existed in receptacles and plugs of this design.

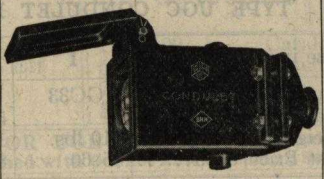
The designs of the plugs are such as to prevent a short circuit or reversal of polarity.



TYPE BRHS CONDULET

Complete with Housing, Receptacle and Swivel Pedestal

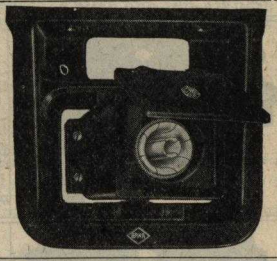
Cat. No.	BRHS100
Std. Pkg.	10
Ship. Wt. Std. Pkg.	190 lbs.
List Price, each	$14.50



TYPE BRH CONDULET

Housing and Receptacle only for M. C. B. Bracket

Cat. No.	BRH100
Std. Pkg.	10
Ship. Wt. Std. Pkg.	155 lbs.
List Price, each	$15.00

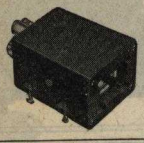


TYPE BRHA CONDULET

Complete with Housing, Receptacle and M. C. B. Bracket

Cat. No.	BRHA100
Std. Pkg.	10
Ship. Wt. Std. Pkg.	220 lbs.
List Price, each	$20.00

RECEPTACLES FOR BATTERY AND YARD CHARGING CONDULETS—100 Ampere Capacity



Type BR, Rectangular		Type BRA, Round
BR100	Cat. No.	BRA100
10	Std. Pkg.	10
70 lbs.	Ship. Wt. Std. Pkg.	80 lbs.
$7.75	List Price, each	$10.50



PLUGS FOR BATTERY CHARGING CONDULETS—100 Ampere Capacity



Type BP, Rectangular		Type BPA, Round
BP100	Cat. No.	BPA100
10	Std. Pkg.	10
55 lbs.	Ship. Wt. Std. Pkg.	55 lbs.
$12.00	List Price, each	$9.50



*Type BRHS Condulet is regularly furnished with rectangular receptacle BR100, requiring the use of rectangular plug BP100, but if specifically ordered, round receptacle BRA100, requiring the use of round plug BPA100 or M. C. B. standard plug, will be furnished, at an advance of $2.75 in the list price.

†Types BRH and BRHA Condulets are regularly furnished with round receptacle BRA100, requiring the use of round plug BPA100 or M. C. B. standard plug, but if specifically ordered, rectangular receptacle BR100, requiring the use of rectangular plug BP100, will be furnished, at a reduction of $2.75 in the list price.

Finishes: Black enamel is the standard finish for Condulets and plug handles, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets and plug handles will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish.

Black enameled and galvanized Condulets or plugs of the same type may be assorted to make up a standard package.

(Cross Reference No. CH166)

TYPE BRHE CONDULET

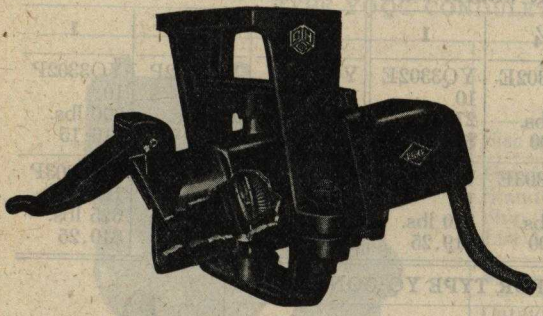
BATTERY CHARGING, SWIVEL MOUNTING

Furnished Complete with 100-Ampere, 125-Volt, 2-Pole Round Receptacle BRA100 and M. C. B. Bracket
The Above Receptacle Takes Round Plug BPA100

Type BRHE Condulet complies with all the A. R. E. E. standards applying to battery charging devices. The receptacle housing is mounted in a M. C. B. bracket of improved design and is pivoted so as to allow the receptacle to align itself with the direction of pull on the plug when the latter is withdrawn.

Wires enter the Condulet from the bottom, and the receptacle housing, which is provided with a door having a concealed spring, is inclined at an angle. The combination of these features prevents the collection of dust, cinders, dirt and moisture within the receptacle. The opening for the wires can be sealed by wrapping tape around the wires where they leave the housing. Another advantage of having the housing set at an angle is that the plug pulls out straight with the cable when the car moves away.

Receptacle BRA100, which is furnished with this Condulet, has self-aligning contact parts. As a further safe-guard against damage, that part of the housing around the opening of the receptacle is made extra long, so that it and the plug handle bear what little side strain there may be.



Type BRHE

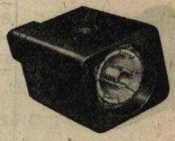
TYPE BRHE CONDULET Black Enamel Finish	
Complete as described in heading and illustrated at left	
Catalogue Number....	BRHE100
Standard Package	10
Ship. Wt. Std. Pkg. ...	275 lbs.
List Price, each.....	$22.50

TYPE BPA PLUG—Aluminum Handle | **TYPE BRA RECEPTACLE**

For Above Condulet



100-Amp., 125-Volt, 2-Pole—Round		
BPA100	Catalogue Number	BRA100
10	Standard Package	10
55 lbs.	Ship. Wt. Std. Pkg.	80 lbs.
$9.50	List Price, each	$10.50



Finishes: Cast iron with black enamel finish is the standard for type BRHE Condulet and will be furnished, unless otherwise specified on the order. Aluminum with scratch brush finish is the standard for the handle of type BPA plug, and will be furnished, unless otherwise specified on the order.

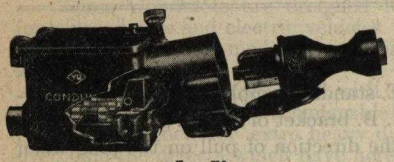
Type BRHE Condulet with galvanized finish will be furnished at the same price as black enamel finish. Black enameled and galvanized type BRHE Condulets may be assorted to make up a standard package.

(Cross Reference No. CH1000E12)

TYPE YQ CONDULETS

For 2 or 3-Pole Plug Receptacles and 2 or 3-Wire Cartridge or Plug Fuse Cut-outs

Furnished Complete with Crouse-Hinds Plug Receptacle and Crouse-Hinds Cut-out, but without Plug or Fuses



Type YQ
(Broken-away View)
Showing Cut-out PE53E and Receptacle RYQ303 Mounted, also Plug RQ303 and Padlock
Plug and Padlock are not included in List Prices for Condulets

These Condulets provide a housing for a combination of plug receptacle and cut-out.

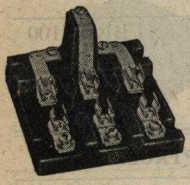
They are particularly suited for use in shops having portable tools, also in garages, laundries, railroad yards, etc. They are weather-proof and, therefore, can be installed either indoors or outdoors.

Two types of N. E. C. cut-outs are furnished—cartridge and plug. The cartridge type can be used on circuits up to 30 amperes, 250 volts, and the plug type on circuits up to 30 amperes, 125 volts.

The door over the cut-out is provided with a spring catch and can be locked with a padlock if desired. The door covering the plug opening is rabbetted and is kept closed by a plunger spring, when the plug is not in place, thus preventing the entrance of dust, moisture and insects.

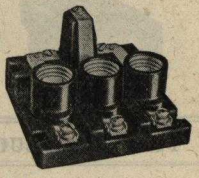
TYPE YQ CONDULETS—Black Enamel Finish

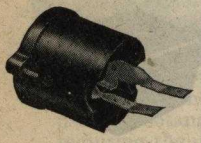
Complete with		Crouse-Hinds Plug Receptacle and 30 Amp., 250 Volt N. E. C. Cartridge Fuse Cut-out, but without Fuses			Crouse-Hinds Plug Receptacle and 30 Amp., 125 Volt N. E. C. Plug Fuse Cut-out, but without Fuses		
Style of Cut-out	Size in inches ..	½	¾	1	½	¾	1
2-wire	Catalogue No...	YQ1302E	YQ2302E	YQ3302E	YQ1302P	YQ2302P	YQ3302P
	Std. Pkg.....	10	10	10	10	10	10
	Wt. Std. Pkg....	260 lbs.	265 lbs.	270 lbs.	275 lbs.	280 lbs.	290 lbs.
	List Price, each.	$15.85	$16.00	$16.15	$15.85	$16.00	$16.15
3-wire	Catalogue No...	YQ1303E	YQ2303E	YQ3303E	YQ1303P	YQ2303P	YQ3303P
	Std. Pkg.....	10	10	10	10	10	10
	Wt. Std. Pkg....	300 lbs.	305 lbs.	310 lbs.	315 lbs.	320 lbs.	325 lbs.
	List Price, each.	$18.75	$19.00	$19.25	$18.75	$19.00	$19.25



N. E. C. CUT-OUTS FOR TYPE YQ CONDULETS

For 30 Ampere, 250 Volt Cartridge Fuses			For 30 Ampere, 125 Volt Plug Fuses	
2-wire	3-wire	Style of Cut-out.	2-wire	3-wire
PE52E	PE53E	Catalogue No..	PE52P	PE53P
10	10	Standard Package	10	10
25 lbs.	30 lbs.	Weight Std. Pkg.	30 lbs.	35 lbs.
$2.85	$3.85	List Price, each.	$2.85	$3.85

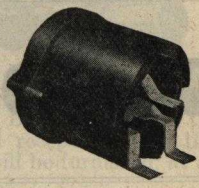




TYPE RYQ PLUG RECEPTACLES—30 Amp. Capacity

For Type YQ Condulets

2-pole	250 Volts	3-pole
RYQ302	Catalogue No..	RYQ303
10	Standard Package	10
20 lbs.	Weight Std. Pkg.	25 lbs.
$2.50	List Price, each.	$3.50





TYPE RQ PLUGS—30 Ampere Capacity

For Types RQH, RQK and RYQ Receptacles

2-Pole		3-Pole
RQ302	Catalogue Number	RQ303
25	Standard Package.	25
60 lbs.	Weight Std. Pkg..	70 lbs.
$3.50	List Price, each..	$5.00

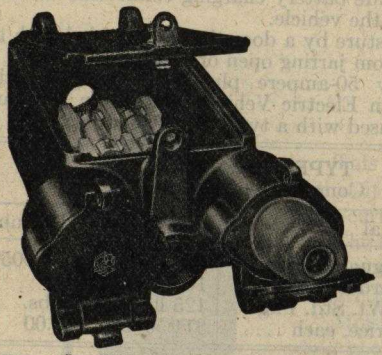


(Cross Reference No. CH167a)

TYPE YQQC CONDULETS

For Two 2-Pole Plug Receptacles and a 2 or 3-Wire, 30 or 60-Ampere Cut-out

Furnished with Two 30-Ampere, 250-Volt, 2-Pole Receptacles RQJ302, Universal Cut-out Fastening Plate and necessary Bolts and Screws, but without Plugs or Cut-out



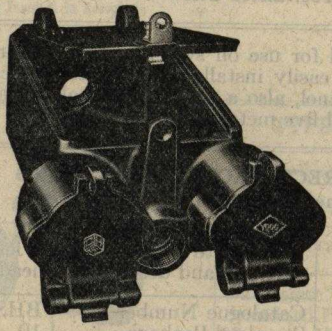
Type YQQC with Cartridge Fuse Cut-out and One Type RQ Plug Inserted

Type YQQC Condulets meet the requirements for a weather-proof, fused cut-out with two plug receptacles. They are especially valuable for use in garages, laundries, railroad shops or yards, roundhouses and similar places.

The door over the cut-out compartment is rabbetted and is provided with a spring catch, with which a padlock can be used, if desired. Doors over the receptacle openings also are rabbetted, and can be padlocked.

Strong, concealed springs keep doors over receptacle openings closed when the plugs are withdrawn.

TYPE YQQC CONDULETS—Through Feed



Complete as described in heading and illustrated at left

Size in inches.....	½	¾
Catalogue Number	YQQC11302	YQQC22302
Standard Package	10	10
Ship. Wt. Std. Pkg.	275 lbs.	280 lbs.
List Price, each...	$17.35	$17.50
Size in inches.....	**1**	**1¼**
Catalogue Number	YQQC33302	YQQC44302
Standard Package	10	10
Ship. Wt. Std. Pkg.	285 lbs.	290 lbs.
List Price, each...	$17.65	$17.80



TYPE RQJ RECEPTACLE—30-Ampere, 250-Volt, 2-Pole
For Above Condulets. Takes Plug RQ302

Catalogue Number.....	RQJ302
Standard Package.....	25
Shipping Weight Std. Pkg.	30 lbs.
List Price, each.....	$2.00

The universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30-Ampere, 250-Volt, Cartridge and 30-Ampere, 125-Volt, Plug Fuse Cut-outs

2-Wire: **BRYANT**—(Cartridge) 1917, (Plug) 62965. **D. & W.**—(Cartridge) 91102. **G. E. CO.**—(Cartridge) 34367, (Plug) 62965. **NOARK**—(Cartridge) 3327. **PAISTE**—(Cartridge) 72965, (Plug) 2965. **SHAWMUT**—(Cartridge) 2077. **TRUMBULL**—(Cartridge) 29653, (Plug) 2965. **WEBER**—(Plug) 62965. **UNION**—(Cartridge) 2010.

3-Wire. **BRYANT**—(Cartridge) 1924, (Plug) 62165. **D. & W.**—(Cartridge) 91103. **G. E. CO.**—(Cartridge) 34372, (Plug) 62165. **NOARK**—(Cartridge) 3328. **PAISTE**—(Cartridge) 72165, (Plug) 2165. **SHAWMUT**—(Cartridge) 2079. **TRUMBULL**—(Cartridge) 21653, (Plug) 2165. **WEBER**— (Plug) 62165. **UNION**—(Cartridge) 2012.

60-Ampere, 250-Volt, Cartridge Fuse Cut-outs

2-Wire: **BRYANT**—(Cartridge) 1918. **D. & W.**—(Cartridge) 91108. **G. E. CO.**—(Cartridge) 34376. **NOARK**—(Cartridge) 3329. **PAISTE**—(Cartridge) 82965. **SHAWMUT**—(Cartridge) 2078. **TRUMBULL**—(Cartridge) 29656. **UNION**—(Cartridge) 2011.

Plug RQ302 is listed on page Cross Reference No. CH1000E8

TYPE BHG PLUG RECEPTACLE CONDULETS

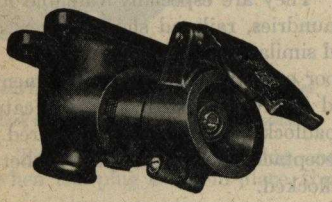
IRON OR ALUMINUM

Furnished Complete with 50-Ampere, 125-Volt, 2-Pole Receptacle BR50 and Spring Door
The Above Receptacle Takes Plug BP50, Listed Below

Type BHG Condulet is primarily designed to provide battery charging connection on electric vehicles, and is usually secured to the under side of the vehicle.

The interior is protected from dust, grease and moisture by a door that is provided with an adjustable, concealed spring, which prevents the door from jarring open or rattling.

Any 50-ampere plug conforming to the American Electric Vehicle Association standard can be used with a type BHG Condulet.



Type BHG

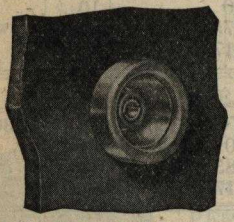
TYPE BHG CONDULETS
Complete, as described above

Material	Iron	Aluminum
Catalogue Number	BHG506	BHG00506
Standard Package	10	10
Ship. Wt. Std. Pkg.	125 lbs.	90 lbs.
List Price, each	$11.50	$17.00

TYPE BHS PLUG RECEPTACLE AND HOUSING

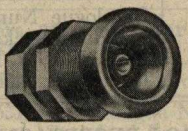
For Switchboard Mounting
Furnished Complete with 50-Ampere, 125-Volt, 2-Pole Receptacle BR50
The Above Receptacle Takes Plug BP50, Listed Below

Type BHS plug receptacle and housing is designed for use on switchboards. It projects only ¾-inch from the face of the switchboard, and is easily installed. All that is necessary is to drill a hole 2 1/16 inches in diameter through the panel, also a small dowel hole, insert the receptacle and tighten the fastening nut on the rear. All live metal parts are enclosed.



Plug Receptacle and Housing
Type BHS—Mounted

TYPE BHS PLUG RECEPTACLE AND HOUSING
Polished Copper Finish



Complete as illustrated at left of listing and described in heading

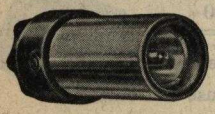
Catalogue Number	BHS50
Standard Package	10
Ship. Wt. Std. Pkg.	60 lbs.
List Price, each	$12.75

TYPE BP PLUG

For Round Receptacle BR50

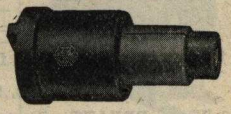
TYPE BR RECEPTACLE

For QE and BH Series, Type BHG Condulets and Type BHS Plug Receptacle and Housing



50-Ampere, 125-Volt, 2-Pole, Round

BP50	Catalogue Number	BR50
10	Standard Package	10
25 lbs.	Ship. Wt. Std. Pkg.	15 lbs.
$7.75	List Price, each	$6.00



TYPE RQ PLUGS—30-Ampere, 250-Volt

For Receptacle RQH302 and RQH303—Aluminum Handle



2-Pole		3-Pole
RQ302	Catalogue Number	RQ303
25	Standard Package	25
60 lbs.	Ship. Wt. Std. Pkg.	70 lbs.
$3.50	List Price, each	$5.00



For finishes, see note on page Cross Reference No. CH1000E20.

TYPE BRHD PLUG RECEPTACLE CONDULETS

WATER-TIGHT EQUIPMENTS—*BRONZE OR IRON

Furnished with 100-Ampere, 125-Volt, 2-Pole Receptacle BRA107, Clamping Nut, Screw Cover with Chain and Gasket, but without Conduit

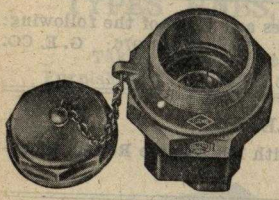


Type BRHD Plug Receptacle Equipment Inserted in Conduit, with Type BPEA Plug Inserted in Receptacle

This Equipment meets a requirement of marine work, in that it provides a means for easy and quick utilization of shore current for lighting or power purposes aboard a vessel.

The Equipment is designed to be mounted in the threaded end of a 4-inch conduit, and can be installed equally well on a wharf, dry dock or vessel.

Moisture is excluded from the interior of the Equipment, when not in use, by the screw cover and gasket, and by a screw clamping ring and gasket when the plug is inserted.



TYPE BRHD PLUG RECEPTACLE EQUIPMENTS

Furnished complete as illustrated at left of listings and as described in heading

Scratch Brush Finish	*Bronze	Iron Galvanized
Catalogue Number	BRHD0100	BRHD100
Standard Package	10	10
Shipping Weight Standard Package	115 lbs.	100 lbs.
List Price, each	$31.00	$19.75

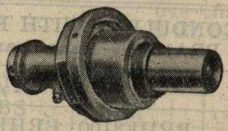
TYPE BPEA PLUGS

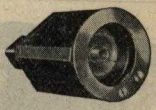
For Above Plug Receptacle Equipments Furnished with Screw Clamping Ring and Gasket

TYPE BRA RECEPTACLE

For Above Plug Receptacle Equipments

100-Ampere, 125-Volt, 2-Pole—Round





Scratch Brush Finish	Bronze	Aluminum
Catalogue Number	BPEA0100	BPEA00100
Standard Package	10	10
Ship. Weight Standard Package	60 lbs.	40 lbs.
List Price, each	$15.50	$13.75

Takes BPEA Plugs	
Catalogue Number	BRA107
Standard Package	10
Ship. Wt. Std. Pkg.	55 lbs.
List Price, each	$10.75

*Clamping nut which secures equipment to threaded end of 4-inch conduit is regularly made of iron.

(Cross Reference No. CH1000E9)

TYPES ZG AND ZGC CONDULETS

For Cartridge Fuse Cut-outs and General Electric 1 H. P., 600-Volt (2 H. P., 250-Volt), Snap Switch No. 151394 with Protective Cover, for Textile Mill Installations

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws, but without Switches or Cut-outs

TYPE ZG CONDULETS—Dead End—Black Enamel Finish

For 30-Ampere, 600-Volt, Cartridge Fuse Main Line Cut-outs and G. E. Switch No. 151394—Cut-outs and Switches not Furnished



Style of Cut-out	Size in inches..	¾	1	1¼
3-wire	Catalogue No..	ZG23036	ZG33036	ZG43036
	Std. Pkg.....	15	10	10
	Wt. Std. Pkg..	410 lbs.	285 lbs.	290 lbs.
	List Price, each	$8.65	$8.75	$8.85

TYPE ZGC CONDULETS—Through Feed—Black Enamel Finish

For 30-Ampere, 600-Volt, Cartridge Fuse Main Line Cut-outs and G. E. Switch No. 151394—Cut-outs and Switches not Furnished



Style of Cut-out	Size in inches..	¾	1	1¼
3-wire	Catalogue No..	ZGC223036	ZGC333036	ZGC443036
	Std. Pkg.....	15	10	10
	Wt. Std. Pkg..	420 lbs.	295 lbs.	300 lbs.
	List Price, each	$8.90	$9.00	$9.10

The universal cut-out fastening plate, furnished with each Condulet, takes any three of the following: 1-Wire, 30-Ampere, 600-Volt, Cartridge Fuse Cut-outs: BRYANT—1937; D. & W.—28076; G. E. CO. —34991; NOARK—5600; SHAWMUT—20735; UNION—4003.

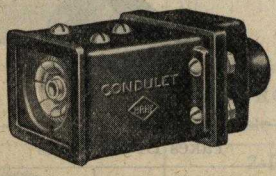
TYPE BRHF YARD CHARGING CONDULETS

Furnished Complete with 100 Ampere Rectangular Receptacle BR100 or with 100 Ampere Round Receptacle BRA100



TYPE BRHF CONDULETS WITH RECTANGULAR RECEPTACLES BR100—Black Enamel Finish**

Size in inches...	1	1¼	1½
Catalogue No ...	BRHF3101	BRHF4101	BRHF5101
Std. Package ...	10	10	10
Weight Std. Pkg.	165 lbs.	170 lbs.	175 lbs.
List Price, each .	$12.00	$12.25	$12.50



TYPE BRHF CONDULETS WITH ROUND RECEPTACLE BRA100†—Black Enamel Finish

Size in inches...	1	1¼	1½
Catalogue No. ..	BRHF3100	BRHF4100	BRHF5100
Std. Package ...	10	10	10
Weight Std. Pkg.	170 lbs.	175 lbs.	180 lbs.
List Price, each .	$14.75	$15.00	$15.25

****Receptacle BR100 requires the use of plug BP100, listed on page Cross Reference No. CH166.**

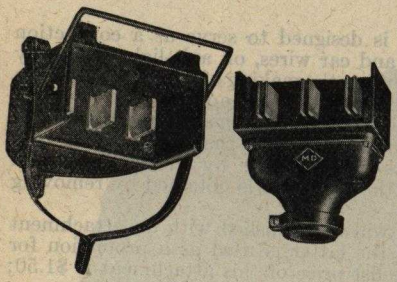
†Receptacle BRA100 requires the use of plug BPA100, listed on pages Cross Reference Nos. CH166 and CH1000E12.

Receptacle BR100 is listed separately on page Cross Reference No. CH166.

Receptacle BRA100 is listed separately on pages Cross Reference Nos. CH166 and CH1000E12.

TYPE MD CONDULETS

Generator or Motor Disconnector for Car Service



Type MD

Type MD Condulet provides an easily operated mechanical means for connecting and disconnecting wires leading from the generator to the regulator or from the controller to the motor. The receptacle part fastens to the car body, while the cables from the generator or motor are attached to the plug. The plug is pulled into the receptacle by a lever, and contact can be broken only by operating this lever, which is provided with a device to lock it in closed position.

All current carrying parts are thoroughly insulated and the whole device is constructed to withstand the severe usage of railroad work.

One of the principal advantages of type MD Condulet is that it prevents incorrect connections being made when the trucks are replaced after having been removed from the car for repairs. Another feature is that the electrical connections can be instantly disconnected without the use of tools or the removing of any parts which might become lost. The connections can be made or broken by car men, without the services of an electrician.



TYPE MD CONDULETS—200 Ampere Capacity

Style.....	3-pole—250 Volts			4-pole—600 Volts		
Size in inches..	1	1¼	1½	1	1¼	1½
Catalogue No..	MD3	MD4	MD5	MD346	MD446	MD546
Standard Pkg..	10	10	10	10	10	10
Wt. Std. Pkg..	220 lbs.	230 lbs.	240 lbs.	On	On	On
List Price, ea..	$25.50	$25.75	$26.00	request	request	request

TYPES HNBS, HNBA, HNAS AND HNAA CONDULETS

Illuminated House Number

Take any Incandescent Lamp with Dimensions not Exceeding 2 1-8 x 4 5-8 Inches Furnished with Ground Glass Front and Back, Separable Swivel Hub and Lamp Receptacle

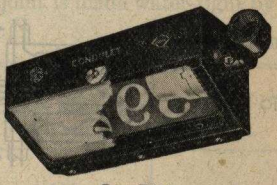


Type HNBS
(Front View)

These Condulets show a luminous house number and, when properly located, the lamp will also illuminate the steps and door.

Two styles of separable swivel hubs are made, one being straight and the other with a 90-degree turn, and they are interchangeable on any of these Condulets.

The front glass will be furnished with any numbers or letters desired, not exceeding five characters, at a charge of $.25, list, per character.



Type HNAA
(Broken-away Rear View)

RIGHT-HAND CONDULETS		Type	LEFT-HAND CONDULETS	
HNBS	HNBA	Style of Hub	HNAS	HNAA
Straight	90°	.....Size in inches.....	Straight	90°
½	½		½	½
HNBS1	HNBA1	..Catalogue Number..	HNAS1	HNAA1
15	15	...Standard Package...	15	15
90 lbs.	100 lbs.	..Ship. Wt. Std. Pkg..	90 lbs.	100 lbs.
$6.00	$6.00	....List Price, each....	$6.00	$6.00

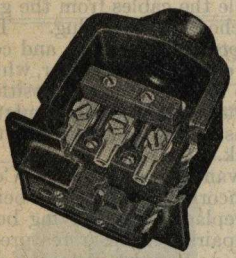
For finishes and assortments, see note on page Cross Refererence No. CH166.
Condulet reducers are listed on page Cross Reference No. CH171.

(Cross Reference No. CH169.)

TYPE MDA CONDULETS

Generator Disconnector for Car Service

Furnished Complete with Terminal Block, Wire Hole Cover and all necessary Screws



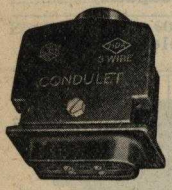
Type MDA, 3-Pole
With Cover Removed

Type MDA Condulet is designed to serve as a connection block for generator leads and car wires, on axle-lighted railway cars. Its arrangement prevents the making of wiring connections after proper connections have once been made.

The terminals are rigidly held in place on a composition block, the whole being inclosed in a substantial cast iron housing that protects the interior parts from damage by the elements and flying ballast. Access to the terminals is obtained by removing a sliding cover.

Type MDA Condulet will be furnished with an attachment for flexible conduit when the latter is used as a protection for the generator leads. The list price of this attachment is $1.50; the standard package is 15.

TYPE MDA CONDULETS—100-Ampere Capacity—Black Enamel Finish



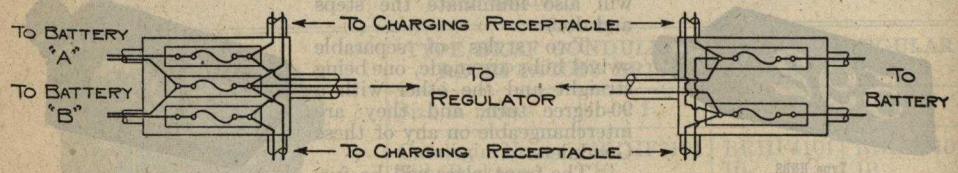
3-Pole—125-Volt		Style	4-Pole—65-Volt	
1¼	1½	Size in inches	1¼	1½
MDA438	MDA538	Cat. No.	MDA444	MDA544
15	15	Std. Pkg.	15	15
115 lbs.	120 lbs.	Wt. Std. Pkg.	130 lbs.	135 lbs.
$8.15	$8.35	List, each	On request	On request



TYPE FBX CONDULETS

FOR HOUSING BATTERY FUSES

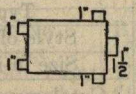
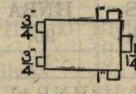
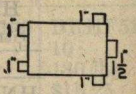
Furnished Complete with Fuse Blocks for 250 Volt Open Link Fuses, but without Fuses
Fuse Screw Centers, 2½ Inches



3-Pole, for Two Battery Systems ——— Wiring Diagram ——— 2-Pole, for One Battery Systems

TYPE FBX CONDULETS—200-Ampere Capacity—Black Enamel Finish



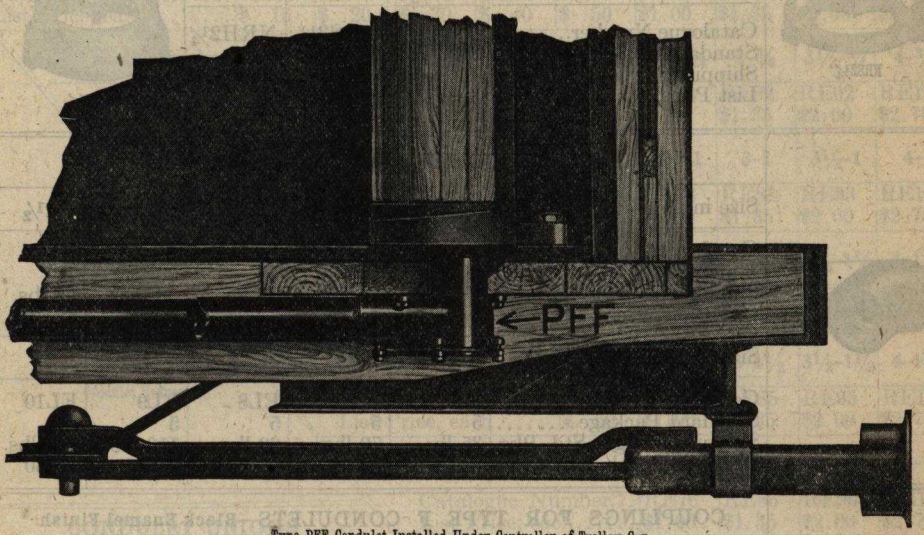
Style	3-Pole	2-Pole	
Size in inches.			
Catalogue No.	FBX533333N	FBX432232N	FBX533332N
Std. Pkg.	15	15	15
Wt. Std. Pkg.	575 lbs.	550 lbs.	560 lbs.
List, each	$28.85	$23.85	$24.10

For finishes and assortments, see note on page Cross Reference No. CH1000E33.

TYPE PFF CONDULETS

FOR USE UNDER CONTROLLERS ON ELECTRIC CARS

Furnished with Cover, Gasket and Cover-Fastening Screws



Type PFF Condulet Installed Under Controller of Trolley Car

Type PFF Condulet is designed for use under the controller of an electric car, providing a pull box and a continuous race-way for wires leading into the controller.

The extension portion of the Condulet, which passes through the floor of the car into the controller, can be furnished in any length from 2½ to 4½ inches, inclusive. The 4½-inch length is standard and will be furnished unless some other length is specified on the order. Outside dimensions of extension are 5½ x 3⅛ inches.

The cover is fastened on with four brass cap screws, and the joint is made water-tight by the use of a gasket.



TYPE PFF CONDULETS—Black Enamel Finish

Size in inches.....	1½	2
Catalogue Number.....	PFF55	PFF66
Standard Package.....	10	10
Ship. Wt. Std. Pkg.....	190 lbs.	192 lbs.
List Price, each.....	$10.50	$11.00

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

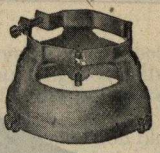
(Cross Reference No. CH1000C27)

SHADE HOLDERS, CONDULET ELBOWS AND COUPLINGS

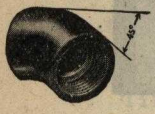
SHADE HOLDERS—Brass, Dipped Finish—For Crouse-Hinds Porcelain Receptacles


NRS2¼

Size	For 2¼-inch Shades	For 3¼-inch Shades	For 2¼-inch Shades H Position
Catalogue Number	NRS2¼	NRS3¼	NRH2¼
Standard Package	200	200	200
Shipping Weight Std. Pkg.	40 lbs.	60 lbs.	50 lbs.
List Price, each	$ .15	$ .30	$ .30


NRH2¼

CONDULET ELBOWS—45 Degrees—Black Enamel Finish



Size in inches	½	¾	1	1¼	1½
Catalogue Number	EL1	EL2	EL3	EL4	EL5
Standard Package	200	100	50	20	10
Shipping Weight Std. Pkg.	100 lbs.	80 lbs.	70 lbs.	55 lbs.	65 lbs.
List Price, each	$ .22	$ .30	$ .35	$ .65	$ .70

Size in inches	2	2½	3	3½	4
Catalogue Number	EL6	EL7	EL8	EL9	EL10
Standard Package	5	5	5	5	5
Shipping Weight Std. Pkg.	35 lbs.	70 lbs.	80 lbs.	110 lbs.	125 lbs.
List Price, each	$1.15	$2.60	$3.00	$4.25	$5.30

COUPLINGS FOR TYPE F CONDULETS—Black Enamel Finish



Size in inches	½	¾	1	1¼	1½
Catalogue Number	Coup 1	Coup 2	Coup 3	Coup 4	Coup 5
Standard Package	100	100	50	20	10
Shipping Weight Std. Pkg.	30 lbs.	35 lbs.	35 lbs.	20 lbs.	15 lbs.
List Price, each	$ .25	$ .30	$ .35	$ .50	$ .60

Size in inches	2	2½	3	3½	4
Catalogue Number	Coup 6	Coup 7	Coup 8	Coup 9	Coup 10
Standard Package	5	5	5	5	5
Shipping Weight Std. Pkg.	15 lbs.	25 lbs.	30 lbs.	50 lbs.	55 lbs.
List Price, each	$ .80	$1.50	$2.50	$4.80	$5.50

CONDULET COUPLINGS—Black Enamel Finish—With Gasket



Size in inches	½-½	¾-¾	1-1	1¼-1¼	1½-1½	2-2
Cat. No.	Coup 11	Coup 22	Coup 33	Coup 44	Coup 55	Coup 66
Std. Pkg.	50	50	25	25	10	10
Wt. Std. Pkg.	50 lbs.	60 lbs.	30 lbs.	35 lbs.	25 lbs.	30 lbs.
List Price, each.	$ .65	$ .75	$ .85	$ .95	$1.05	$1.25

Finishes: Black enamel is the standard finish for Condulet elbows and Condulet couplings listed above, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze elbows and couplings with plain and special finishes, aluminum elbows and couplings with plain and black enamel finish, see page Cross Reference No. CH182. Above Condulet elbows or couplings of the same size with black enamel or galvanized finish may be assorted to make up a standard package. No other assortment is allowed.

Dipped brass is the standard finish for shade holders, but polished or brush brass finish will be furnished at same price, if specifically ordered. No assortment of shade holders is allowed in making up a standard package.

(Cross Reference No. CH170)

CONDULET REDUCERS, UNIONS AND CORD CLAMPS

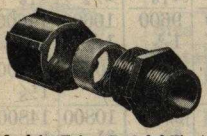
CONDULET REDUCERS

Standard Pkg. Assorted*	50	50	50	50	25	25	25	10	10
Ship. Wt. Std. Pkg	60 lbs.	65 lbs.	70 lbs.	75 lbs.	45 lbs.	65 lbs.	105 lbs.	80 lbs.	100 lbs.
Size in inches.....	¾-½	1-½	1¼-½	1½-½	2-½	2½-½	3-½	3½-½	4-½
Catalogue Number.....	RE21	RE31	RE41	RE51	RE61	RE71	RE81	RE91	RE101
List Price, each.....	$ .15	$ .20	$ .30	$ .40	$ .50	$1.00	$1.35	$2.00	$2.75
Size in inches.....		1-¾	1¼-¾	1½-¾	2-¾	2½-¾	3-¾	3½-¾	4-¾
Catalogue Number...		RE32	RE42	RE52	RE62	RE72	RE82	RE92	RE102
List Price, each.....		$ .20	$ .30	$ .40	$ .50	$1.00	$1.35	$2.00	$2.75
Size in inches.....			1¼-1	1½-1	2-1	2½-1	3-1	3½-1	4-1
Catalogue Number...			RE43	RE53	RE63	RE73	RE83	RE93	RE103
List Price, each.....			$ .30	$ .40	$ .50	$1.00	$1.35	$2.00	$2.75
Size in inches.....				1½-1¼	2-1¼	2½-1¼	3-1¼	3½-1¼	4-1¼
Catalogue Number...				RE54	RE64	RE74	RE84	RE94	RE104
List Price, each.....				$ .40	$ .50	$1.00	$1.35	$2.00	$2.75
Size in inches.....					2-1½	2½-1½	3-1½	3½-1½	4-1½
Catalogue Number...					RE65	RE75	RE85	RE95	RE105
List Price, each.....					$ .50	$1.00	$1.35	$2.00	$2.75
Size in inches.....						2½-2	3-2	3½-2	4-2
Catalogue Number...						RE76	RE86	RE96	RE106
List Price, each.....						$1.00	$1.35	$2.00	$2.75
Size in inches.....							3-2½	3½-2½	4-2½
Catalogue Number...							RE87	RE97	RE107
List Price, each.....							$1.35	$2.00	$2.75
Size in inches.....								3½-3	4-3
Catalogue Number...								RE98	RE108
List Price, each.....								$2.00	$2.75
Size in inches.....									4-3½
Catalogue Number...									RE109
List Price, each.....									$2.75



Condulet Reducer

CONDULET UNIONS



Condulet Union (Exploded View)



Condulet Union

Size in inches.	½-½	¾-¾	1-1	1¼-1¼	1½-1½
Catalogue No.	UN11	UN22	UN33	UN44	UN55
Standard Pkg.	50	50	25	25	25
Wt. Std. Pkg.	40 lbs.	50 lbs.	40 lbs.	50 lbs.	60 lbs.
List Price, ea.	$ .35	$ .40	$ .60	$1.00	$1.25

CORD CLAMP—Black Enamel Finish



Illustrating use of Cord Clamp



For ½, ¾ and 1-inch Conduit	Description	For 30-60 Amp. Condulets	For 100 Amp. Condulets
Clamp 1	Catalogue No.	PE35	PE36
50	Standard Pkg.	50	50
20 lbs.	Wt. Std. Pkg.	15 lbs.	30 lbs.
$ .40	List Price, each	$ .15	$ .25

PORCELAIN BUSHING—For Type FF Condulets



*Reducers listed in the same vertical column may be assorted to make up a standard package.

Finishes: Reducers are furnished with galvanized finish only.

Black enamel is the standard finish for unions, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at the same price as black enamel finish. For special plated finishes, and cast brass and cast bronze reducers and unions, see page Cross Reference No. CH182.

Black enameled and galvanized unions of the same size may be assorted to make up a standard package.

(Cross Reference No. CH171)

ARC LAMP HOOKS FOR CONDULETS

FOR ARC LAMPS, CEILING FANS AND SIMILAR INSTALLATIONS



Hooks Arranged for Guy Wire

Size	For ½-inch Conduit	For ¾-inch Conduit	For 1-inch Conduit
Cat. No. ...	GAH1	GAH2	GAH3
Std. Pkg....	50	50	50
Wt.Std.Pkg.	50 lbs.	25 lbs.	25 lbs.
List, each ..	$ .45	$ .45	$ .50



Plain Hooks

Size	For ½" and ¾" Conduit	For 1-inch Conduit
Cat. No. ...	PAH2	PAH3
Std. Pkg....	50	50
Wt.Std.Pkg.	25 lbs.	13 lbs.
List, each ..	$ .20	$ .20



DIAMETER OF WIRE HOLES IN CONDULET COVERS

Obround Covers—Porcelain and Composition

Style	Size of Cover ...	½	¾	1	1¼	1½	2	2½	3	3½	4	5 or 6
1-wire Std.*	Catalogue No. ..	11	21	31	41	51	61	71	81	91	101	1401
	Diameter Hole..	13/32	13/32	13/32	13/32	1 3/8	1 3/4	2 5/16	2 5/16	3 1/4	3 1/4	3 1/4
1-wire Spec.	Catalogue No. ..	11S	21S	31S	41S	51S	61S	71S	81S	91S	101S	Not
	Diameter Hole..	5/8	25/32	1	1 1/8	13/32	13/32	13/32	13/32	13/32	13/32	made
2-wire	Catalogue No. ..	12	22	32	42	52	62	72	82	92	102	1402
	Diameter Holes.	3/8	3/8	1/2	11/16	13/16	1	1 5/16	1 7/16	1 3/4	1 15/16	2 1/4
3-wire	Catalogue No. ..	13	23	33	43	53	63	73	83	93	103	1403
	Diameter Holes.	5/16	3/8	1/2	11/16	13/16	1	1 5/16	1 7/16	1 3/4	1 15/16	2 1/4
4-wire	Catalogue No. ..	1400	2400	3400	4400	5400	6400	7400	8400	9400	10400	14400
	Diameter Holes.	5/16	5/16	13/32	17/32	5/8	1	1 5/16	1 7/16	1 3/4	1 15/16	1 7/8
5-wire	Catalogue No. ..	Not	2500	3500	4500	5500	6500	7500	8500	9500	10500	14500
	Diameter Holes.	made	5/16	13/32	17/32	5/8	13/16	29/32	1 1/16	1 5/16	1 1/2	1 9/16
6-wire	Catalogue No. ..	Not	2600	3600	4600	5600	6600	7600	8600	9600	10600	14600
	Diameter Holes.	made	5/16	3/8	1/2	17/32	5/8	7/8	7/8	1 3/16	1 3/16	1 5/16
7-wire	Catalogue No. ..	Not	Not	3700	4700	5700	6700	7700	8700	9700	10700	14700
	Diameter Holes.	made	made	11/32	7/16	15/32	19/32	25/32	25/32	1	1	1 1/8
8-wire	Catalogue No. ..	Not	Not	3800	4800	5800	6800	7800	8800	9800	10800	14800
	Diameter Holes.	made	made	5/16	3/8	13/32	1/2	21/32	21/32	27/32	27/32	1
9-wire	Catalogue No. ..	Not	Not	3900	4900	5900	6900	7900	8900	9900	10900	14900
	Diameter Holes.	made	made	19/64	21/64	23/64	29/64	19/32	19/32	23/32	23/32	7/8
W. P.	Catalogue No. ..	14	24	34	44							
	Diameter Holes.	5/16	5/16	5/16	5/16							

2½ and 3-inch Obround wire hole covers are interchangeable; also the 3½ and 4-inch sizes.

Covers for G and H, FD and FS, RJ and RK, M and O Series of Condulet Bodies

Style of Cover	Type	For G and H Series		For FD and FS Series
		Form 5 or 10	Form 20	
1-wire	Cat. No....	5101	201	DS1
	Diam. Hole	13/32	13/32	13/32
2-wire	Cat. No. ...	5102	202	DS2
	Diam. Holes	5/16	5/16	3/8
3-wire	Cat. No. ...	5103	203	DS3
	Diam. Holes	5/16	5/16	3/8
4-wire	Cat. No. ...	510400	20400	DS4
	Diam. Holes	5/16	5/16	5/16
5-wire	Cat. No....	Not made		DS5
	Diam. Holes			5/16

Style of Cover	Type	For RJ and RK Series	For M and O Series Style of Molding	
			2-wire	3-wire
1-wire Std.*	Cat. No. ...	RK01	021	031
	Diam. Hole	3/32	13/32	13/32
1-wire Special	Cat. No. ...	RK01S	Not made	
	Diam. Hole	1		
2-wire	Cat. No. ...	RK02		
	Diam. Holes	3/8		
3-wire	Cat. No. ...	RK03		
	Diam. Holes	5/16		

*Standard 1-wire hole covers will always be furnished, unless order specifically calls for special 1-wire hole covers.

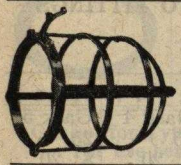
Finishes: Black enamel is the standard finish for hooks, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, at same price as black enamel finish, when the order specifies galvanized finish.

Black enameled and galvanized hooks of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

(Cross Reference No. CH172)

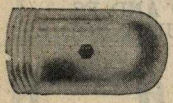
CONDULET GUARDS, GLOBES, SEALING PLATES AND REFLECTOR HOLDERS

GUARDS

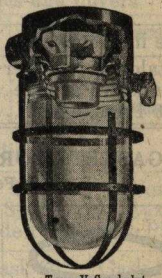


Size.....	For V Series and Equipment VGDE1		For VH Series and Equipment VGDE2	
Finish.....	Black	Marine	Black	Marine
Cat. No....	V9	V90	VH9	VH90
Std. Pkg....	35	35	35	35
Wt. Std. Pkg.	40 lbs.	40 lbs.	60 lbs.	60 lbs.
List Price, ea.	$1.80	$1.80	$2.25	$2.25

GLOBES



Color....	Clear	Opal	Green	Blue	Orange	Ruby
For V Series of Condulets and Equipment VGDE1						
Cat. No..	V8	V41	V42	V43	V44	V45
Std. Pkg.	35	35	35	35	35	35
Wt. Pkg.	50 lbs.	50 lbs.	50 lbs.	50 lbs.	50 lbs.	50 lbs.
List, ea...	$ .80	$1.10	$1.70	$1.70	$1.70	$2.35
For VH Series of Condulets and Equipment VGDE2						
Cat.No..	VH8	VH41	VH42	VH43	VH44	VH45
Std. Pkg.	35	35	35	35	35	35
Wt. Pkg.	60 lbs.	60 lbs.	60 lbs.	60 lbs.	60 lbs.	60 lbs.
List, ea..	$ .80	$1.70	$2.35	$2.35	$2.35	$2.90



Type V Condulet Complete with Globe, Guard Receptacle and Sealing Plate (Broken-away View)

SEALING PLATES—Brass



For V and VH Series of Condulets

Size	For V Series	For VH Series
Catalogue Number..	V51	VH51
Std. Pkg., not Ass'd.	35	35
Ship. Wt. Std. Pkg..	30 lbs.	40 lbs.
List Price, each.....	$ .30	$ .50



Reflector Holder Showing Reflector Mounted

REFLECTOR HOLDERS

Take Reflectors Enumerated Below



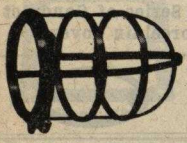
Size.....	For V Series and Equipment VGDE1		For VH Series and Equipment VGDE2	
Finish.....	Black	Marine	Black	Marine
Cat. No.....	V61	V610	VH61	VH610
Std. Pkg.....	35	35	35	35
Wt. Std. Pkg.	30 lbs.	30 lbs.	35 lbs.	35 lbs.
List Price, ea.	$1.40	$1.40	$1.65	$1.65



Reflector Holder with Guard Showing Reflector Mounted

COMBINATION REFLECTOR HOLDERS WITH GUARDS

Take Reflectors Enumerated Below



Size.....	For V Series and Equipment VGDE1		For VH Series and Equipment VGDE2	
Finish.....	Black	Marine	Black	Marine
Cat. No.....	V71	V710	VH71	VH710
Std. Pkg.....	35	35	35	35
Wt. Std. Pkg.	50 lbs.	50 lbs.	70 lbs.	70 lbs.
List Price, ea.	$2.00	$2.00	$2.50	$2.50

Above holders take the following reflectors which are not included in list prices.
Holders V61, V610, V71 and V710 take HOLOPHANE—626, 627 and OVERBAUGH & AYERS—769, 771. Holders VH61, VH610, VH71 and VH710 take HOLOPHANE—628, 629 and OVERBAUGH & AYERS—770, 772.

Finishes: Galvanized finish will be furnished at the same price as black finish, when order specifies galvanized finish.

Black, marine and galvanized guards of the same size may be assorted to make up a standard package. The same assortment applies to reflector holders and reflector holders with guards.

(Cross Reference No. CH173)

GASKETS FOR CONDULETS

GASKETS FOR OBROUND COVERS AND OBROUND CONDULETTO FITTINGS

For use between Condulet Bodies and Covers or Fittings



Size in inches	½	¾	1	1¼	1½
Catalogue Number	Gask 1	Gask 2	Gask 3	Gask 4	Gask 5
Standard Package	200	100	50	25	25
List Price, each	$ .10	$ .10	$ .15	$ .20	$ .20

Size in inches	2	2½	3	3½	4	5 and 6
Catalogue Number	Gask 6	Gask 7	Gask 8	Gask 9	Gask 10	Gask 86
Standard Package	25	25	25	25	25	25
List Price, each	$ .25	$ .40	$ .40	$ .50	$ .60	$ .70

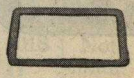
GASKETS FOR OBROUND CONDULETTO FITTINGS

For use between Cap and Base



Size in inches	½	¾	1
Cat. No.	Gask 31	Gask 32	Gask 33
Std. Pkg.	250	100	50
List Price, ea.	$ .10	$ .10	$ .15

GASKET FOR FD AND FS CONDULET BODIES

Gask 91	
30	
$ .25	

GASKETS FOR TYPE F CONDULET COUPLINGS



Size in inches	½	¾	1	1¼
Catalogue Number	Gask 11	Gask 12	Gask 13	Gask 14
Standard Package	100	100	50	25
List Price, each	$ .05	$ .05	$ .08	$ .10

Size in inches	1½	2	2½	3	3½	4
Catalogue Number	Gask 15	Gask 16	Gask 17	Gask 18	Gask 19	Gask 20
Standard Package	25	25	25	25	25	25
List Price, each	$ .10	$ .15	$ .20	$ .20	$ .40	$ .50

GASKETS FOR G AND H SERIES OF CONDULET BODIES

For use between Bodies and Covers or Fittings



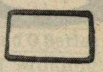
For Form 5 and Form 10 Bodies	For Form 20 Bodies
Gask 21	Gask 22
100	75
$ .10	$ .15

GASKETS FOR NORBITT CONDULETTO FITTINGS

For use between Bodies of the J and K Series and Fittings

Gask 23 is also for use with Blank Cover J100

Catalogue Number	Gask 23
Standard Package	200
List Price, each	$ .10



GASKETS FOR RJ AND RK SERIES OF CONDULET BODIES

For use between Bodies and Metal Covers



Gask 35	Catalogue Number	Gask 34
200	Standard Package	200
$ .15	List Price, each	$ .15



GASKETS FOR ELLIPTICAL CONDULETTO FITTINGS

For use between RJ and RK Series of Condulet Bodies and Fittings or Porcelain Covers

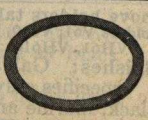
GASKETS FOR V SERIES OF CONDULETS



Sealing Plate Gasket	Globe Gasket
Gask 26	Gask 24
35	35
$ .15	$ .15

GASKETS FOR VH SERIES OF CONDULETS

Description	Sealing Plate Gasket	Globe Gasket
Cat. No.	Gask 27	Gask 25
Std. Pkg.	35	35
List, each	$ .20	$ .20



(Cross Reference No. CH176)

CONDULET GASKETS

Gaskets for WV Condulets


Gask 87

Globe Gaskets		Cover Gasket	Description
Upper	Lower		
Gask 87	Gask 88	Gask 89	Cat. No.
25	25	25	Std. Pkg.
$ .35	$ .35	$ .35	List, ea..

Gaskets for Equipments VGDE1 and VGDE2

Globe Gaskets		Between Holder and Body	Description
For VGDE1	For VGDE2		
Gask 24	Gask 25	Gask 60	Cat. No.
35	35	35	Std. Pkg.
$ .15	$ .20	$ .25	List, ea..

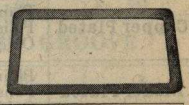

Gask 60

Gasket for Types PRC and PRX Condulets
For use between Bodies and Covers

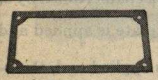


Gask 52	..... Catalogue Number	Gask 67
25	..... Standard Package	25
$ .35	..... List Price, each	$ .30

Gasket for Types PJCA and PJX Condulets
For use between Bodies and Covers



Gaskets for RS Series of Condulet Bodies


Gask 63


Gask 66

Size	For 8½x8½ Cover	For 8½x4½ Cover	For 4½x4½ Cover	For 8½x4 Side Plate	For 4½x4 Side Plate
Catalogue No. ..	Gask 61	Gask 63	Gask 64	Gask 66	Gask 65
Standard Pkg. ..	25	25	25	25	25
List Price, each .	$ .50	$ .40	$ .35	$ .35	$ .30

Gaskets for LO, CL and BO Series of Condulet Bodies
For use between Bodies and LOB00 or LOB000 Covers

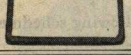

Gask 60

Gask 60	Gask 85	. Catalogue Number.	Gask 84
35	35	. Standard Package .	50
$ .25	$ .30	... List Price, each ..	$ .25

Gasket for DSP Series of Condulet Bodies
For use between Bodies and Rectangular Cover



Gasket for Types JRRH and JRRV Hoods
For use between Condulet Bodies and Hoods



Gask 70	..... Catalogue Number	Gask 90
50	..... Standard Package	50
$ .20	..... List Price, each	$ .25

Gasket for Types MOH and MOV Hoods
For use between Condulet Bodies and Hoods



Gasket for Types UGC and UGX Bodies
For use between Bodies and Covers or Receptacle Housings

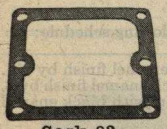


Gask 51	..... Catalogue Number	Gask 59
25	..... Standard Package	25
$ .75	..... List Price, each	$ .25

Gasket for Types BPF, BPFA and BPB Plugs
For use between Receptacle Housings and Plugs



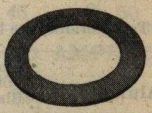
Gaskets for Type UGE Frame


Gask 83

For Blank or Hub Plates and Receptacle Housing	For Supporting and Flange Plates	Description
Gask 82	Gask 83	..Cat. No...
25	25	..Std. Pkg...
$ .40	$ .40	List Price, ea.

Gaskets for SP Series of Condulets

Gasket for Brass Ring	Gasket for Glass Disk
Gask 57	Gask 58
25	25
$ .60	$ .50


Gask 57

Gasket for Condulet Bodies or Side Bracket Hoods that take Receptacle Mounting Plate RMP1
For use between Bodies and Mounting Plate



Gask 85	..... Catalogue Number	Gask 30
35	..... Standard Package	25
$ .30	..... List Price, each	$ .10

Gasket for Conduletto Clamp Fittings and Receptacle CCV337



(Cross Reference No. CH177)

CONDULET FINISHES

IRON CONDULETS AND COVERS

To determine the list prices of iron Condulets or covers with special plated finishes, use the following schedule:

Hot Galvanized	Multiply the standard list price of the article in iron with black enamel finish by 1½.
Brass Plated	Plain Finish: Multiply the standard list price of the article in iron with black enamel finish by 1¼. Polished Finish: Multiply the standard list price of the article in iron with black enamel finish by 3. Oxidized Finish: Multiply the standard list price of the article in iron with black enamel finish by 3.
Copper Plated	Plain Finish: Multiply the standard list price of the article in iron with black enamel finish by 1¼. Polished Finish: Multiply the standard list price of the article in iron with black enamel finish by 3. Oxidized Finish: Multiply the standard list price of the article in iron with black enamel finish by 3.
Nickel Plated	Plain Finish: Multiply the standard list price of the article in iron with black enamel finish by 1¼. Polished Finish: Multiply the standard list price of the article in iron with black enamel finish by 3. Oxidized Finish: Multiply the standard list price of the article in iron with black enamel finish by 3.

Iron Condulets or covers with polished plated finishes have to be ground and polished before plate is applied and again polished after plate has been applied.

Iron Condulets or covers with plain plated finishes are not ground and polished before plate is applied and, therefore, can not be satisfactorily polished after plate is applied.

CAST BRASS AND CAST BRONZE CONDULETS

To determine the list prices of cast brass or cast bronze Condulets with various finishes, use the following schedule:

Cast Brass	Marine Finish: Multiply the standard list price of the article in iron with black enamel finish by 3. Plain Finish: (See note*) Multiply the standard list price of the article in iron with black enamel finish by 3. Polished Finish: Multiply the standard list price of the article in iron with black enamel finish by 3¼. Sand Blast Finish: Multiply the standard list price of the article in iron with black enamel finish by 3¼. Oxidized Finish: Multiply the standard list price of the article in iron with black enamel finish by 3¼.
Cast Bronze	Plain Finish: Multiply the standard list price of the article in iron with black enamel finish by 3¼. Polished Finish: Multiply the standard list price of the article in iron with black enamel finish by 3¾. Sand Blast Finish: Multiply the standard list price of the article in iron with black enamel finish by 3¾. Oxidized Finish: Multiply the standard list price of the article in iron with black enamel finish by 3¾.

*Cast brass Condulets with marine finish will be furnished with plain finish at the same list price.

SHEET BRASS AND SHEET BRONZE COVERS

To determine the list prices of sheet brass or sheet bronze covers with various finishes, use the following schedule:

Sheet Brass	Plain Finish: Multiply the standard list price of the article in iron with black enamel finish by 3. Polished Finish: Multiply the standard list price of the article in iron with black enamel finish by 4. Sand Blast Finish: Multiply the standard list price of the article in iron with black enamel finish by 4. Oxidized Finish: Multiply the standard list price of the article in iron with black enamel finish by 4.
Sheet Bronze	Plain Finish: Multiply the standard list price of the article in iron with black enamel finish by 3. Polished Finish: Multiply the standard list price of the article in iron with black enamel finish by 4. Sand Blast Finish: Multiply the standard list price of the article in iron with black enamel finish by 4½. Oxidized Finish: Multiply the standard list price of the article in iron with black enamel finish by 4.

ALUMINUM CONDULETS AND COVERS

To determine the list prices of aluminum Condulets or covers with various finishes, use the following schedule:

Aluminum	Plain Finish: Multiply the standard list price of the article in iron with black enamel finish by 2½. Polished Finish: Multiply the standard list price of the article in iron with black enamel finish by 3. Black Enamel Finish: Multiply the standard list price of the article in iron with black enamel finish by 2½.

Important Information Concerning Iron Condulets or Covers with Special Plated Finishes and Condulets or Covers of Special Metals with Various Finishes

Condulets or covers with special finishes or of special metal with various finishes can be ordered by using the catalogue number for black enamel Condulet or cover of type and size desired, followed by a description of the selected special finish or special metal.

Thus, the order for a ½-inch type FD Condulet body, brass plated and polished, should read: "FD1 brass plated polished."

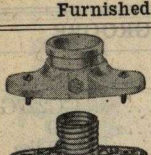
A standard package quantity of Condulets or covers with a special plated finish or of a special metal with a special finish is the same as for black enamel Condulets or covers of the same type and size.

(Cross Reference No. CH182)

OBROUND CONDULETTO FITTINGS

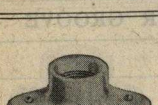
For Types A, B, C, CO, D, E, LB, LBA, LBB, LBL, LBV, LF, LFB, LFM, LL, LLB, LR, LRB, LU, T, TB, TL, TR, U, UB and X Condulet Bodies

Furnished with Gasket between Base and Cap, and all necessary Fastening Screws



RECEPTACLES WITH SHADE HOLDER GROOVE

Size of Condulet Body	½	¾	1
Catalogue Number	JR1G	JR2G	JR3G
Standard Package	200	100	50
Shipping Weight Std. Pkg.	120 lbs.	80 lbs.	55 lbs.
List Price, each	$ .30	$ .35	$ .40



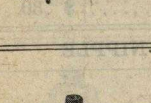
RECEPTACLES WITHOUT SHADE HOLDER GROOVE

Size of Condulet Body	½	¾	1
Catalogue Number	JR1	JR2	JR3
Standard Package	200	100	50
Shipping Weight Std. Pkg.	120 lbs.	80 lbs.	55 lbs.
List Price, each	$ .25	$ .30	$ .35



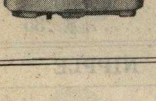
CORD ROSETTES

Size of Condulet Body	½	¾	1
Catalogue Number	JC1	JC2	JC3
Standard Package	200	100	50
Shipping Weight Std. Pkg.	120 lbs.	80 lbs.	60 lbs.
List Price, each	$ .20	$ .25	$ .30



FIXTURE ROSETTES WITH ⅛ MALE NIPPLE

Size of Condulet Body	½	¾	1
Catalogue Number	JF19	JF29	JF39
Standard Package	100	100	50
Shipping Weight Std. Pkg.	80 lbs.	90 lbs.	60 lbs.
List Price, each	$ .30	$ .35	$ .40



FIXTURE ROSETTES WITH ⅛ FEMALE NIPPLE

Size of Condulet Body	½	¾	1
Catalogue Number	JF1	JF2	JF3
Standard Package	100	100	50
Shipping Weight Std. Pkg.	80 lbs.	90 lbs.	60 lbs.
List Price, each	$ .30	$ .35	$ .40



HUBBELL ATTACHMENT PLUG RECEPTACLES—10 AMPERE

Size of Condulet Body	½	¾	1
Catalogue Number	JR15	JR25	JR35
Standard Package	100	100	50
Shipping Weight Std. Pkg.	70 lbs.	80 lbs.	55 lbs.
List Price, each	$ .40	$ .45	$ .50



HUBBELL POLARITY PLUG RECEPTACLES—20 AMPERE

Size of Condulet Body	½	¾	1
Catalogue Number	JR12	JR22	JR32
Standard Package	100	100	50
Shipping Weight Std. Pkg.	70 lbs.	80 lbs.	55 lbs.
List Price, each	$ .55	$ .60	$ .65

Obround Conduletto fittings are made in sizes for ½, ¾ and 1-inch Obround Condulet bodies.

Proper fastening screws are furnished with Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

Condulet bodies that take Obround Conduletto fittings are listed on pages Cross Reference Nos. CH21 to CH29a, inclusive. Obround gaskets are listed separately on page Cross Reference No. CH176.

(Cross Reference No. CH184a)

NORBITT CONDULETTO FITTINGS

FOR CONDULET BODIES OF THE J AND K SERIES

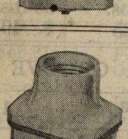
Furnished with Gasket and Fastening Screw



RECEPTACLE WITH SHADE HOLDER GROOVE

Complete Fitting

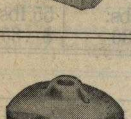
Catalogue Number	CC227G
Standard Package	200
Shipping Weight Std. Pkg.	130 lbs.
List Price, each	$ .45



RECEPTACLE WITHOUT SHADE HOLDER GROOVE

Complete Fitting

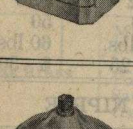
Catalogue Number	CC227
Standard Package	200
Shipping Weight Std. Pkg.	130 lbs.
List Price, each	$ .40



CORD ROSETTE

Complete Fitting

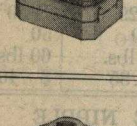
Catalogue Number	CC332
Standard Package	200
Shipping Weight Std. Pkg.	140 lbs.
List Price, each	$ .30



FIXTURE ROSETTE WITH ⅛ MALE NIPPLE

Complete Fitting

Catalogue Number	CC339
Standard Package	100
Shipping Weight Std. Pkg.	80 lbs.
List Price, each	$ .35



FIXTURE ROSETTE WITH ⅛ FEMALE NIPPLE

Complete Fitting

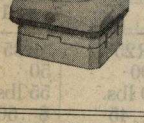
Catalogue Number	CC338
Standard Package	100
Shipping Weight Std. Pkg.	80 lbs.
List Price, each	$ .35



HUBBELL ATTACHMENT PLUG RECEPTACLE—10 AMPERE

Complete Fitting

Catalogue Number	CC5
Standard Package	100
Shipping Weight Std. Pkg.	70 lbs.
List Price, each	$ .50



HUBBELL POLARITY PLUG RECEPTACLE—20 AMPERE

Complete Fitting

Catalogue Number	CC20
Standard Package	100
Shipping Weight Std. Pkg.	70 lbs.
List Price, each	$ .65

Norbitt Conduletto fittings are made in one size only and are interchangeable on Condulet bodies of the J and K series.

Proper fastening screw is furnished with each Norbitt Conduletto fitting, and is so held in screw hole that it can not fall out.

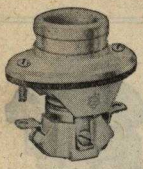
Condulet bodies that take Norbitt Conduletto fittings are listed on pages Cross Reference Nos. CH65, CH66 and CH67. Gasket is listed separately on page Cross Reference No. CH176.

(Cross Reference No. CH186a)

ELLIPTICAL CONDULETTO FITTINGS

FOR CONDULET BODIES OF THE RJ AND RK SERIES

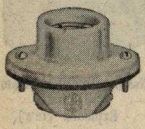
Furnished with Gasket and Fastening Screws



RECEPTACLE WITH SHADE HOLDER GROOVE

Complete Fitting

Catalogue Number	RK527G
Standard Package	200
Shipping Weight Std. Pkg.	100 lbs.
List Price, each	$ .45



RECEPTACLE WITHOUT SHADE HOLDER GROOVE

Complete Fitting

Catalogue Number	RK527
Standard Package	200
Shipping Weight Std. Pkg.	100 lbs.
List Price, each	$ .40



CORD ROSETTE

Complete Fitting

Catalogue Number	RK532
Standard Package	200
Shipping Weight Std. Pkg.	110 lbs.
List Price, each	$ .30



FIXTURE ROSETTE WITH ⅛ MALE NIPPLE

Complete Fitting

Catalogue Number	RK539
Standard Package	100
Shipping Weight Std. Pkg.	70 lbs.
List Price, each	$ .35



FIXTURE ROSETTE WITH ⅛ FEMALE NIPPLE

Complete Fitting

Catalogue Number	RK538
Standard Package	100
Shipping Weight Std. Pkg.	70 lbs.
List Price, each	$ .35



HUBBELL ATTACHMENT PLUG RECEPTACLE—10 AMPERE

Complete Fitting

Catalogue Number	RK5
Standard Package	100
Shipping Weight Std. Pkg.	80 lbs.
List Price, each	$ .50



HUBBELL POLARITY PLUG RECEPTACLE—20 AMPERE

Complete Fitting

Catalogue Number	RK20
Standard Package	100
Shipping Weight Std. Pkg.	80 lbs.
List Price, each	$ .65

Elliptical Conduletto fittings are made in one size only and are interchangeable on all Condulet bodies of the RJ and RK series.

Proper fastening screws are furnished with Elliptical Conduletto fittings, and are so held in screw holes that they can not fall out.

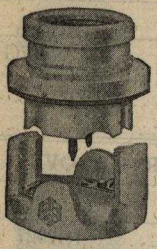
Condulet bodies that take Elliptical Conduletto fittings are listed on pages Cross Reference Nos. CH69, CH70, CH71 and CH72. Gasket is listed separately on page Cross Reference No. CH176.

(Cross Reference No. CH188a)

NORBITT CONDULETTO CLAMP FITTINGS

FOR CONDULETS OF THE S SERIES

Norbitt Conduletto Clamp Receptacle C337 is used with the following: Equipments VGDE1 and VGDE2; Crouse-Hinds Reflector and Receptacle Holder SRH2, and Receptacle Mounting Plate RMP1. Furnished with Gasket



Norbitt Conduletto Clamp Receptacle With Shade Holder Groove (Exploded View)

Norbitt Conduletto Clamp fittings eliminate soldered and taped joints, and have the additional advantage of enclosed contacts.

These fittings are made in two parts—base and cap. Circuit wires connect direct to the base, and two screws through the cap complete the electrical connection and clamp fitting in position.

Norbitt Conduletto Clamp fittings have a base common to all. This construction permits the substitution of one style of cap for another, without disconnecting circuit wires.

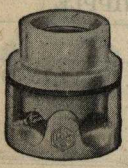


Norbitt Conduletto Clamp Cord Rosette Exploded View)



RECEPTACLE WITH SHADE HOLDER GROOVE

Description	Fitting Complete
Catalogue Number	C337G
Standard Package	200
Shipping Weight Std. Pkg.	110 lbs.
List Price, each	$ .45



RECEPTACLE WITHOUT SHADE HOLDER GROOVE

Description	Fitting Complete
Catalogue Number	C337
Standard Package	200
Shipping Weight Std. Pkg.	110 lbs.
List Price, each	$ .40



CORD ROSETTE

Description	Fitting Complete
Catalogue Number	C442
Standard Package	200
Shipping Weight Std. Pkg.	100 lbs.
List Price, each	$ .30



FIXTURE ROSETTE WITH ⅛ MALE NIPPLE

Description	Fitting Complete
Catalogue Number	C449
Standard Package	100
Shipping Weight Std. Pkg.	65 lbs.
List Price, each	$ .35



FIXTURE ROSETTE WITH ⅛ FEMALE NIPPLE

Description	Fitting Complete
Catalogue Number	C448
Standard Package	100
Shipping Weight Std. Pkg.	65 lbs.
List Price, each	$ .35

Conduletbodies that take Norbitt Conduletto clamp fittings are listed on pages Cross Reference Nos. CH94 and CH95. Equipments VGDE1 and VGDE2, Crouse-Hinds reflector and receptacle holder SRH2 and receptacle mounting plate RMP1, with each of which receptacle C337 is used, are listed on page Cross Reference No. CH160a Gasket is listed separately on page Cross Reference No. CH177.

PORCELAIN CLAMP BUSHINGS

FEDERAL PORCELAIN CLAMP BUSHINGS



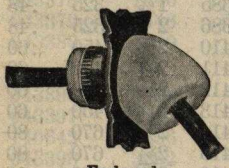
Federal Camp Bushing

These bushings are made of one piece of the best grade of vitrified porcelain. Clamping rings are made of metal, threaded to fit threads on the porcelain.

Can be used with material 5/8 inch to 3/4 inch in thickness.

Trade No.	Mfrs. No.	Length Inches	Diameter, Inches Inside	Diameter, Inches Outside	Std. Pkg.	Price Each
023156	B-1	1¼	9/32	41/64	100	$0.07

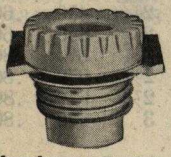
FEDERAL ANGLE BUSHINGS


Federal Angle Bushing

Special shape for outdoor work, preventing water from entering around wire. Also used instead of regular bushing where wires leave surface at an angle, preventing damage to wire or insulation by sudden bending at the bushing. A small projection behind the head, designed to engage a notch which can be made easily in the metal opening, prevents the bushing from turning after the clamping ring is tightened.

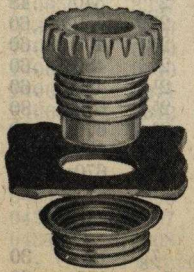
Trade No.	Mfrs. No.	Diameter, Inches Inside	Diameter, Inches Outside	Std. Pkg.	Price Each
088427	K-1	9/32	41/64	250	$0.08
088428	K-2	13/32	13/16	250	.12

THORDARSON PORCELAIN CLAMP BUSHINGS


Thordarson Bushing

The Thordarson Improved Clamp Bushing is made of one piece of the best grade of vitrified porcelain. It is equipped with two threaded metal sleeves; one sleeve is permanently anchored to the body of the porcelain and the other one is used for clamping or holding the bushing in position.

The object of a double-threaded sleeve is to relieve the porcelain from mechanical strain, thus reducing the breakage of porcelain to a minimum. Another feature is that the loose sleeve can be reversed, and in this way the bushing will take a wall ½ inch or less in thickness. Bushing and sleeve are interchangeable.


Thordarson Bushing Exploded View

This type of bushing is most desirable for transformer and motor work where it has to be screwed in a solid casting or wall.

Trade No.	Mfrs. No.	Diameter, Inches Inside	Diameter, Inches Outside	Std. Pkg.	Price Each
41895	1	9/32	41/64	250	$0.08
41896	2	13/32	13/16	250	.09
41897	3	7/16	1	150	.11
41898	4	3/4	15/16	150	.13
41899	5	15/16	1 19/32	100	.16
41900	6	1 5/8	2 11/32	48	.40

GEM WIRE HOLDERS

WITH PORCELAIN INSULATORS



No. 1303

WITH SCREW

Trade No.	Mfrs. No.	Size Opng. Inches	Ship. Wt., Lbs. per 100	Price Each	Trade No.	Mfrs. No.	Size Opng. Inches	Ship. Wt., Lbs. per 100	Price Each
019516	1303	3/16	30	$0.12	019528	1319	1 5/8	250	$0.31
019517	1304	1/4	30	.12	019529	1320	1 3/4	325	.48
019518	1305	3/8	60	.16	019530	1321	1 7/8	325	.48
019519	1306	1/2	60	.16	019531	1322	2	325	.48
019520	1308	5/8	125	.20	019532	1323	2 1/8	450	.60
019521	1310	3/4	125	.20	019533	1324	2 1/4	450	.60
019522	1312	7/8	120	.20	019534	1325	2 3/8	450	.60
019523	1314	1	120	.20	019535	1326	2 1/2	450	.60
019524	1315	1 1/8	250	.31	019536	1327	2 5/8	670	.80
019525	1316	1 1/4	250	.31	019537	1328	2 3/4	670	.80
019526	1317	1 3/8	250	.31	019538	1329	2 7/8	670	.80
019527	1318	1 1/2	250	.31	019539	1329½	3	670	.80



No. 2367

WITH BOLT AND NUT

019540	2367	3/16	30	.12	019552	2383	1 5/8	225	.31
019541	2368	1/4	30	.12	019553	2384	1 3/4	325	.48
019542	2369	3/8	45	.16	019554	2385	1 7/8	325	.48
019543	2370	1/2	45	.16	019555	2386	2	325	.48
019544	2372	5/8	135	.20	019556	2410	2 1/8	450	.60
019545	2374	3/4	130	.20	019557	2411	2 1/4	450	.60
019546	2376	7/8	125	.20	019558	2412	2 3/8	450	.60
019547	2378	1	120	.20	019559	2413	2 1/2	450	.60
019548	2379	1 1/8	225	.31	019560	2414	2 5/8	670	.80
019549	2380	1 1/4	225	.31	019561	2415	2 3/4	670	.80
019550	2381	1 3/8	225	.31	019562	2416	2 7/8	670	.80
019551	2382	1 1/2	225	.31	019563	2417	3	670	.80



No. 481

WITH SCREW

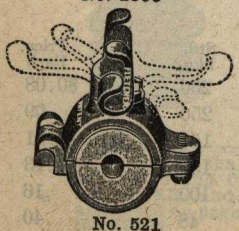
019564	481	3/16	35	.12	019576	427½	1 5/8	230	.31
019565	482	1/4	35	.12	019577	428	1 3/4	350	.48
019566	483	3/8	45	.16	019578	428½	1 7/8	350	.48
019567	421	1/2	45	.16	019579	429	2	350	.48
019568	422	5/8	125	.20	019580	430	2 1/8	450	.60
019569	423	3/4	120	.20	019581	431	2 1/4	450	.60
019570	424	7/8	115	.20	019582	432	2 3/8	450	.60
019571	425	1	110	.20	019583	433	2 1/2	450	.60
019572	425½	1 1/8	250	.31	019584	434	2 5/8	670	.80
019573	426	1 1/4	245	.31	019585	435	2 3/4	670	.80
019574	426½	1 3/8	240	.31	019586	436	2 7/8	670	.80
019575	427	1 1/2	235	.31	019587	437	3	670	.80



No. 2355

WITH BOLT AND NUT

019588	2355	3/16	30	.12	019600	2364½	1 5/8	240	.31
019589	2356	1/4	30	.12	019601	2365	1 3/4	360	.48
019590	2357	3/8	45	.16	019602	2365½	1 7/8	350	.48
019591	2358	1/2	45	.16	019603	2366	2	340	.48
019592	2359	5/8	120	.20	019604	2350	2 1/8	450	.60
019593	2360	3/4	100	.20	019605	2351	2 1/4	450	.60
019594	2361	7/8	100	.20	019606	2352	2 3/8	450	.60
019595	2362	1	90	.20	019607	2353	2 1/2	450	.60
019596	2362½	1 1/8	240	.31	019608	2346	2 5/8	670	.80
019597	2363	1 1/4	240	.31	019609	2347	2 3/4	670	.80
019598	2363½	1 3/8	240	.31	019610	2348	2 7/8	670	.80
019599	2364	1 1/2	240	.31	019611	2349	3	670	.80



No. 521

WITH LOOPS TO ANGLE

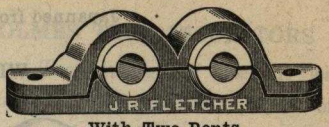
043824	521	1/2	100	.30	043827	524	7/8	125	.30
043825	522	5/8	125	.30	043828	525	1	125	.30
043826	523	3/4	125	.30	043829	526	1 1/8	125	.30

INSULATED CLAMPS AND RACKS

JAPANNED IRON FRAMES—PORCELAIN INSULATIONS



With One Bent



With Two Bents

WITH ONE BENT

Trade No.	Mfrs. No.	Size Opening Inches	Ship. Wt., Lbs. per 100	Price Each	Trade No.	Mfrs. No.	Size Opening Inches	Ship. Wt., Lbs. per 100	Price Each
043372	1400	3/16	40	.08	043381	1450	1 1/4	350	.28
043373	1402	1/4	40	.08	043382	1451	1 3/8	350	.28
140635	1406	5/16	60	.10	043383	1452	1 1/2	340	.28
043374	1407	3/8	60	.10	043384	1453	1 5/8	340	.28
140636	1408	7/16	60	.10	043385	1454	1 3/4	550	.33
043375	1409	1/2	60	.10	043386	1455	1 7/8	545	.33
140637	1411	*5/16	225	.18	043387	1456	2	540	.33
140638	1412	*3/8	220	.18	043388	1457	2 1/8	775	.46
140639	1413	*7/16	215	.18	043389	1458	2 1/4	770	.46
140640	1414	*1/2	210	.18	043390	1459	2 3/8	765	.46
140641	1415	*9/16	205	.18	043391	1460	2 1/2	760	.46
043376	1442	*5/8	200	.18	043392	1461	2 5/8	1085	.72
043377	1444	*3/4	195	.18	043393	1462	2 3/4	1080	.72
043378	1446	*7/8	190	.18	043394	1463	2 7/8	1075	.72
043379	1448	*1	185	.18	043395	1464	3	1070	.72
043380	1449	1 1/8	350	.28	.....	....	....	....	...

WITH TWO BENTS

043396	3200	3/16	75	.16	043405	3209	1 1/4	550	.56
043397	3201	1/4	75	.16	043406	3210	1 3/8	550	.56
140642	3236	5/16	125	.20	043407	3211	1 1/2	550	.56
043398	3202	3/8	125	.20	043408	3212	1 5/8	550	.56
140643	3237	7/16	125	.20	043409	3213	1 3/4	900	.66
043399	3203	1/2	125	.20	043410	3214	1 7/8	900	.66
140644	3239	*5/16	335	.36	043411	3215	2	900	.66
140645	3240	*3/8	335	.36	043412	3216	2 1/8	1350	.92
140646	3241	*7/16	335	.36	043413	3217	2 1/4	1350	.92
140647	3242	*1/2	335	.36	043414	3218	2 3/8	1350	.92
140648	3243	*9/16	335	.36	043415	3219	2 1/2	1350	.92
043400	3204	*5/8	335	.36	043416	3220	2 5/8	....	1.44
043401	3205	*3/4	335	.36	043417	3221	2 3/4	....	1.44
043402	3206	*7/8	335	.36	043418	3222	2 7/8	....	1.44
043403	3207	*1	335	.36	043419	3223	3	....	1.44
043404	3208	1 1/8	550	.56	.....	....	...	....	...

WITH THREE BENTS



043420	3300	3/16	110	.24	043429	3309	1 1/4	875	.84
043421	3301	1/4	110	.24	043430	3310	1 3/8	875	.84
140649	3336	5/16	170	.30	043431	3311	1 1/2	875	.84
043422	3302	3/8	170	.30	043432	3312	1 5/8	875	.84
140650	3337	7/16	170	.30	043433	3313	1 3/4	1270	.99
043423	3303	1/2	170	.30	043434	3314	1 7/8	1270	.99
140651	3339	*5/16	450	.54	043435	3315	2	1270	.99
140652	3340	*3/8	450	.54	043436	3316	2 1/8	1950	1.38
140653	3341	*7/16	450	.54	043437	3317	2 1/4	1950	1.38
140654	3342	*1/2	450	.54	043438	3318	2 3/8	1950	1.38
140655	3343	*9/16	450	.54	043439	3319	2 1/2	1950	1.38
043424	3304	*5/8	450	.54	043440	3320	2 5/8	....	2.16
043425	3305	*3/4	450	.54	043441	3321	2 3/4	....	2.16
043426	3306	*7/8	450	.54	043442	3322	2 7/8	....	2.16
043427	3307	*1	450	.54	043443	3323	3	....	2.16
043428	3308	1 1/8	875	.84	.....	....	...	....	....

Can be furnished with iron bottom and brass top, or with both top and bottom of brass, if desired.

*Outside diameter same as the 1-inch size.

INSULATED CLAMPS AND RACKS

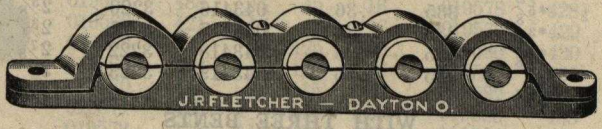
Japanned Iron Frames--Porcelain Insulations

WITH FOUR BENTS



Trade No.	Mfrs. No.	Size Opening	Ship. Wt., Lbs.	Price
043444	3400	3/16	125	$0.32
043445	3401	1/4	125	.32
140667	3436	5/16	215	.40
043446	3402	3/8	215	.40
140668	3437	7/16	215	.40
043447	3403	1/2	215	.40
140669	3439	*5/16	585	.72
140670	3440	*3/8	585	.72
140671	3441	*7/16	585	.72
140672	3442	*1/2	585	.72
140673	3443	*9/16	585	.72
043448	3404	*5/8	585	.72
043449	3405	*3/4	585	.72
043450	3406	*7/8	585	.72
043451	3407	*1	585	.72
043452	3408	1 1/8	1075	1.12
043453	3409	1 1/4	1075	$1.12
043454	3410	1 3/8	1075	1.12
043455	3411	1 1/2	1075	1.12
043456	3412	1 5/8	1075	1.12
043457	3413	1 3/4	1700	1.32
043458	3414	1 7/8	1700	1.32
043459	3415	2	1700	1.32
043460	3416	2 1/8	2475	1.84
043461	3417	2 1/4	2475	1.84
043462	3418	2 3/8	2475	1.84
043463	3419	2 1/2	2475	1.84
043464	3420	2 5/8	....	2.88
043465	3421	2 3/4	....	2.88
043466	3422	2 7/8	....	2.88
043467	3423	3	....	2.88
.....	....	...	....	....

WITH FIVE BENTS



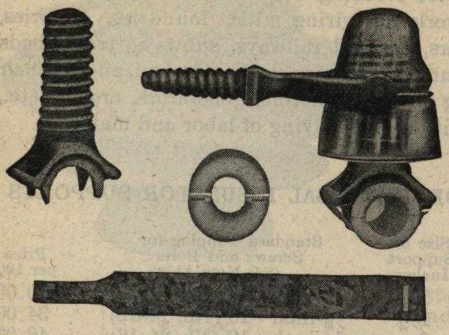
140674	3500	3/16	185	.40	140690	3509	1 1/4	1400	1.40
140675	3501	1/4	185	.40	140691	3510	1 3/8	1400	1.40
140676	3536	5/16	300	.50	140692	3511	1 1/2	1400	1.40
140677	3502	3/8	300	.50	140693	3512	1 5/8	1400	1.40
140678	3537	7/16	300	.50	140694	3513	1 3/4	2175	1.65
140679	3503	1/2	300	.50	140695	3514	1 7/8	2175	1.65
140680	3539	*5/16	775	.90	140696	3515	2	2175	1.65
140681	3540	*3/8	775	.90	140697	3516	2 1/8	3300	2.30
140682	3541	*7/16	775	.90	140698	3517	2 1/4	3300	2.30
140683	3542	*1/2	775	.90	140699	3518	2 3/8	3300	2.30
140684	3543	*9/16	775	.90	140700	3519	2 1/2	3300	2.30
140685	3504	*5/8	775	.90	140701	3520	2 5/8	....	3.60
140686	3505	*3/4	775	.90	140702	3521	2 3/4	....	3.60
140687	3506	*7/8	775	.90	140703	3522	2 7/8	....	3.60
140688	3507	*1	775	.90	140704	3523	3	....	3.60
140689	3508	1 1/8	1400	1.40	.....	....	....	....	....

Can be furnished with iron bottom and brass top, or with both top and bottom of brass, if desired.

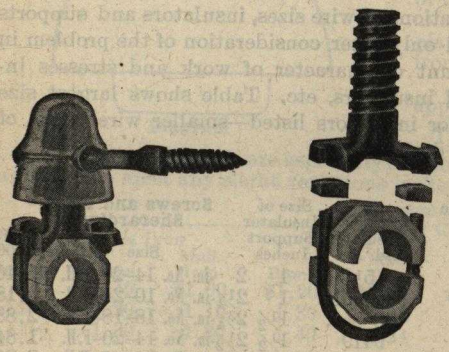
In ordering, give outside diameter of wire or cable, over insulation.

*Outside diameter same as the 1-inch size.

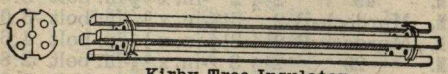
TREE INSULATORS



Holmes Tree Insulator, Style A



Holmes Tree Insulator, Style B



Kirby Tree Insulator



Round Wood Tree Molding

HOLMES TREE INSULATORS

Holmes Tree Insulators prevent leakage, short circuits and tree grounds. Made of malleable iron with double petticoat insulator. Always in upright position regardless of slant of tree. Current cannot leak even if wire is bare. It can be applied quickly without cutting the wire.

Trade No.	Style	Description	Price Each
052297	A	Takes wire up to 00 B. & S.	$0.56
052298	B	Takes wire up to 0000 B. & S.	.90

KIRBY TREE INSULATORS

As will be seen from the illustration, this guard is of the squirrel cage type, consisting of two split-porcelain circular end frames serving as mounting supports for the guide or guard rods, which are made of specially treated wood, of great toughness and strength. The line conductor is by this method of construction entirely surrounded by a flexible protecting cage, which prevents damage being done by the line insulation coming in contact with limbs, guy wires, poles, buildings, etc. As the guard will freely swing with the line conductors, the danger of strains is minimized.

To mount the guard in position, it is only necessary to place the split-porcelain ends around the conductor and insert the wooden rods; then a small binder wire is run around in grooves on the porcelain end frames, after which the wire is simply twisted together.

By the use of this improved form of guard the insulation on the line wires can be mechanically protected, while a high factor of insulation is secured by the use of porcelain end frames.

Trade No.	Description	Price Each
052304	Takes wire up to No. 0000	$0.60

ROUND WOOD TREE MOLDING

Trade No.	Size of Hole Inches	Price, per 1000 Feet
052305	3/8	$55.00
052306	1/2	60.00
052307	3/4	70.00
052308	1	90.00
052309	1 1/4	115.00
052310	1 1/2	140.00

UNIVERSAL INSULATOR SUPPORTS



No. 500

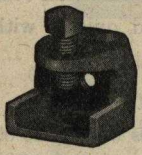


No. 501

Universal Insulator Supports are specially designed malleable iron clamps for securing insulators in any position to open steel framework for wiring mills, foundries, factories, shops, bridges, piers, elevated railways, subways, train sheds and similar structures. They are easily attached, and by their use, electric wiring for lights, motors, generators, cranes, etc., can be installed with a great saving of labor and material.



No. 502

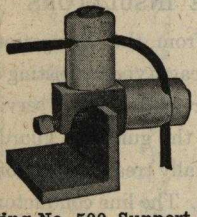


No. 503

LIST PRICES OF UNIVERSAL INSULATOR SUPPORTS

Trade No.	Mfrs. No.	Size of Support Inches	Standard Tapping for Screws and Bolts (See Note A)	Price per 100
012141	500	1	¼-inch—20 (No. 14-20)	$20.00
012142	501	1½	5/16-inch—18 (No. 18-18)	34.00
012143	502	2	⅜-inch—16 (No. 24-16)	46.00
012144	503	2½	½-inch—13	68.00

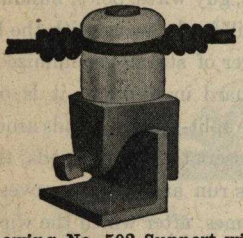
Prices include leather washers for insulators, but do not include machine screws or bolts for insulators.



Showing No. 500 Support with Two No. 5½ Split Insulators Support is Tapped Special for No. 10—24-Thread Machine Screw

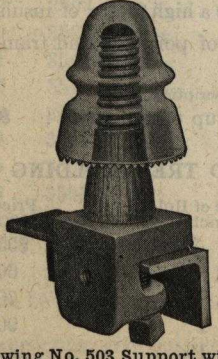
Table of Wires, Insulators, Supports and Screws

These combinations of wire sizes, insulators and supports should be followed only after consideration of the problem in hand, taking account of character of work and stresses involved, strength of insulators, etc. Table shows largest size of wires suitable for insulators listed—smaller wires may, of course, be used as desired.



Showing No. 502 Support with No. 3½ Insulator. Support is Tapped Standard for No. 24—16-Thread Machine Screw

See Notes	Largest Wire Fitting Insulator Groove	Insulator Std. No.	Size of Insulator Support Inches	Screws and Bolts—Sherardized Size	Price per 100
....	No. 12	5½	1	2 -in. No. 14-20-F.H.	$1.46
A	No. 12	5½ Split	1	2¼-in. No. 10-24-F.H.	1.18
....	No. 8	33 Sec.	1½	2¾-in. No. 18-18-F.H.	2.88
A	No. 6	9419	1½	2½-in. No. 14-20-F.H.	1.84
....	No. 6	4½	1½	2¼-in. No. 18-18-F.H.	2.26
....	No. 4	3½	2	2½-in. No. 24-16-F.H.	3.68
A	No. 4	9420	2	2¾-in. No. 18-18-F.H.	2.88
B	No. 2	2	2	2½-in. No. 24-16-R.H.	3.68
B	No. 1	26	2	2½-in. No. 24-16-R.H.	3.68
B	No. 0	24	2	2¼-in. No. 24-16-R.H.	3.44
B	No. 0	30	2	2½-in. No. 24-16-R.H.	3.68
C	No. 2-0	3 W. G.	2	2½-in. No. 24-16-F.H.	3.68
C	No. 2-0	1	2	3¼-in. No. 24-16-F.H.	6.11
B-C	250000 C.M.	49	2½	2 -in. x ½-in. bolt	3.86
B-C	300000 C.M.	Murdock-B	2	3½-in. x ⅜-in. bolt	3.04
B-C	300000 C.M.	Murdock-B	2½	3½-in. x ½-in. bolt	4.64
A-B-C	500000 C.M.	29	2½	3 -in. x ⅜-in. bolt	2.88
B-C	1000000 C.M.	52	2½	3¾-in. x ½-in. bolt	4.90
B-C	1000000 C.M.	53	2½	3½-in. x ½-in. bolt	4.64
B-C	1000000 C.M.	Murdock-A	2½	4 -in. x ½-in. bolt	4.90
....	To fit glass ins.	38 and Glass	2½	Special wood pin and bolt	10.00



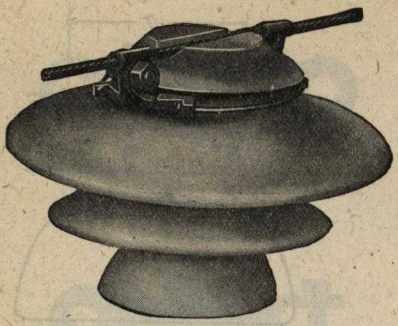
Showing No. 503 Support with D. G. D. P. Glass Insulator and Special Wood Pin

NOTE A.—Items marked require supports to be tapped special for screws or bolts, without extra charge.

NOTE B.—Should have iron washer under screw or bolt head.

NOTE C.—B. & D. Cleats also recommended.

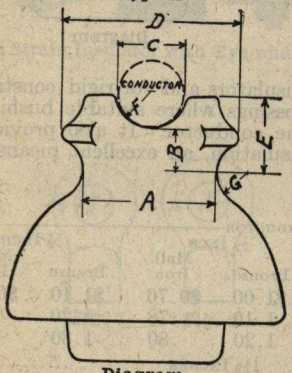
CLARK INSULATOR CLAMPS



Type A



Type B



Diagram

The Clark Insulator Clamp is used for firmly attaching conductors to porcelain or glass insulators, and is used in place of the old-fashioned tie wires.

When ordering, the following information should be supplied:

1. Name and number of insulator, or fill in dimensions on sketch.
2. Solid or stranded wire used.
3. Conductor, bare or insulated.
4. Exact outside diameter of conductor.

These clamps are supplied of either special high tensile strength red bronze, or of the best grade of malleable iron protected by a heavy coating of zinc, and with steel bolts and nuts heavily copper-plated or sherardized, as may be desired. Malleable iron clamps cannot be supplied in lots of less than 100.

Prices will vary with the copper market, but will approximate those shown below.

TYPE A

The Type A clamps are especially designed for use on large insulators, and may be readily adjusted to meet any slight variations inthe diameter of the insulator neck.

Dimen. B	Dimension C — Diameter of Conductor: ¼ Inch		⅜ Inch		½ Inch		⅝ Inch		¾ Inch	
Inches	Bronze	Mall. Iron	Bronze	Mall. Iron	Bronze	Mall. Iron	Bronze	Mall. Iron	Bronze	Mall. Iron
Dimension A—4 to 4⅛ Inches										
1	$1.10	$1.00	$1.20	$1.10	$1.30	$1.20	$1.40	$1.24	$1.50	$1.30
1¼	1.20	1.10	1.30	1.20	1.40	1.24	1.50	1.28	1.60	1.32
1½	1.30	1.20	1.40	1.24	1.50	1.28	1.60	1.32	1.70	1.36
Dimension A—5 to 8 Inches										
1	1.20	1.10	1.30	1.20	1.40	1.24	1.50	1.30	1.60	1.34
1¼	1.30	1.20	1.40	1.24	1.50	1.30	1.60	1.36	1.70	1.40
1½	1.40	1.30	1.50	1.36	1.60	1.40	1.70	1.44	1.80	1.50
1¾	1.50	1.36	1.60	1.40	1.70	1.44	1.80	1.50	1.90	1.60

TYPE B

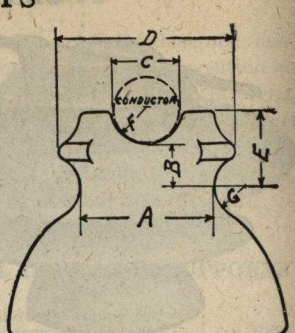
The Type B clamp is principally designed for use with small insulators. This clamp is especially adapted for use on messenger lines.

	⅛ Inch		¼ Inch		⅜ Inch		½ Inch		⅝ Inch	
Dimension A—1½ to 2 7/16 Inches										
¾	.80	.70	.90	.74	1.00	.76	1.10	.78	1.20	.80
1	.90	.74	1.00	.76	1.10	.78	1.20	.80	1.30	.82
1¼	1.00	.76	1.10	.78	1.20	.80	1.30	.82	1.40	.84
Dimension A—2½ to 3 7/16 Inches										
¾	1.00	.78	1.08	.80	1.14	.82	1.20	.84	1.30	.86
1	1.04	.80	1.16	.82	1.24	.84	1.30	.86	1.40	.88
1¼	1.10	.82	1.20	.84	1.30	.86	1.40	.88	1.50	.90
Dimension A—3½ to 4 7/16 Inches										
1	1.10	.84	1.16	.86	1.24	.88	1.32	.90	1.40	.92
1¼	1.20	.86	1.26	.88	1.34	.90	1.42	.92	1.50	.94
1½	1.30	.88	1.36	.90	1.42	.92	1.52	.94	1.60	.96
Dimension A—4½ to 6 Inches										
1	1.20	.86	1.26	.88	1.34	.90	1.44	.92	1.50	.94
1¼	1.30	.88	1.36	.90	1.44	.92	1.54	.94	1.60	.96
1½	1.40	.90	1.46	.92	1.54	.94	1.64	.96	1.70	.98
1¾	1.50	.92	1.56	.94	1.64	.96	1.74	.98	1.80	1.00

CLARK INSULATOR CLAMPS



Type C



Diagram

TYPE C

The Type C clamp is designed for use with small heavy insulators and for rigid construction. It is especially adapted for use at overhead railroad crossings where suitable bushings of soft copper or aluminum are provided, depending upon the conductor. It also provides, when furnished with lead bushings, to amply protect the insulation, an excellent means of holding insulated conductors in place.

Dimension A—1½ to 1⅞ Inches

	Dimension C—Diameter of Conductor									
	⅛ Inch		¼ Inch		⅜ Inch		½ Inch		⅝ Inch	
Dimen. B Inches	Bronze	Mall. Iron	Bronze	Mall. Iron	Bronze	Mall. Iron	Bronze	Mall. Iron	Bronze	Mall. Iron
½	$0.70	$0.66	$0.80	$0.70	$0.90	$0.74	$1.00	$0.76	$1.10	$0.78
¾	.80	.70	.90	.74	1.00	.76	1.10	.78	1.20	.80
1	.90	.74	1.00	.76	1.10	.78	1.20	.80	1.30	.82
	¾ Inch		1 Inch		1¼ Inches		1½ Inches		.....	
½	1.20	.80	1.30	.82	1.40	.84	1.50	.86	....	....
¾	1.30	.82	1.40	.84	1.50	.86	1.60	.88	....	....
1	1.40	.84	1.50	.86	1.60	.88	1.70	.90	....	....

Dimension A—2 to 2⅞ Inches

	⅛ Inch		¼ Inch		⅜ Inch		½ Inch		⅝ Inch	
¾	.94	.76	1.04	.78	1.14	.80	1.24	.82	1.34	.84
1	1.04	.78	1.14	.80	1.24	.82	1.34	.84	1.44	.86
1¼	1.14	.80	1.24	.82	1.34	.84	1.44	.88	1.54	.90
1½	1.24	.84	1.34	.86	1.44	.88	1.54	.92	1.64	.96
	¾ Inch		1 Inch		1¼ Inches		1½ Inches		.....	
¾	1.44	.86	1.54	.88	1.64	.92	1.74	.94	....	....
1	1.54	.88	1.64	.90	1.74	.94	1.84	.96	....	....
1¼	1.64	.92	1.74	.96	1.84	.98	1.94	1.04	....	....
1½	1.74	1.00	1.84	1.04	1.94	1.08	2.10	1.10	....	....

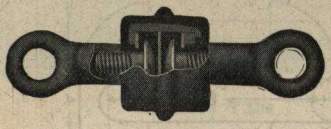
Dimension A—3 to 3⅞ Inches

	⅛ Inch		¼ Inch		⅜ Inch		½ Inch		⅝ Inch	
¾	1.10	.82	1.20	.84	1.30	.86	1.40	.90	1.50	.92
1	1.20	.86	1.30	.88	1.40	.90	1.50	.92	1.60	.94
1¼	1.30	.90	1.40	.92	1.50	.94	1.60	.96	1.70	1.00
1½	1.40	.94	1.50	.96	1.60	1.00	1.70	1.02	1.80	1.06
	¾ Inch		1 Inch		1¼ Inches		1½ Inches		.....	
¾	1.60	.94	1.70	.96	1.80	.98	1.90	1.00	....	....
1	1.70	.96	1.80	1.00	1.90	1.04	2.00	1.06	....	....
1¼	1.80	1.02	1.90	1.06	2.00	1.08	2.10	1.12	....	....
1½	1.90	1.08	2.00	1.12	2.10	1.16	2.20	1.20	....	....

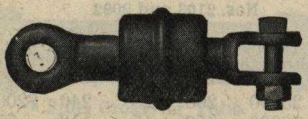
Dimension A—4 to 4⅞ Inches

	⅛ Inch		¼ Inch		⅜ Inch		½ Inch		⅝ Inch	
1	1.30	.86	1.40	.88	1.50	.92	1.60	.94	1.70	.98
1¼	1.40	.92	1.50	.96	1.60	1.00	1.70	1.02	1.80	1.04
1½	1.50	1.00	1.60	1.04	1.70	1.08	1.80	1.12	1.90	1.16
	¾ Inch		1 Inch		1¼ Inches		1½ Inches		.....	
1	1.80	1.00	1.90	1.02	2.00	1.04	2.10	1.06	....	....
1¼	1.90	1.08	2.00	1.12	2.10	1.16	2.20	1.20	....	....
1½	2.00	1.18	2.10	1.20	2.20	1.26	2.30	1.30	....	....

WESTINGHOUSE STRAIN INSULATORS



Giant Strain Insulator with Two Eyes



Giant Strain Insulator with Eye and Clevis

GIANT STRAIN INSULATORS

Sheet mica is the only insulating material under stress, the composition insulation being used solely to exclude moisture and to lengthen the creepage surface. Breakdown voltages invariably take the surface path. The average tensile and dielectric strength of the three sizes are approximately as follows:

Size, Inches	Pounds	Volts
2	6500	9800
2½	8000	12700

WITH TWO MALLEABLE IRON EYES, GALVANIZED
With Eyes in Same Plane

Trade No.	Mfrs. No.	Diam. of Body Inches	Eyes Like Fig. No.	Distance between Centers of Eyes, Inches	Approx. Wt., Lbs. per 100	Price per 100
022535	49443	2	1	5 5/16	130	$82.50
022536	49394	2	1 and 3	5 1/8	130	95.00
022537	49395	2	3	4 15/16	130	100.00
022538	92149	2½	2	6¼	245	112.50
022539	84143	2½	2 and 4	6 5/16	245	130.00
022540	49397	2½	4	6⅛	245	150.00

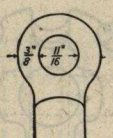


Fig. 1

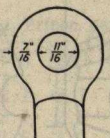


Fig. 2

WITH MALLEABLE IRON EYE AND CLEVIS, GALVANIZED
With Eye in Same Plane with Clevis Bolt

022542	84145	2	1 and 5	5 3/32	135	92.50
022543	49396	2	3 and 5	4 29/32	135	105.00
022544	84144	2½	2 and 6	6 5/32	250	125.00
022545	49398	2½	4 and 6	6 3/32	250	162.50

The body dimensions do not include the beading at the center of these insulators.

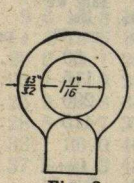


Fig. 3

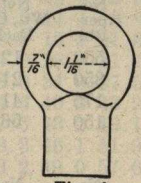


Fig. 4

BROOKLYN STRAIN INSULATORS

Brooklyn insulators consist of a metal head and insulated body, the body containing a metal sleeve into which an eye or clevis stud is threaded. The head is insulated from the stud by Westinghouse composition.

No. 1 Standard Size, ⅝-inch Eyebolt, 3-inch Take-up

Trade No.	Mfrs. No.	Description	Approx. Wt., Lbs. per 100	Price per 100
022552	84268	Mall. iron head and body, forged steel eyebolt, galvanized	250	$225.00

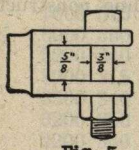


Fig. 5

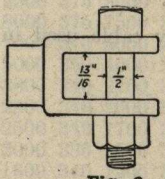
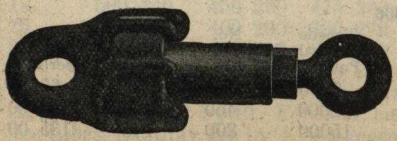


Fig. 6

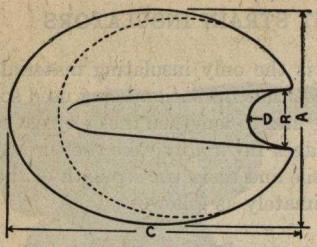
Large Size, ¾-inch Eyebolt, 4-inch Take-up

72707	97516	Mall. iron head and body, forged steel eyebolt, galvanized	500	325.00

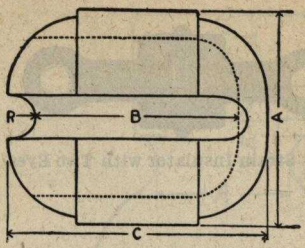


Brooklyn Strain Insulator

PORCELAIN STRAIN INSULATORS

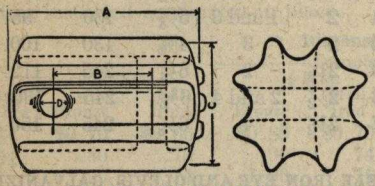


Nos. E2277, E2103 and E2092

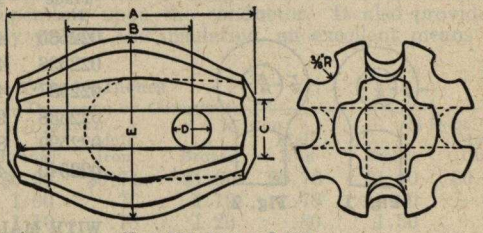


Nos. 2103 and 2092

Trade No.	Mfrs. No.	Dimensions, Inches A	B	C	R	Test Voltage Dry	Wet	Tensile Strength Lbs.	No. per Bbl.	Net Wt., Oz. Each	Approx. Ship. Wt. Lbs. per 100	Price per 1000
148929	E2277	3 7/16	2 7/8	4 1/2	1	28000	16000	25000	200	28	240	$200.00
148930	E2103	2 5/8	2 1/8	3 3/8	5/8	20000	12000	16000	450	15	110	75.00
148931	E2092	2 1/4	1 3/4	2 5/8	1/2	16000	10000	7000	800	9	60	50.00
148932	2103	2 1/2	2 3/4	3 3/8	1/2	20000	12000	16000	450	18	125	75.00
148933	2092	2 1/4	2 1/8	2 3/8	3/8	15000	10000	7000	800	11	65	50.00



Nos. 702, 704, 706 and 708



Nos. 804, 806 and 808

Wet Process, Puncture-proof, Non-absorbent, Porcelain Insulators

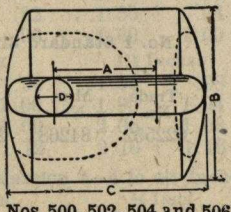
Trade No.	Mfrs. No.	Dimensions, Inches A	B	C	D	Test Voltage Dry	Wet	No. per Bbl.	Net Wt., Oz. Each	Approx. Ship. Wt. Lbs. per 100	Price per 1000
148934	702	3 3/8	2 1/4	3/8	1 1/2	26000	10000	550	12	80	.....
148935	704	3 1/2	2 1/2	9/16	1 3/4	32000	12000	350	21	115	.....
148936	706	5 3/8	3 1/4	9/16	1 7/8	42000	18000	175	41	290	.....
148937	708	6 3/4	3 1/2	3/4	2 1/2	52000	20000	150	56	415	.....

Prices on application.

Trade No.	Mfrs. No.	Dimensions, Inches A	B	D	E	Flash Over Voltage Dry	Wet	No. per Bbl.	Net Wt., Oz. Each	Approx. Ship. Wt. Lbs. per 100	Price per 1000
148938	804	3 3/4	1 1/2	1/2	2 7/8	25000	10000	300	16	150	.....
148939	806	5 1/4	2 1/2	3/4	4	30000	14000	156	43	270	.....
148940	808	6 3/4	3	1	4 5/8	40000	18000	100	60	400	.....

Prices on application.

These insulators will withstand a greater strain than any cable used in line construction which will pass through the hole in them.



Nos. 500, 502, 504 and 506

Trade No.	Mfrs. No.	Dimensions, Inches A	B	C	D	Test Voltage Exceeds	Tensile Strength Pounds	No. per Bbl.	Approx. Ship. Wt., Lbs. per 100	Price per 1000
148941	500	1 3/16	1 1/2	2 1/4	5/16	10000	8000	1650	28	$ 66.00
148942	502	1 7/16	2 3/8	3	3/8	20000	12000	450	100	110.00
148943	504	1 9/16	2 7/8	3 1/2	1/2	25000	15000	300	140	135.00
148944	506	2 3/4	3 3/8	5 1/2	3/4	30000	20000	180	230	280.00

PORCELAIN TUBES



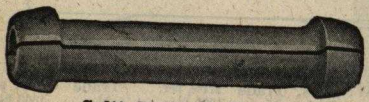
Standard Tube



Curved End Tube



Split Tube



Split Crossover Tube



Crossover Tube



Floor Tube

Prices, per 100—For Tubes Up to and Including 24 Inches Long

Length under Head Inches	Inside and Outside Dimensions of Tubes in Inches													
	5/16x9/16	3/8x11/16	1/2x13/16	5/8x15/16	3/4x1 3/16	1x1 7/16	1 1/4x1 13/16	1 1/2x2 3/16	1 3/4x2 9/16	2x2 15/16	2 1/2x3 1/16	2 1/2x3 11/16	2 3/4x4 1/2	3x4 1/2
1/2	$1.3	$1.4	....	....	....	....	....	....	....	....	....	....	....	....
1	1.3	1.4	2.1	2.7	3.0	4.5	....	....	....	....	....	....	....	....
1 1/2	1.3	1.5	2.1	2.7	3.3	5.3	....	....	....	....	....	....	....	....
2	1.4	1.8	2.6	3.2	4.2	6.0	....	....	....	....	....	....	....	....
2 1/2	1.5	2.2	3.0	4.0	5.0	7.0	12.2	15.6	19.8	23.4	26.8	30.3	45.5	68.2
3	1.6	2.6	3.4	4.7	5.5	8.0	13.8	17.4	22.0	25.8	29.6	32.5	48.8	73.2
4	2.7	3.0	4.1	5.5	6.8	10.0	15.6	19.2	23.9	27.7	31.5	35.3	52.9	79.4
5	3.2	3.6	4.8	6.4	8.0	12.5	18.1	25.3	34.1	41.7	48.8	56.8	85.2	127.8
6	3.9	4.5	5.5	7.3	9.5	14.3	19.2	31.2	45.3	57.9	70.5	83.2	124.8	187.2
8	7.2	8.4	9.6	10.8	12.0	16.8	24.0	38.4	58.1	73.9	89.8	105.6	158.4	237.6
10	9.6	10.8	12.0	14.4	16.8	19.2	31.2	45.6	66.0	81.8	97.7	113.5	170.2	255.3
12	14.4	15.6	16.8	19.2	21.6	26.4	45.6	69.2	102.1	128.0	154.0	180.0	270.0	405.0
14	20.2	23.1	25.9	28.8	31.7	34.6	63.4	97.9	145.7	183.7	221.8	259.8	389.7	584.5
16	23.1	25.9	28.8	34.6	37.5	43.2	74.9	109.5	158.4	196.5	234.5	272.4	408.6	612.9
18	25.9	28.8	34.6	40.3	43.2	49.0	86.4	122.7	190.3	234.1	277.7	321.1	481.6	722.5
20	28.8	31.7	37.5	43.2	46.1	54.7	95.1	135.4	211.4	259.2	307.6	355.9	533.8	800.8
22	33.1	36.0	40.3	46.1	51.9	59.1	103.7	148.3	231.6	285.1	338.7	392.3	588.4	882.6
24	37.5	40.3	43.2	49.0	57.6	63.4	112.3	161.3	252.3	311.1	369.9	428.5	642.7	964.1

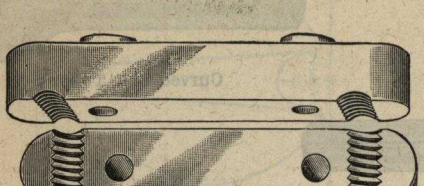
Standard Package Quantities and Weights per Standard Package

Length under Head Inches	Inside and Outside Dimensions of Tubes in Inches																	
	5/16x9/16		3/8x11/16		1/2x13/16		5/8x15/16		3/4x1 3/16		1x1 7/16		1x1 1/4 13/16		1 1/2x2 3/16		1 3/4x2 9/16	
	Std. Pkg.	Wt. Lbs.	Std. Pkg.	Wt. Lbs.	Std. Pkg.	Wt. Lbs.	Std. Pkg.	Wt. Lbs.	Std. Pkg.	Wt. Lbs.	Std. Pkg.	Wt. Lbs.	Std. Pkg.	Wt. Lbs.	Std. Pkg.	Wt. Lbs.	Std. Pkg.	Wt. Lbs.
1/2	15000	375	12500	375	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1	11000	375	9500	375	8500	360	4500	380	3700	330	2000	350	....	....	....	....	....	....
1 1/2	9000	375	8000	375	7500	360	3200	375	2500	320	1500	360	....	....	....	....	....	....
2	7000	375	7000	370	5000	355	2500	355	1800	310	1100	345	....	....	....	....	....	....
2 1/2	6000	360	5000	350	4000	350	2000	325	1500	295	900	330	525	320	350	325	250	380
3	5200	340	3800	340	2700	340	1800	320	1250	285	750	315	425	310	300	315	225	370
4	3900	315	2900	340	2000	335	1450	325	850	250	600	300	360	310	250	305	200	360
5	3500	340	2500	340	1700	340	1200	320	700	255	500	290	325	305	225	305	175	340
6	3200	350	2000	335	1500	340	1000	305	600	255	400	280	250	300	180	305	150	320
8	2200	340	1600	340	1200	335	700	275	450	245	325	290	180	290	140	300	100	300
10	1700	335	1200	320	1000	335	500	255	350	240	245	270	140	265	110	300	80	290
12	1200	340	1000	305	800	340	375	220	325	240	190	255	120	265	90	280	70	280
14	1000	335	800	200	700	320	310	215	250	230	150	230	100	255	75	275	60	260
16	800	340	700	300	550	300	250	205	185	205	140	230	85	175	65	265	60	255
18	500	340	450	290	475	250	200	205	160	200	110	210	70	235	55	250	50	250
20	450	340	400	290	300	270	160	175	125	180	85	195	55	215	40	220	50	240
22	400	340	400	290	300	260	160	185	125	200	85	205	55	228	40	240	50	245
24	400	340	400	300	300	260	160	195	125	210	85	215	55	240	40	250	50	250

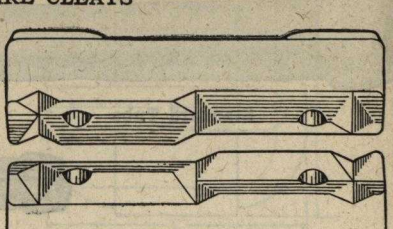
For glazed tubes, add 50 per cent to net prices. For split, split floor, and split crossover tubes, multiply list by 10. For floor, curved, and curved end tubes, multiply list by 6. For headless tubes, multiply list by 4. All measurements should be computed over all except split tubes, which should be taken under head, and crossover tubes, which should be taken between heads.

PORCELAIN CLEATS

TWO AND THREE-WIRE CLEATS



Standard 2 or 3-wire, Nos. 334 or 337



No. 9172

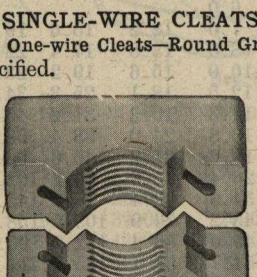
Size Wire	Description	Width Inches	Length Inches	No. per Bbl.	Ship. Wt., Lbs. per Bbl.	Unglazed Trade No.	Unglazed Price, per 1000 Pair	Glazed Trade No.	Glazed Price, per 1000 Pair
12 to 14	(2-wire No. 334, 3-wire No. 337)	11/16	3	2400	500	148816	$20.00	148824	$26.00
12 to 14	Style A	11/16	3	1500	500	148817	36.00	148825	42.00
12 to 14	Heavy mill type	3/4	3	1500	490	148818	41.00	148826	53.00
12 to 14	Style A heavy mill type	3/4	3	1000	490	148819	74.00	148827	86.00
8 to 10		3/4	3	1800	490	148820	41.00	148828	53.00
8 to 10	Style A	3/4	3	1000	480	148821	74.00	148829	86.00
8 to 10	Heavy mill type	3/4	3	1000	480	148822	41.00	148830	53.00
8 to 10	Style A heavy mill type	3/4	3	900	480	148823	74.00	148831	86.00
12 to 14	(No. 9172)	3/4	3	1000	250	.....	.....	148832	32.00
12 to 14	Style A (No. 9172)	3/4	3	1000	300	.....	.....	148833	37.40

In ordering specify whether two or three-wire cleats are desired.

SINGLE-WIRE CLEATS

B and D Type One-wire Cleats—Round Groove Standard

V groove is furnished if so specified.



Style A cleats have wire groove 1 inch from surface wired. Style B cleats have top and bottom the same as Style A.

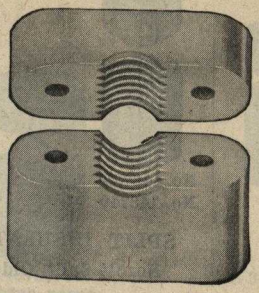
Mfrs. No.	Size Wire	Size Hole Inches	Regular Trade No.	Regular Std. Pkg.	Regular Wt. Lbs. per Bbl.	Regular Price, per 1000 Pair	Style A Trade No.	Style A Std. Pkg.	Style A Wt., Lbs. per Bbl.	Style A Price, per 1000 Pair	Style B Trade No.	Style B Price, per 1000 Pair
1	14 to 6	1/8 to 3/8	148834	3000	490	$26.00	148844	2300	510	$36.00	148854	$46.00
1 1/2	6 to 2	3/16 to 7/16	148835	2000	490	40.00	148845	1550	500	50.00	148855	60.00
2	2 to 0	3/8 to 1/2	148836	1500	490	48.00	148846	1350	490	60.00	148856	72.00
2 1/2	0 to 000	1/2 to 5/8	148837	1100	500	60.00	148847	900	500	72.00	148857	84.00
3	000 to 200000 C. M.	9/16 to 3/4	148838	700	480	80.00	148848	600	490	95.00	148858	95.00
3 1/4	*	.....	148839	....	...	120.00	148849	600	490	120.00	148859	120.00
3 1/2	200000 C. M. 500000 C. M.	3/4 to 1	148840	....	...	120.00	148850	550	480	120.00	148860	120.00
4	500000 C. M. 1000000 C. M.	1 to 1 3/8	148841	....	...	160.00	148851	400	475	160.00	148861	160.00
4 1/4	800000 C. M. 1250000 C. M.	1 3/8 to 1 5/8	148842	....	...	320.00	148852	190	480	320.00	148862	320.00
4 1/2	2000000 C. M. 2000000 C. M.	1 7/16 to 1 15/16	148843	....	...	400.00	148853	165	490	400.00	148863	400.00

*Especially adapted to take a No. 10 duplex parallel cond. cable 5/8x7/8.

Standard package of Style B cleats is two-thirds that of Style A.

PORCELAIN CLEATS

SINGLE-WIRE CLEATS—ROUND GROOVE



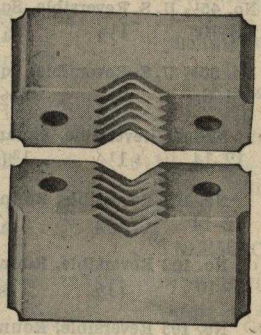
Style A cleats have wire groove 1 inch from surface wire. Style B cleats have top and bottom the same as Style A. V groove is furnished, if so specified.

Mfrs. No.	Dimensions, Inches Lgth.	Wdth.	Groove	Hole	Regular Trade No.	Std. Pkg.	Wt. Lbs. per Bbl.	Price, per 1000 Pair	Style A Trade No.	Std. Pkg.	Wt., Lbs. per Bbl.	Price, per 1000 Pair	Style B Trade No.	Price, per 1000 Pair
1	1 5/16	3/4	3/16	1/4	148875	4000	525	$26.00	148880	2700	540	$36.00	148893	$46.00
2	2 1/4	15/16	1/4	1/4	148876	2200	520	40.00	148881	1750	535	50.00	148894	60.00
3	2 9/16	1 1/8	7/16	1/4	148877	1800	520	48.00	148882	1350	525	60.00	148895	72.00
4	2 11/16	1 1/4	1/2	1/4	148878	1200	520	60.00	148883	1000	525	72.00	148896	84.00
5	3	1 5/16 V	9/16	1/4	148879	900	520	80.00	148884	750	525	95.00	148897	95.00
6	3 3/8	1 3/8	3/4	3/8	.....	....	...	.....	148885	600	540	120.00	148898	120.00
7	3 15/16	1 7/16	1	3/8	.....	....	...	.....	148886	500	540	160.00	148899	160.00
*7 1/4	3 15/16	1 7/16	1 3/8	3/8	.....	....	...	.....	148887	500	540	160.00	148900	160.00
*7 1/2	3 15/16	1 7/16	1 1/4	3/8	.....	....	...	.....	148888	500	540	160.00	148901	160.00
*7 3/4	3 15/16 V	1 7/16	1 1/2	3/8	.....	....	...	.....	148889	500	540	160.00	148902	160.00
8	4 3/4	1 5/8	1 3/8	3/8	.....	....	...	.....	148890	300	500	320.00	148903	320.00
8 1/2	5	2	1 1/4	3/8	.....	....	...	.....	148891	165	490	400.00	148904	400.00
9	5	2	1 1/2	3/8	.....	....	...	.....	148892	165	490	400.00	148919	400.00

All cleats above 5 have top and bottom 1 inch or over.

*Cleats of Nos. 7 1/4, 7 1/2 and 7 3/4 have same groove as cleats Nos. 8, 8 1/2 and 9 respectively, but because of heavy strain of large cables, Nos. 8, 8 1/2 and 9 are recommended as they have a broader wire way and are heavier in every respect.

SINGLE-WIRE CLEATS—V GROOVE



Mfrs. No.	For Wire Size B. & S.	Regular Trade No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price, per 1000 Pair	Style A Trade No.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price, per 1000 Pair
4	16 to 8	148905	3000	500	$26.00	148912	2350	500	$36.00
5	2 to 00	148906	1500	490	48.00	148913	1300	490	60.00
6	000 to 250000	148907	700	480	80.00	148914	600	490	95.00
7	6 to 2	148908	1500	490	48.00	148915	1300	490	60.00
8	300000 to 500000	148909	550	480	160.00	148916	500	480	160.00
8 1/2	600000 to 1000000	148910	400	480	190.00	148917	400	480	190.00
9	1250000 to 1750000	148911	200	480	320.00	148918	250	480	320.00

PORCELAIN INSULATORS



No. 148736



No. 148737
No. 148738



No. 148739
No. 148740



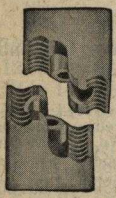
No. 148741



No. 148742
No. 148743

SPLIT INSULATORS

No. 5½ Split, Old Code

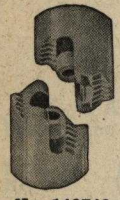


No. 148744
No. 148745
No. 148746

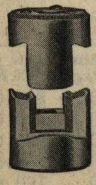
Trade No.	No. of Grooves	Size Wire	Diam. In.	Height In.	Std. Pkg.	Ship. Wt., Lbs. Std. Pkg.	Price per 1000
148736	1	12–14	1	1¾	4500	525	$23.80
			Dyke 5½ Split, Old Code				
148737	2	12–14	1	1¾	4500	525	23.80
			Dyke 5½ Split, New Code				
148738	2	12–14	1⅛	1¾	4000	500	25.60
			No. 1849 Split, Old Code				
148739	2	12–14	1	1¾	4500	525	23.80
			No. 1849 Split, New Code				
148740	2	12–14	1⅛	1¾	4000	500	25.60
			G. P. Split, New Code				
148741	2	12–14	1⅛	1¾	4000	500	25.60
			No. 9419 Midget, Old Code				
148742	4	12–14	1	1¾	4500	525	23.80
			No. 9419 Midget, New Code				
148743	4	12–14	1⅛	1¾	3500	490	25.60
			No. 55½ U. S. Reversible, Square, New Code				
148744	2	12–14	1⅛	1⅝	3700	540	30.30
			No. 45½ U. S. Reversible, Square, New Code				
148745	2	8–10	1½	2¼	2000	500	60.00
			No. 35½ U. S. Reversible, Square, New Code				
148746	2	4–6	2	2½	1000	500	68.00
			Midget Reversible, Square, New Code				
148747	2	12–14	1⅛	1¾	3800	530	25.60
			No. 101 Reversible, Round, New Code				
148748	2	12–14	1⅛	1¾	3700	500	26.50
			No. 102 Reversible, Round, New Code				
148749	2	8–10	1½	1⅞	2000	500	60.00
			No. 103 Reversible, Round, New Code				
148750	2	4–6	2	2	1000	500	68.00
			Detroit Reversible, Round, New Code				
148751	2	12–14	1¼	1¾	3000	490	32.80
			No. 1914 Buckeye, Reversible, Round, New Code				
148752	2	12–14	1⅛	1¾	4000	500	32.00
			No. 1916 Buckeye, Reversible, Round, New Code				
148753	2	12–14	1¼	1¾	2500	490	32.80



No. 148747

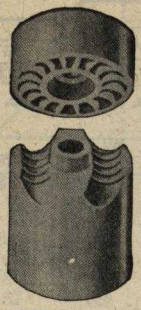


No. 148748
No. 148749
No. 148750
No. 148751



No. 148752
No. 148753

PORCELAIN INSULATORS



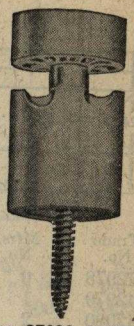
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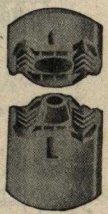
Nos. 148767, 70727, 148768, 70728



Nos. 37037, 148769



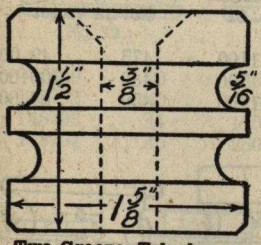
Nos. 37038, 148770, 148771



Nos. 046323, 046324

SPLIT INSULATORS

Trade No.	No. of Grooves	Size Wire	Diam. In.	Height In.	Std. Pkg.	Ship. Wt., Lbs. Std., Pkg.	Price per 1000
			Gripit, New Code				
039636	2	12–14	1 3/16	1 3/4	3200	480	$26.50
			Gripit, Old Code				
148765	2	12–14	1	1 3/4	4000	500	23.80
			Gripit, Detroit				
148766	2	12–14	1 1/4	1 3/4	3000	500	32.00
			Unit No. 0, Old Code				
148767	2	12–14	1	1 3/4	4500	500	28.30
			Unit No. 1, New Code				
70727	2	12–14	1 3/16	1 3/4	4000	500	29.30
			Unit, Detroit				
148768	2	12–14	1 1/4	1 3/4	3000	500	30.30
			Unit, No. 2				
70728	2	6–10	1 3/16	1 3/4	3000	500	66.00
			Nailit, No. 1, New Code				
37037	2	12–14	1 3/16	1 3/4	4000	650	30.60
			Nailit, No. 2, Old Code				
148769	2	12–14	1	1 3/4	4000	500	28.50
			Screwit, No. 1, New Code				
37038	2	12–14	1 3/16	1 3/4	4000	600	35.60
			Screwit, No. 2, Old Code				
148770	2	12–14	1	1 3/4	4000	520	34.50
			Screwit, Detroit				
148771	2	12–14	1 1/4	1 3/4	3000	520	34.30
			No. 9419				
046323	4	8–10	1 1/2	1 7/8	2000	500	40.00
			No. 9420				
046324	4	4–6	2	2 1/8	1000	475	62.00

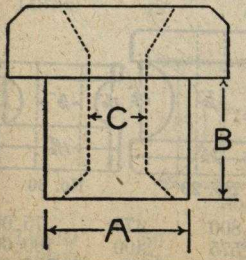


Two Groove Telephone Knob

TELEPHONE KNOBS

These can be furnished without countersinking.

Trade No.	No. of Grooves	Dimensions, Inches Diam.	Height	Groove	Hole	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 1000
102378	2	1 5/8	1 1/2	5/16	3/8	2000	440	$40.00
102379	4	1 3/4	2 1/4	5/16	7/16	1100	425	54.00

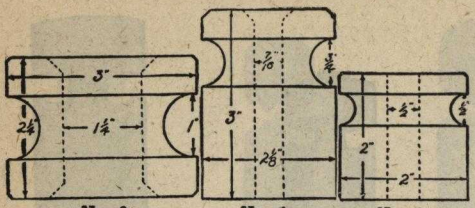


Battery Bushing

BATTERY BUSHINGS

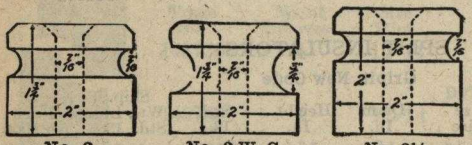
Trade No.	Mfrs. No.	Dimensions, Inches A	B	C	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 1000
148772	400	1/2	9/16	1/4	15000	400	$16.00
148773	401	3/4	5/8	5/16	9000	375	14.00
148774	402	11/16	1 1/8	3/8	5000	325	16.00
148775	403	3/4	1	3/16	5000	350	21.00

PORCELAIN INSULATORS



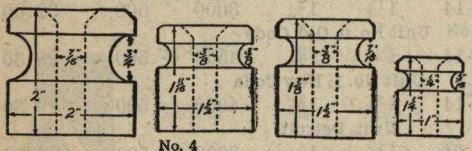
No. 0 No. 1 No. 2

Trade No.	Mfrs. No.	No. per Bbl.	Wt., Lbs. per Bbl.	Price per 1000
042978	0	450	400	$146.00
042979	1	675	465	88.00
042980	2	1050	475	49.00



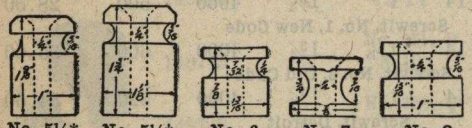
No. 3 No. 3 W. G. No. 3½

042981	3	1200	480	41.00
042982	3 W. G.	1200	470	41.00
042983	3½	1050	450	49.00



No. 3½ W. G. No. 4 No. 4½ No. 5

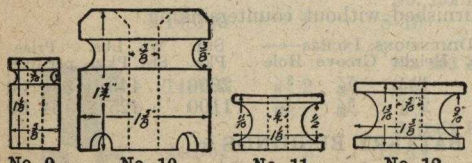
100592	3½ W. G.	1050	440	49.00
042984	4	2200	490	17.00
042985	4½	1900	475	19.00
042986	5	6000	480	12.00



No. 5½* No. 5½† No. 6 No. 7 No. 8

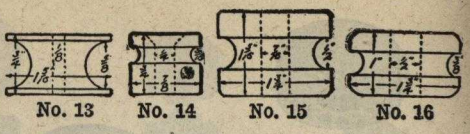
042987	5½*	5300	500	12.00
44677	5½†	4500	500	15.00
042988	6	13000	490	15.00
042989	7	13500	475	19.00
042990	8	9000	475	15.00

*Old code. †New code.



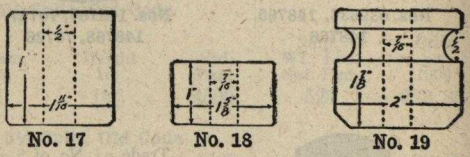
No. 9 No. 10 No. 11 No. 12

042991	9	12000	475	15.00
042992	10	2000	490	28.00
100586	10½	2000	490	28.00
042993	11	9000	480	20.00
042994	12	8000	460	22.00



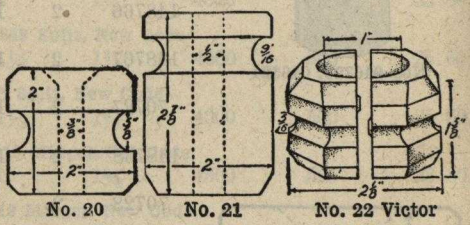
No. 13 No. 14 No. 15 No. 16

Trade No.	Mfrs. No.	No. per Bbl.	Wt., Lbs. per Bbl.	Price per 1000
042995	13	5500	450	$22.00
41934	14	13000	480	15.00
042996	15	2200	490	32.00
100587	16	1800	460	26.00



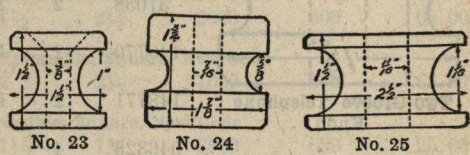
No. 17 No. 18 No. 19

100588	17	1200	400	26.00
100589	18	2500	400	18.00
100590	19	1000	475	49.00



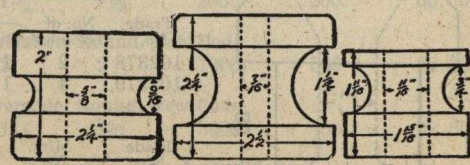
No. 20 No. 21 No. 22 Victor

042997	20	1100	475	49.00
042951	21	700	480	106.00
042952	22 Victor	1400	450	53.00



No. 23 No. 24 No. 25

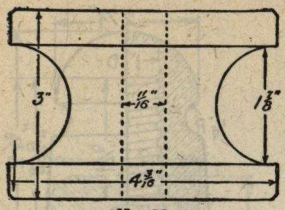
042953	23	2400	450	29.00
042954	24	1200	475	49.00
042955	25	750	440	75.00



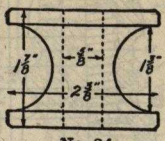
No. 26 No. 29 No. 30

042956	26	800	475	75.00
042957	29	575	400	100.00
100591	30	1000	450	41.00

PORCELAIN INSULATORS

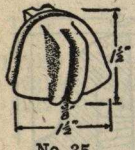


No. 32

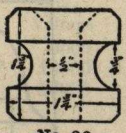


No. 34

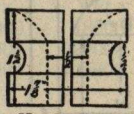
Trade No.	Mfrs. No.	No. per Bbl.	Wt., Lbs. per Bbl.	Price per 1000
148786	31	2100	250	$19.00
148787	32	150	460	400.00
148788	33	1500	435	34.00
148789	34	700	400	75.00



No. 35

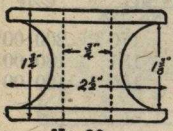


No. 36
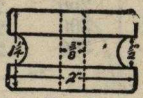


No. 37 Split

148790	35	1800	450	120.00
042958	36	1800	460	36.00
148791	37 Split	1300	440	46.00



No. 39



No. 41

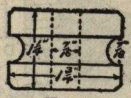


No. 45

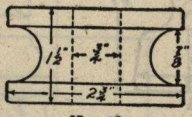
042959	39	650	425	75.00
148792	40	1200	400	44.00
148793	41	1200	440	44.00
148794	45	2800	450	22.00



No. 46

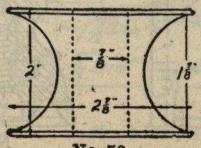


No. 47



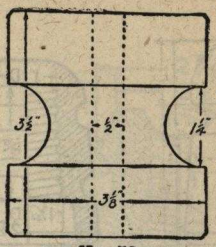
No. 49

148795	46	2500	450	26.00
148796	47	1500	475	32.00
148797	48	1000	475	73.00
148798	49	750	425	73.00



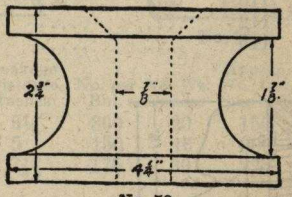
No. 50

148799	50	450	440	80.00
148800	51	500	300	160.00



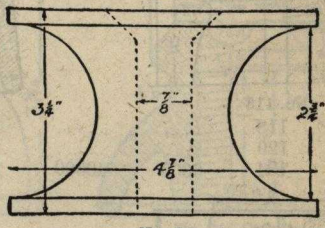
No. 52

Trade No.	Mfrs. No.	No. per Bbl.	Wt., Lbs. per Bbl.	Price per 1000
148801	52	200	400	$300.00



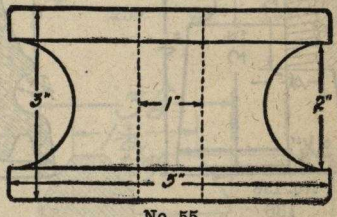
No. 53

148802 53 130 275 400.00



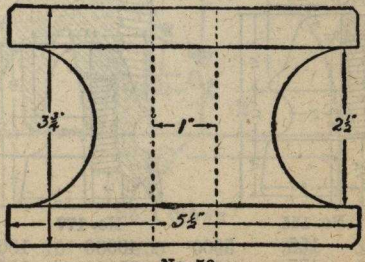
No. 54

148803 54 125 250 500.00



No. 55

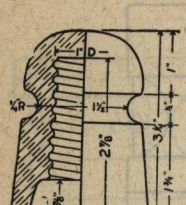
148804 55 100 360 500.00



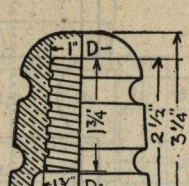
No. 56

148805 56 100 360 700.00

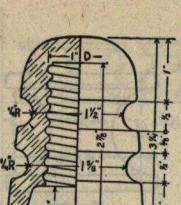
HIGH VOLTAGE PORCELAIN INSULATORS



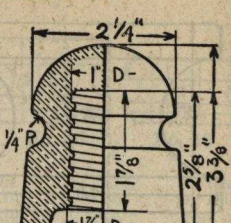
No. 109



No. 110

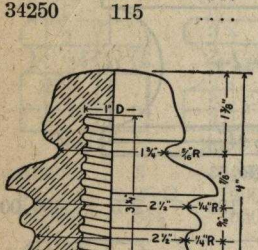


No. 112

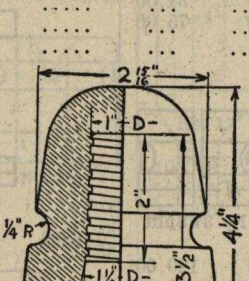


No. 115

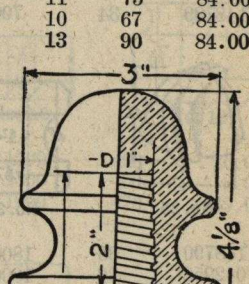
Trade No.	Mfrs. No.	Line Voltage	Test Voltage Dry	Test Voltage Wet	Arcing Distance Inches	Leakage Distance Inches	No. per Bbl.	Net Wt., Ounces	Approx. Wt.,Lbs. per 100	Price per 1000
49663	109	....	.....	.....	...	...	600	10	67	$84.00
34249	110	....	.....	.....	...	...	600	11	75	84.00
49664	112	....	.....	.....	...	...	600	10	67	84.00
34250	115	....	.....	.....	...	...	600	13	90	84.00



No. 118

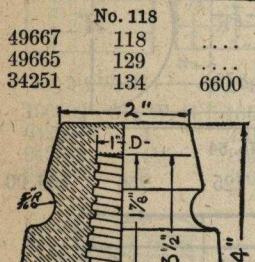


No. 129

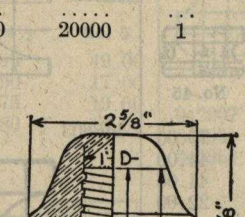


No. 134

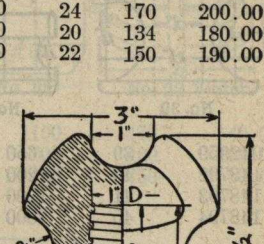
49667	118	....	.....	.....	...	6¼	250	24	170	200.00
49665	129	....	.....	.....	...	4¾	300	20	134	180.00
34251	134	6600	40000	20000	1	4	300	22	150	190.00



No. 136

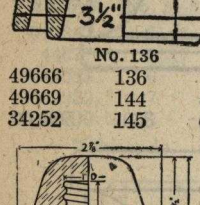


No. 144

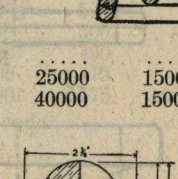


No. 145

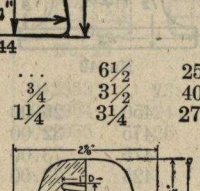
49666	136	....	.....	.....	...	6½	250	30	200	210.00
49669	144	4000	25000	15000	¾	3½	400	14½	97	130.00
34252	145	6600	40000	15000	1¼	3¼	275	24	190	300.00



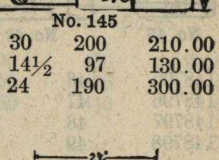
No. 155



No. 177



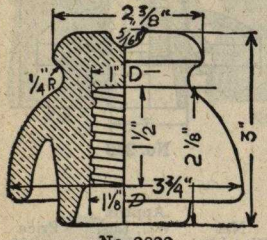
No. 229



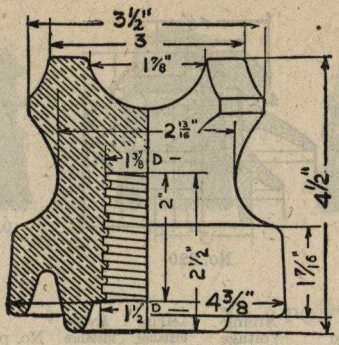
No. 2904

49670	155	5000	40000	18000	1⅛	4	300	18	125	180.00
49668	177	4000	25000	15000	¾	3	400	13	90	130.00
34253	229	5000	40000	18000	1⅛	3⅝	325	14	100	200.00
34254	2904	6600	40000	15000	1⅛	4	300	18	130	170.00

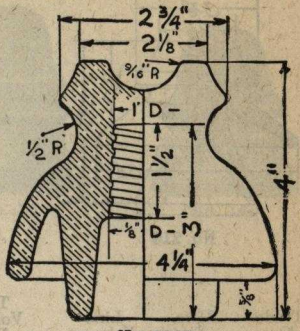
HIGH VOLTAGE PORCELAIN INSULATORS



No. 2822

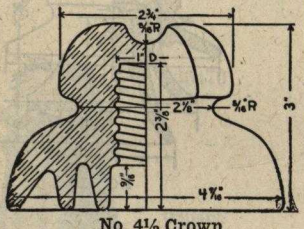


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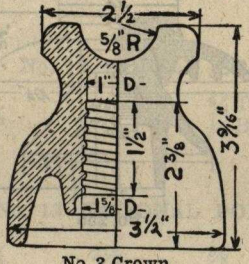


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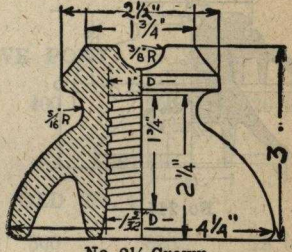
Trade No.	Mfrs. No.	Line Voltage	Test Voltage Dry	Test Voltage Wet	Arcing Distance Inches	Leakage Distance Inches	No. per Bbl.	Net Wt. Ounces	Approx. Wt., Lbs. per 100	Price per 1000
145090	2822	6600	40000	18000	1 1/4	5 1/4	300	20	150	$170.00
92219	2905 A *	10000	60000	20000	1 1/2	5	150	46	300	360.00
92220	2907	10000	45000	25000	1 5/8	7 1/2	175	30	220	420.00



No. 4½ Crown

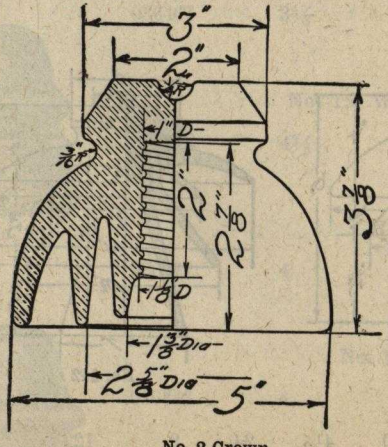


No. 3 Crown

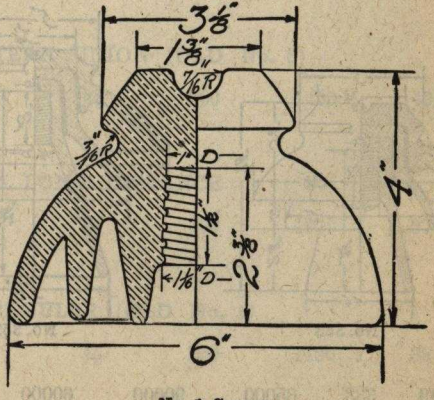


No. 2½ Crown

92221	4½ Crown	10000	45000	22000	1 5/8	7 1/2	200	27	200	280.00
92222	3 Crown	6600	40000	15000	1 1/4	4 3/4	300	23	160	190.00
145091	2½ Crown	7500	45000	20000	1 1/4	5	250	22	160	200.00



No. 2 Crown

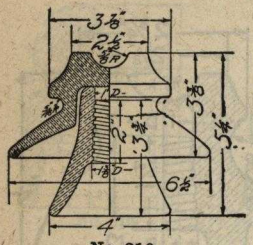


No. 1 Crown

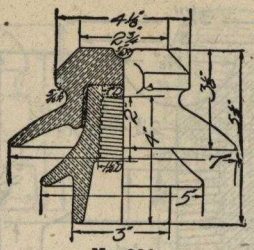
145093	2 Crown	13000	60000	30000	1 7/8	10	130	48	330	400.00
145092	1 Crown*	17000	70000	38000	2 1/8	10 1/4	75	60	440	700.00

*These insulators can be furnished with a 1 3/8-inch pin hole if so specified.

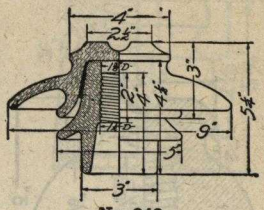
HIGH VOLTAGE PORCELAIN INSULATORS



No. 210

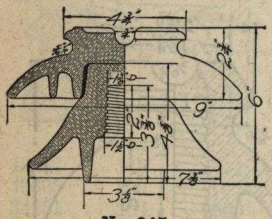


No. 220

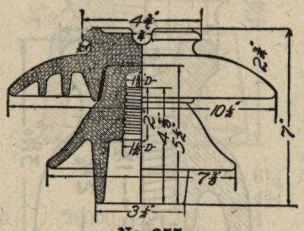


No. 243

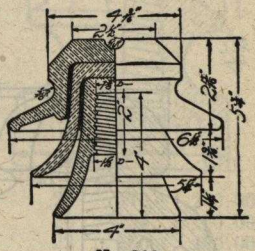
Trade No.	Mfrs. No.	Line Voltage	Test Voltage Dry	Arcing Voltage Wet	Leaking Distance Inches	Arcing Distance Inches	No. per Crate	Net Wt., Lbs.	Approx Wt., Lbs. Packed	Price per 1000
53843	210	17000	63000	45000	10	3	50	3.8	4.8	
53844	220	25000	80000	45000	11	3	45	5.25	6.5	On Application
53845	243	33000	85000	70000	19	5¾	36	8½	12	



No. 245

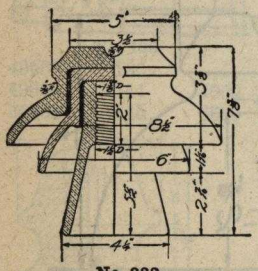


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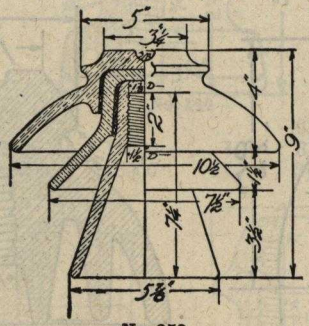


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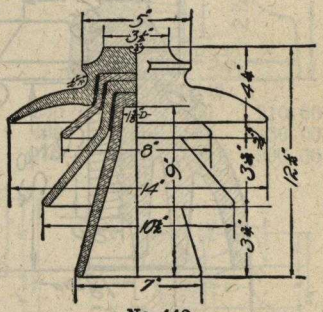
53846	245	37500	125000	70000	19¾	5¾	6	9.5	12½	
53847	255	47000	150000	85000	23	7	6	12	15	On Application
53848	310	25000	80000	53000	12	3½	45	5.75	6.75	



No. 333



No. 352



No. 442

53849	333	35000	90000	60000	20	4½	24	9	12	
53850	352	45000	125000	85000	21	5¾	6	14	19	On Application
53851	442	60000	150000	110000	40	9	3	26	34	

Prices on application.

HEMINGRAY GLASS INSULATORS



No. 9



No. 10



No. 12



No. 13



No. 14



No. 15



No. 16



No. 17



No. 18

Trade No.	Dimens. Over All, Inches Height	Diam.	Groove	Std. Pkg.	Wt., Lbs. per 1000	Price per 1000
No. 9 PONY						
036469	3¾	2¼	⅜	400	675	$26.00
No. 10 EXCHANGE LINE						
83877	3¼	2½	7/16	350	720	30.00
No. 12 DOUBLE GROOVE PONY						
036470	3⅝	2⅜	⅜ Top ¼ Bot.	400	750	26.00
No. 13 NATIONAL PONY (OLD No. 4)						
036468	3¾	2½	⅜	300	825	28.00
No. 14 DEEP GROOVE, DOUBLE PETTICOAT PONY						
036467	3⅜	2⅞	⅜	300	865	34.00
No. 15 WESTERN UNION (OLD No. 5)						
83878	4⅜	2¾	⅜	200	1450	49.00
No. 16 LONG DISTANCE						
036471	4	2⅝	⅜	300	1000	37.00
No. 17 REGULAR (OLD No. 3)						
036463	4	2¾	5/16	250	1120	38.00
No. 18 DEEP GROOVE						
036464	4	2⅞	½	250	1200	42.00

HEMINGRAY GLASS INSULATORS



No. 19



No. 20



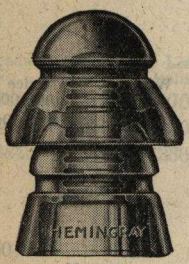
No. 21



No. 22



No. 40



No. 50

No. 19 DEEP GROOVE, DOUBLE PETTICOAT

Line Voltage, 5000

Trade No.	Dimens. Over All, Inches Height	Diam.	Groove	Std. Pkg.	Wt., Lbs. per 1000	Price per 1000
036465	3⅞	3¼	½	200	1350	$50.00

Also made in blue, amber and crystal colors.

No. 20 STREET RAILWAY, OR EXTRA DEEP GROOVE, DOUBLE PETTICOAT

Line Voltage, 5000

036466	4	3¼	¾	200	1375	50.00



No. 51

No. 21 WESTERN UNION, DOUBLE PETTICOAT

036462	4⅜	3¼	⅜	200	1550	52.00

No. 22 WESTERN UNION, DOUBLE PETTICOAT TEAT

036461	4¼	3½	¼	200	1520	52.00

No. 40 DOUBLE PETTICOAT

Line Voltage, 5000

83901	3 15/16	3 9/16	5/16	200	1550	54.00



No. 52

No. 50 TWO-PIECE TRANSPOSITION

036474	5	3¼	⅜ Top ⅜ Bot.	125	1950	100.00

No. 51 PERFECT TRANSPOSITION (OLD No. 1)

036472	5½	4¼	⅜ Top ½ Bot.	100	2500	100.00



No. 53

No. 52 TRANSPOSITION (OLD No. 2)

036473	4¾	3¼	⅜ Top ⅜ Bot.	125	2100	74.00

No. 53 TRANSPOSITION (OLD No. 14)

83889	4½	4	⅜ Top 5/16 Bot.	100	2250	80.00

HEMINGRAY GLASS INSULATORS



Nos. 60 and 60A



No. 61



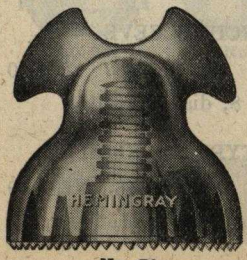
No. 62



No. 63



No. 64



No. 70

Trade No.	Dimens. Over All Inches Height	Diam.	Groove	Voltage Test Dry	Wet	Line	Std. Pkg.	Wt., Lbs. per 1000	Price per 1000
No. 60 CABLE									
036459	5	3¼	1½	54500	24000	6600	100	2300	$70.00
No. 60A CABLE									
83903	5	3¼	2	54500	24000	6600	100	2300	70.00
No. 61 CABLE (OLD No. 1)									
83904	3¾	3¼	1	44200	21800	6600	200	1450	60.00
No. 62 CABLE (OLD No. 2)									
036458	4	3⅝	1¼	56400	25100	6600	125	2100	70.00
No. 63 CABLE (OLD No. 3)									
83905	5⅞	4¼	2	60200	28300	7500	65	3600	110.00
No. 64 COLUMBIA DOUBLE PETTICOAT									
036460	5¼	4	1¼	62400	29500	6600	100	2800	100.00
No. 70 HIGH POTENTIAL TRIPLE PETTICOAT CABLE									
83906	5	4¾	1¾	61900	37800	10000	65	3150	112.50

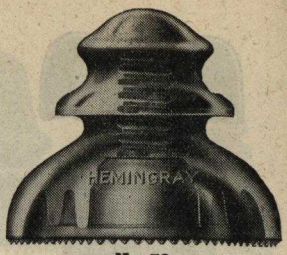
HEMINGRAY GLASS INSULATORS



No. 71



No. 72



No. 73



No. 74



Nos. 75 and 76



No. 78 Insulator with No. 77 Sleeve

No. 71 HIGH VOLTAGE (OLD No. 1)

Trade No.	Voltage Test Dry	Wet	Line	Std. Pkg.	Wt., Lbs. per 1000	Price per 1000
036454	58400	31000	10000	100	2500	$82.50

Dimensions, inches: Height, 3¾; diameter, 4¾; groove, ⅝.

No. 72 HIGH VOLTAGE (OLD No. 4)

83917 64000 31400 10000 100 2700 82.50

Dimensions, inches: Height, 4; diameter, 4¾; top groove, 1 inch; side groove, ¾.

No. 73 PROVO TYPE (OLD No. 2)

036455 74400 43800 15000 60 3600 150.00

Dimensions, inches: Height, 4¾; diameter, 5½; top groove, ¾; bottom groove, ½.

No. 74 PROVO TYPE (OLD No. 1)

036453 93700 55200 19000 25 7000 225.00

Dimensions, inches: Height, 6; diameter, 7; top groove, ⅝; center groove, ⅜; bottom groove, ½.

Made for standard 1-inch and special 1⅜-inch pins.

No. 75 (7-INCH) MUNCIE TYPE

036452 86200 50100 17000 30 6200 225.00

Dimensions, inches: Height, 4⅞; diameter, 7; groove, ⅞.

Made for standard 1-inch and special 1⅜-inch pins.

No. 76 (9-INCH) MUNCIE TYPE

83918 95000 80000 22000 16 11250 375.00

Dimensions, inches: Height, 5⅞; diameter, 9; groove, ⅞.

No. 77 (9-INCH) MUNCIE SLEEVE

83919 .... 32 5400 262.50

Dimensions, inches: Height, 8; diameter, 5½.

No. 78 (9-INCH) MUNCIE TYPE ASSEMBLED

83920 110000 95000 33000 8 18125 637.50

Dimensions, inches: Height, 13⅞; diameter, 9; groove, ⅞.

HEMINGRAY GLASS INSULATORS



No. 100



No. 101

No. 100 INSULATING OR BREAK KNOBS (OLD No. 1)

Trade No.	Dimens. Over All, Inches Height	Diam.	Groove	Hole	Std. Pkg.	Wt., Lbs. per 1000	Price per 1000
036432	1½	1½	⅜	⅜	500	200	$21.00

No. 101 INSULATING OR BREAK KNOBS (OLD No. 1½)

036435	1⅞	1½	⅜	⅜	500	230	24.00



No. 102



No. 103

No. 102 INSULATING OR BREAK KNOBS (OLD No. 2)

036434	1¾	2	⅜	⅜	500	440	25.00

No. 103 INSULATING OR BREAK KNOBS (OLD No. 3)

036433	2	2	⅝	⅜	500	460	25.00



No. 107



No. 108

No. 107 INSULATING OR BREAK KNOBS (OLD No. 7)

036436	1⅞	2	¾	⅜	500	460	25.00

No. 108 INSULATING OR BREAK KNOBS (OLD No. 8)

036438	3⅜	2¾	1	⅝	200	1500	95.00



No. 95

No. 95 MINE INSULATORS (OLD No. 1)

036437	3½	2⅞	⅝	Std. Scr.	200	1475	80.00

No. 90 SPAN WIRE INSULATORS (OLD No. 10)

036439	2⅜	2¼	⅜	....	500	700	90.00

No. 91 SPAN WIRE INSULATORS (OLD No. 15)

036440	3⅛	2¾	½	....	250	1260	140.00



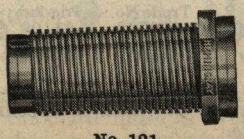
No. 90



No. 91

FLOOR INSULATORS

Trade No.	Mfrs. No.	Length Inches	Bore Inches	Style	Price per 1000
036442	121	3	½	Screw	$83.50
036443	122	3	1	Screw	83.50
036444	123	3	1¼	Screw	100.00
067161	125	3½	1	Screw	94.50
036446	126	4	¾	Screw	117.00
036447	127	4	1	Screw	117.00
036448	128	4½	1	Screw	122.00
036449	129	5	1	Screw	140.00
036450	130	6	1	Screw	161.00
036451	131	6	1¼	Screw	172.00
83866	132	6	1	Split plain	228.00


No. 121

The 6-inch split insulators are in two pieces, tongued and grooved, and fit together closely.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

All of these NEW WRINKLE Bodies Will Fit All of the NEW WRINKLE Caps and Bases on the Following Pages

SCHEDULE B

No. 13
Keyless Socket
660 Watts, 250 Volts



Trade No.	Price Each
100719	$0.23
Carton	Std. Pkg.
25	500

No. 32
Keyless Socket
With Spartan Outlet
660 Watts, 250 Volts



Trade No.	Price Each
111600	$0.48
Carton	Std. Pkg.
10	100

No. 10
S. P. Key Socket
250 Watts, 250 Volts



Trade No.	Price Each
100716	$0.26
Carton	Std. Pkg.
25	500

No. 11
D. P. Key Socket
250 Watts, 250 Volts



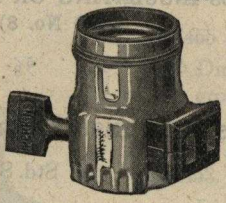
Trade No.	Price Each
100717	$0.26
Carton	Std. Pkg.
25	500

No. 12
Q. T. Key Socket
660 Watts, 250 Volts



Trade No.	Price Each
100718	$0.29
Carton	Std. Pkg.
25	500

No. 31
Q. T. Key Socket
With Spartan Outlet
660 Watts, 250 Volts



Trade No.	Price Each
111601	$0.51
Carton	Std. Pkg.
10	100

No. 14
Turn Socket
250 Watts, 250 Volts



Trade No.	Price Each
100720	$0.53
Carton	Std. Pkg.
25	100

No. 35
High Capacity
Pull Socket
660 Watts, 250 Volts



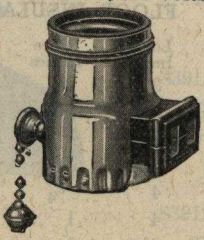
Trade No.	Price Each
111602	$0.59
Carton	Std. Pkg.
25	250

No. 15
Pull Socket
250 Watts, 250 Volts



Trade No.	Price Each
100721	$0.53
Carton	Std. Pkg.
25	250

No. 33
Pull Socket
With Spartan Outlet
250 Watts, 250 Volts



Trade No.	Price Each
111603	$0.78
Carton	Std. Pkg.
10	100

No. 16
Twin Pull Socket
Both Outlets Operate On and Off Simultaneously
250 Watts, 250 Volts



Trade No.	Price Each
100722	$1.08
Carton	Std. Pkg.
10	20

No. 17
Twin Pull Socket, Side Outlet on All the Time, Top Outlet On and Off
250 W. 250 V. Top Outlet
660 W. 250 V. Side Outlet



Trade No.	Price Each
100723	$1.08
Carton	Std. Pkg.
10	20

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

All of these NEW WRINKLE Bodies Will Fit All of the NEW WRINKLE Caps and Bases on the Following Pages

SCHEDULE H

No. 29
Spartan Plug Receptacle
10 Amperes, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
105804	$0.38	10	20

No. 18
Key Wall Switch
3 Amperes, 125 Volts
1 Ampere, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
100734	$0.26	10	50

No. 19
Pull Wall Switch
3 Amperes, 125 Volts
1 Ampere, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
100735	$0.53	10	50

No. 22
Key Candle Switch
3 Amperes, 125 Volts
1 Ampere, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
100738	$0.26	10	50

No. 24
Pull Candle Switch
3 Amperes, 125 Volts
1 Ampere, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
100740	$0.53	10	50

No. 23
Turn Candle Switch
3 Amperes, 125 Volts
1 Ampere, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
100739	$0.68	10	30

No. 26
Rosette
3 Amperes, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
100742	$0.13	10	20

No. 25
Pull Switch Rosette
3 Amperes, 125 Volts
1 Ampere, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
100741	$0.53	10	50

No. 20
S. P. Pull
Ceiling Switch
3 Amperes, 125 Volts
1 Ampere, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
100736	$0.53	10	50

No. 27
Electrolier Pull
Ceiling Switch
Operating 1-2-1 & 2-Off
3 Amperes, 125 Volts
1 Ampere, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
121065	$0.83	10	50

No. 21
S. P. Pull
Fixture Switch
3 Amperes, 125 Volts
1 Ampere, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
100737	$0.68	10	50

No. 28
Electrolier Pull
Fixture Switch
Operating 1-2-1 & 2-Off
3 Amperes, 125 Volts
1 Ampere, 250 Volts



Trade No.	Price Each	Carton	Std. Pkg.
121171	$0.98	10	50

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

All of These NEW WRINKLE Caps Will Fit All of the NEW WRINKLE Bodies on the Following Pages

SCHEDULE B

No. AA
⅛-inch Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100753	$0.07	25	500

No. AB
¼-inch Socket Cap



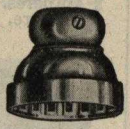
Trade No.	Price Each	Carton	Std. Pkg.
100754	$0.16	25	100

No. AC
⅜-inch Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100755	$0.13	25	250

No. AD
½-inch Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100756	$0.19	25	50

No. AE
⅛-inch Male Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100757	$0.07	25	100

No. AF
¼-inch Male Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100758	$0.16	25	50

No. AG
⅜-inch Male Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100759	$0.16	25	100

No. AH
½-inch Male Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100760	$0.22	25	50

No. AK
⅛-inch Fixture Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100761	$0.13	25	100

No. AL
¼-inch Fixture Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100762	$0.16	25	100

No. AM
⅛-inch Angle Socket Cap



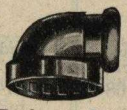
Trade No.	Price Each	Carton	Std. Pkg.
100763	$0.12	25	100

No. AN
¼-inch Angle Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100764	$0.21	25	50

No. AP
⅜-inch Angle Socket Cap



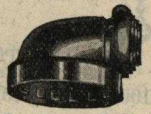
Trade No.	Price Each	Carton	Std. Pkg.
100765	$0.18	25	50

No. AR
⅛-inch Angle Fixture Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100766	$0.18	25	50

No. AS
¼-inch Angle Fixture Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100767	$0.21	25	50

No. AT
Pendent Socket Cap



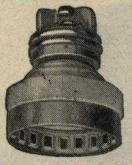
Trade No.	Price Each	Carton	Std. Pkg.
100768	$0.07	25	500

No. AU
Strain Relief Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100769	$0.07	25	500

No. AV
Attachment Plug



Trade No.	Price Each	Carton	Std. Pkg.
100770	$0.27	10	50

The sale of New Wrinkle Interchangeable Devices as individual parts eliminates the labor of taking complete articles apart to interchange them. This increases the efficiency of the line, at the same time reducing the stock investment. Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

All of These NEW WRINKLE Bases Will Fit All of the NEW WRINKLE Bodies on the Following Pages

SCHEDULE B

No. AW
Cleat Socket Base



Trade No.	Price Each	Carton	Std. Pkg.
100781	$0.23	10	250

No. AX
Slotted Socket Base



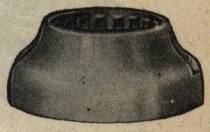
Trade No.	Price Each	Carton	Std. Pkg.
100782	$0.18	10	100

No. AY
Small Concealed Socket Base



Trade No.	Price Each	Carton	Std. Pkg.
100783	$0.18	10	250

No. AZ
Large Concealed Socket Base



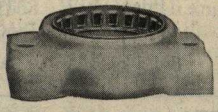
Trade No.	Price Each	Carton	Std. Pkg.
100784	$0.23	10	100

No. BA
Angle Concealed Socket Base



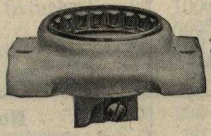
Trade No.	Price Each	Carton	Std. Pkg.
100785	$0.23	10	100

No. BB
Wood Molding Socket Base



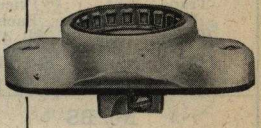
Trade No.	Price Each	Carton	Std. Pkg.
100786	$0.18	10	100

No. BW
½ and ¾-inch Taplet Socket Base



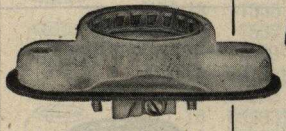
Trade No.	Price Each	Carton	Std. Pkg.
100813	$0.23	10	100

No. BC
½-inch Condulet Socket Base



Trade No.	Price Each	Carton	Std. Pkg.
100787	$0.23	10	100

No. BX
¾-inch Condulet Socket Base



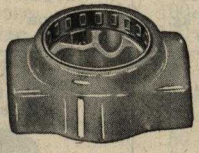
Trade No.	Price Each	Carton	Std. Pkg.
100814	$0.23	10	100

No. BD
One-way National Socket Base



Trade No.	Price Each	Carton	Std. Pkg.
100788	$0.18	10	100

No. BE
Two-way National Socket Base



Trade No.	Price Each	Carton	Std. Pkg.
100789	$0.18	10	100

No. BH
Small Covered Socket Base



Trade No.	Price Each	Carton	Std. Pkg.
100792	$0.28	10	250

The sale of New Wrinkle Interchangeable Devices as individual parts eliminates the labor of taking complete articles apart to interchange them. This increases the efficiency of the line, at the same time reducing the stock investment. Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

All of These NEW WRINKLE Bases Will Fit All of the NEW WRINKLE Bodies on the Following Pages

SCHEDULE B

No. BK
Large Covered Socket Base



Trade No.	Price Each
100803	$0.37
Carton	Std. Pkg.
10	100

No. BL
3¼-inch Box Socket Base



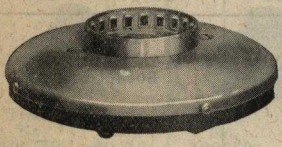
Trade No.	Price Each
100804	$0.37
Carton	Std. Pkg.
10	100

No. BM
4-inch Box Socket Base



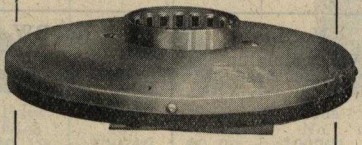
Trade No.	Price Each
100805	$0.67
Carton	Std. Pkg.
5	100

No. BN
3¼-inch Pancake Socket Base



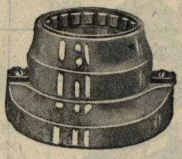
Trade No.	Price Each
100806	$0.47
Carton	Std. Pkg.
10	50

No. BP
4-inch Pancake Socket Base



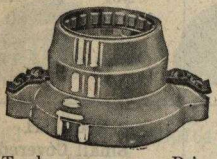
Trade No.	Price Each
100807	$0.77
Carton	Std. Pkg.
5	50

No. BR
Concealed Rosette Socket Base



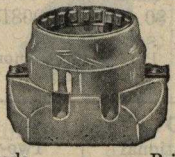
Trade No.	Price Each
100808	$0.49
Carton	Std. Pkg.
10	50

No. BS
Cleat Rosette Socket Base



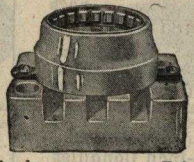
Trade No.	Price Each
100809	$0.49
Carton	Std. Pkg.
10	50

No. BT
Two-wire Molding Rosette Socket Base



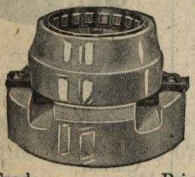
Trade No.	Price Each
10810	$0.49
Carton	Std. Pkg.
10	50

No. BU
Three-wire Molding Rosette Socket Base



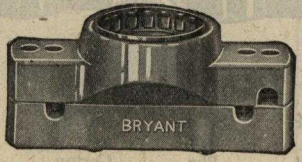
Trade No.	Price Each
100811	$0.49
Carton	Std. Pkg.
10	50

No. BV
Combination Rosette Socket Base



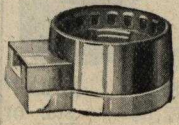
Trade No.	Price Each
100812	$0.49
Carton	Std. Pkg.
10	50

No. BY
Cleat Base with Covered Terminals



Trade No.	Price Each
100815	$0.36
Carton	Std. Pkg.
5	100

No. BZ
Canopy Tap Base



Trade No.	Price Each
100816	$0.22
Carton	Std. Pkg.
10	20

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

KEYLESS SOCKETS

660 Watts, 250 Volts

SCHEDULE B



No. 13

Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
13	.....	Body, without cap or base....	25	500	....	$0.23
AA-13	59482	With ⅛-inch cap.....	25	500	115	.30
AB-13	7510	With ¼-inch cap.....	25	250	65	.39
AC-13	59483	With ⅜-inch cap.....	25	250	65	.36
AD-13	....	With ½-inch cap.....	25	250	..	.42
AE-13	....	With ⅛-inch male cap.....	25	500	..	.30
AF-13	....	With ¼-inch male cap.....	25	250	..	.39
AG-13	59485	With ⅜-inch male cap.....	25	250	70	.39
AH-13	....	With ½-inch male cap.....	25	250	..	.45
AK-13	7547	With ⅛-inch fixture cap.....	25	250	70	.36
AL-13	7549	With ¼-inch fixture cap.....	25	250	70	.39
AM-13	7501	With ⅛-inch angle cap.....	25	100	28	.35
AN-13	7504	With ¼-inch angle cap.....	25	100	28	.44
AP-13	7507	With ⅜-inch angle cap.....	25	100	31	.41
AR-13	7551	With ⅛-inch angle fixture cap	25	100	32	.41
AS-13	7553	With ¼-inch angle fixture cap	25	100	32	.44
AT-13	59487	With pendent cap.....	25	500	105	.30
AU-13	....	With strain relief cap.....	25	500	....	.30
AV-13	....	With attachment plug.....	10	50	....	.50
BZ-13	....	With canopy tap base.....	10	20	....	.45
AW-13	7535	With cleat base.....	10	250	140	.46
BY-13	....	With cleat base, covered connections...	5	50	....	.59
AX-13	....	With slotted base.....	10	250	....	.41
AY-13	66610	With small concealed base....	10	250	105	.41
AZ-13†	....	With large concealed base....	10	250	....	.46
BA-13	68225	With angle concealed base....	10	100	45	.46
BC-13	7531	With base for ⅜ and ½-inch condulets	10	250	120	.46
BX-13	....	With base for ¾-inch condulets..	10	250	125	.46
BW-13	....	With base for ½ and ¾-inch taplets	10	250	....	.46
BB-13	7533	With wood molding base.....	10	250	115	.41
BD-13	7517	With one-way National base..	10	250	110	.41
BE-13	7519	With two-way National base..	10	250	120	.41
BH-13	68137	With small covered base.....	10	250	105	.51
BK-13	68140	With large covered base.....	10	100	70	.60
BL-13	7514	With 3¼-inch box base.....	5	100	75	.60
BM-13	7555	With 4-inch box base.....	1	100	150	.90
BN-13	7537	With 3¼-inch pancake base..	5	100	85	.70
BP-13	7539	With 4-inch pancake base....	1	100	122	1.00
BR-13	68231‡	With concealed rosette base...	10	50	47	.72
BS-13*	68232	With cleat rosette base.....	10	50	47	.72
BT-13	68233‡	With two-wire molding rosette base	10	50	47	.72
BU-13	68234‡	With three-wire molding rosette base	10	50	45	.72
BV-13	68235‡	With combination rosette base	10	50	43	.72

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass when specified, will be furnished without extra charge.

























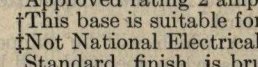


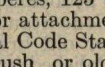


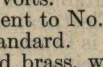


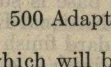


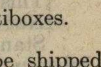














































BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD
KEYLESS SOCKETS WITH SPARTAN OUTLET
Each Outlet 660 Watts, 250 Volts
SCHEDULE B





Mfrs. New No.	No. 32 Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
32	Body, without cap or base..	10	100	....	$0.48
AA-32	With ⅛-inch cap.....	10	100	....	.55
AB-32	With ¼-inch cap.....	10	50	....	.64
AC-32	With ⅜-inch cap.....	10	50	....	.61
AD-32	With ½-inch cap.....	10	50	....	.67
AE-32	With ⅛-inch male cap.....	10	50	....	.55
AF-32	With ¼-inch male cap.....	10	50	....	.64
AG-32	With ⅜-inch male cap.....	10	50	....	.64
AH-32	With ½-inch male cap.....	10	50	....	.70
AK-32	With ⅛-inch fixture cap....	10	50	....	.61
AL-32	With ¼-inch fixture cap....	10	50	....	.64
AM-32	With ⅛-inch angle cap.....	10	50	....	.60
AN-32	With ¼-inch angle cap.....	10	50	....	.69
AP-32	With ⅜-inch angle cap.....	10	50	....	.66
AR-32	With ⅛-inch angle fixture cap..	10	50	....	.66
AS-32	With ¼-inch angle fixture cap..	10	50	....	.69
AT-32	With pendent cap.....	10	50	....	.55
AU-32	With strain relief cap.....	10	50	....	.55
AV-32	With attachment plug.....	10	50	....	.75
BZ-32	With canopy tap base.....	10	20	....	.70
AW-32	With cleat base.....	10	50	....	.71
BY-32	With cleat base, covered connections.	5	50	....	.84
AX-32	With slotted base.....	10	50	....	.66
AY-32	With small concealed base..	10	50	....	.66
AZ-32†	With large concealed base..	10	50	....	.71
BA-32	With angle concealed base..	10	50	....	.71
BC-32	With base for ⅜ and ½-inch conduletes	10	50	....	.71
BX-32	With base for ¾-inch conduletes..	10	50	....	.71
BW-32	With base for ½ and ¾-inch taplets..	10	50	....	.71
BB-32	With wood molding base....	10	50	....	.66
BD-32	With one-way National base	10	50	....	.66
BE-32	With two-way National base	10	50	....	.66
BH-32	With small covered base....	10	50	....	.76
BK-32	With large covered base....	10	50	....	.85
BL-32	With 3¼-inch box base.....	5	50	....	.85
BM-32	With 4-inch box base.....	1	50	....	1.15
BN-32	With 3¼-inch pancake base	5	50	....	.95
BP-32	With 4-inch pancake base...	1	50	....	.25
BR-32	‡With concealed rosette base.	10	50	....	.97
BS-32*	With cleat rosette base.....	10	50	....	.97
BT-32	‡With two-wire molding rosette base..	10	50	....	.97
BU-32	‡With three-wire molding rosette base..	10	50	....	.97
BV-32	‡With combination rosette base..	10	50	....	.97

















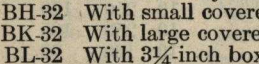


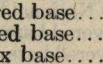


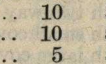


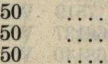


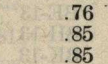












































*Approved rating **2** amperes, 125 volts.
†This base is suitable for attachment to No. 500 Adaptiboxes.
‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

SINGLE-POLE KEY SOCKETS

250 Watts, 250 Volts

SCHEDULE B



No. 10

Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std.Pkg.	Price Each
10	....	Body, without cap or base....	25	500	...	$0.26
AA-10	59480	With ⅛-inch cap.....	25	500	139	.33
AB-10	7509	With ¼-inch cap.....	25	250	70	.42
AC-10	59481	With ⅜-inch cap.....	25	250	70	.39
AD-10	....	With ½-inch cap.....	25	250	...	.45
AE-10	....	With ⅛-inch male cap.....	25	500	...	.33
AF-10	....	With ¼-inch male cap.....	25	250	...	.42
AG-10	59484	With ⅜-inch male cap	25	250	...	.42
AH-10	....	With ½-inch male cap.....	25	250	...	.48
AK-10	7546	With ⅛-inch fixture cap.....	25	250	78	.39
AL-10	7548	With ¼-inch fixture cap.....	25	250	78	.42
AM-10	7500	With ⅛-inch angle cap.....	25	100	30	.38
AN-10	7503	With ¼-inch angle cap.....	25	100	30	.47
AP-10	7506	With ⅜-inch angle cap.....	25	100	33	.44
AR-10	7550	With ⅛-inch angle fixture cap	25	100	35	.44
AS-10	7552	With ¼-inch angle fixture cap	25	100	35	.47
AT-10	59486	With pendent cap.....	25	500	100	.33
AU-10	....	With strain relief cap.....	25	500	...	.33
AV-10	462	With attachment plug.....	10	50	25	.53
BZ-10	....	With canopy tap base.....	10	20	...	.48
AW-10	7534	With cleat base.....	10	250	145	.49
BY-10	....	With cleat base, covered connections...	5	100	...	.62
AX-10	....	With slotted base.....	10	250	...	.44
AY-10	66609	With small concealed base....	10	250	110	.44
AZ-10†	....	With large concealed base....	10	250	...	.49
BA-10	68224	With angle concealed base....	10	100	50	.49
BC-10	7530	With base for ⅜ and ½-inch condulets	10	250	125	.49
BX-10	....	With base for ¾-inch condulets.	10	250	125	.49
BW-10	....	With base for ½ and ¾-inch taplets	10	250	...	.49
BB-10	7532	With wood molding base.....	10	250	120	.44
BD-10	7516	With one-way National base..	10	250	120	.44
BE-10	7518	With two-way National base..	10	250	130	.44
BH-10	68136	With small covered base.....	10	250	110	.54
BK-10	68139	With large covered base.....	10	100	75	.63
BL-10	7513	With 3¼-inch box base.....	5	100	80	.63
BM-10	7554	With 4-inch box base.....	1	100	150	.93
BN-10	7536	With 3¼-inch pancake base..	5	100	90	.73
BP-10	7538	With 4-inch pancake base....	1	100	127	1.03
BR-10	68226	‡With concealed rosette base...	10	100	90	.75
BS-10*	58227	With cleat rosette base.....	10	100	90	.75
BT-10	68228	‡With two-wire molding rosette base.	10	100	90	.75
BU-10	68229	‡With three-wire molding rosette base	10	100	90	.75
BV-10	68230	‡With combination rosette base	10	100	90	.75

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass when specified, will be furnished without extra charge.



















































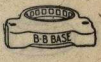
















BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

DOUBLE-POLE KEY SOCKETS

250 Watts, 250 Volts

SCHEDULE B



No. 11

Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
11	....	Body, without cap or base...	25	500	...	$0.26
AA-11	4480	With 1/8-inch cap.....	25	500	125	.33
AB-11	4509	With 1/4-inch cap.....	25	250	70	.42
AC-11	4481	With 3/8-inch cap.....	25	250	70	.39
AD-11	....	With 1/2-inch cap.....	25	250	...	.45
AE-11	....	With 1/8-inch male cap.....	25	500	...	.33
AF-11	....	With 1/4-inch male cap.....	25	250	...	.42
AG-11	4482	With 3/8-inch male cap.....	25	250	65	.42
AH-11	....	With 1/2-inch male cap.....	25	250	...	.48
AK-11	4546	With 1/8-inch fixture cap.....	25	250	78	.39
AL-11	4548	With 1/4-inch fixture cap.....	25	250	78	.42
AM-11	4500	With 1/8-inch angle cap.....	25	100	30	.36
AN-11	4503	With 1/4-inch angle cap.....	25	100	30	.47
AP-11	4506	With 3/8-inch angle cap.....	25	100	33	.44
AR-11	4550	With 1/8-inch angle fixture cap	25	100	35	.44
AS-11	4552	With 1/4-inch angle fixture cap	25	100	35	.47
AT-11	4483	With pendent cap.....	25	500	110	.33
AU-11	....	With strain relief cap.....	25	500	...	.33
AV-11	....	With attachment plug.....	10	50	...	.53
BZ-11	....	With canopy tap base.....	10	20	...	.48
AW-11	4534	With cleat base.....	10	250	145	.49
BY-11	....	With cleat base, covered connections..	5	100	...	.62
AX-11	....	With slotted base.....	10	250	...	.44
AY-11	4484	With small concealed base...	10	250	110	.44
AZ-11†	....	With large concealed base...	10	250	...	.49
BA-11	4485	With angle concealed base...	10	100	50	.49
BC-11	4530	With base for 3/8 and 1/2-inch condulets	10	250	125	.49
BX-11	....	With base for 3/4-inch condulets.	10	250	125	.49
BW-11	....	With base for 1/2 and 3/4-inch taplets	10	250	...	.49
BB-11	4532	With wood molding base....	10	250	120	.44
BD-11	4516	With one-way National base.	10	250	120	.44
BE-11	4518	With two-way National base.	10	250	130	.44
BH-11	4486	With small covered base.....	10	250	110	.54
BK-11	4487	With large covered base.....	10	100	75	.63
BL-11	4513	With 3 1/4-inch box base.....	5	100	80	.63
BM-11	4554	With 4-inch box base.....	1	100	150	.93
BN-11	4536	With 3 1/4-inch pancake base.	5	100	90	.73
BP-11	4538	With 4-inch pancake base...	1	100	127	1.03
BR-11	4488	‡With concealed rosette base..	10	100	90	.75
BS-11*	4489	With cleat rosette base.....	10	100	90	.75
BT-11	4490	‡With two-wire molding rosette base	10	100	90	.75
BU-11	4491	‡With three-wire molding rosette base	10	100	90	.75
BV-11	4492	‡With combination rosette base...	10	100	90	.75

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.



































































BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

QUARTER TURN KEY SOCKETS

660 Watts, 250 Volts

SCHEDULE B



Mfrs. New No.	Mfrs. Old No.	No. 12 Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
12	....	Body, without cap or base	25	500	....	$0.29
AA-12	4440	With ⅛-inch cap	25	500	130	.36
AB-12	4441	With ¼-inch cap	25	250	70	.45
AC-12	4442	With ⅜-inch cap	25	250	70	.42
AD-12	4443	With ½-inch cap	25	250	70	.48
AE-12	....	With ⅛-inch male cap	25	500	....	.36
AF-12	....	With ¼-inch male cap	25	250	....	.45
AG-12	....	With ⅜-inch male cap	25	250	....	.45
AH-12	....	With ½-inch male cap	25	250	....	.51
AK-12	....	With ⅛-inch fixture cap	25	250	....	.42
AL-12	....	With ¼-inch fixture cap	25	250	....	.45
AM-12	4444	With ⅛-inch angle cap	25	100	35	.41
AN-12	4445	With ¼-inch angle cap	25	100	35	.50
AP-12	4446	With ⅜-inch angle cap	25	100	34	.47
AR-12	....	With ⅛-inch angle fixture cap	25	100	....	.47
AS-12	....	With ¼-inch angle fixture cap	25	100	....	.50
AT-12	4447	With pendent cap	25	500	110	.36
AU-12	4448	With strain relief cap	25	500	130	.36
AV-12	....	With attachment plug	10	50	....	.56
BZ-12	....	With canopy tap base	10	20	....	.51
AW-12	4449	With cleat base	10	250	145	.52
BY-12	....	With cleat base, covered connections	5	100	....	.65
AX-12	....	With slotted base	10	250	....	.47
AY-12	4450	With small concealed base	10	250	110	.47
AZ-12†	4451	With large concealed base	10	250	155	.52
BA-12	4452	With angle concealed base	10	100	50	.52
BC-12	4454	With base for ⅜ and ½-inch condulets	10	250	125	.52
BX-12	....	With base for ¾-inch condulets	10	250	125	.52
BW-12	....	With base for ½ and ¾-inch taplets	10	250	....	.52
BB-12	4453	With wood molding base	10	250	120	.47
BD-12	4455	With one-way National base	10	250	130	.47
BE-12	4456	With two-way National base	10	250	135	.47
BH-12	4459	With small covered base	10	250	105	.57
BK-12	4460	With large covered base	10	100	75	.66
BL-12	4461	With 3¼-inch box base	5	100	95	.66
BM-12	4462	With 4-inch box base	1	100	180	.96
BN-12	4463	With 3¼-inch pancake base	5	100	95	.76
BP-12	4464	With 4-inch pancake base	1	100	150	1.06
BR-12	....	‡With concealed rosette base	10	100	....	.78
BS-12*	....	With cleat rosette base	10	100	....	.78
BT-12	....	‡With two-wire molding rosette base	10	100	....	.78
BU-12	....	‡With three-wire molding rosette base	10	100	....	.78
BV-12	....	‡With combination rosette base	10	100	....	.78

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.





















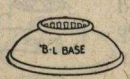


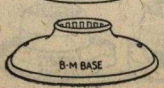






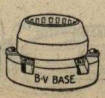


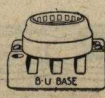


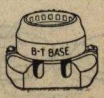














































BRYANT-PERKINS NEW WRINKLE LINE

National Electrical Code Standard

Q. T. KEY SOCKETS WITH SPARTAN OUTLET

Each Outlet 660 Watts, 250 Volts

SCHEDULE B



No. 31

Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
-31	Body, without cap or base	10	100	....	$0.51
AA-31	With 1/8-inch cap	10	100	....	.58
AB-31	With 1/4-inch cap	10	50	....	.67
AC-31	With 3/8-inch cap	10	50	....	.64
AD-31	With 1/2-inch cap	10	50	....	.70
AE-31	With 1/8-inch male cap	10	50	....	.58
AF-31	With 1/4-inch male cap	10	50	....	.67
AG-31	With 3/8-inch male cap	10	50	....	.67
AH-31	With 1/2-inch male cap	10	50	....	.73
AK-31	With 1/8-inch fixture cap	10	50	....	.64
AL-31	With 1/4-inch fixture cap	10	50	....	.67
AM-31	With 1/8-inch angle cap	10	50	....	.63
AN-31	With 1/4-inch angle cap	10	50	....	.72
AP-31	With 3/8-inch angle cap	10	50	....	.69
AR-31	With 1/8-inch angle fixture cap	10	50	....	.69
AS-31	With 1/4-inch angle fixture cap	10	50	....	.72
AT-31	With pendent cap	10	50	....	.58
AU-31	With strain relief cap	10	50	....	.58
AV-31	With attachment plug	10	50	....	.78
BZ-31	With canopy tap base	10	20	....	.73
AW-31	With cleat base	10	50	....	.74
BY-31	With cleat base, covered connections	5	50	....	.87
AX-31	With slotted base	10	50	....	.69
AY-31	With small concealed base	10	50	....	.69
AZ-31	†With large concealed base	10	50	....	.74
BA-31	With angle concealed base	10	50	....	.74
BC-31	With base for 3/8 and 1/2-inch condulets	10	50	....	.74
BX-31	With base for 3/4-inch condulets	10	50	....	.74
BW-31	With base for 1/2 and 3/4-inch taplets	10	50	....	.74
BB-31	With wood molding base	10	50	....	.69
BD-31	With one-way National base	10	50	....	.69
BE-31	With two-way National base	10	50	....	.69
BH-31	With small covered base	10	50	....	.79
BK-31	With large covered base	10	50	....	.88
BL-31	With 3 1/4-inch box base	10	50	....	.88
BM-31	With 4-inch box base	10	50	....	1.18
BN-31	With 3 1/4-inch pancake base	5	50	....	.98
BP-31	With 4-inch pancake base	1	50	....	1.28
BR-31	‡With concealed rosette base	5	50	....	1.00
BS-31	*With cleat rosette base	1	50	....	1.00
BT-31	‡With two-wire molding rosette base	10	50	....	1.00
BU-31	‡With three-wire molding rosette base	10	50	....	1.00
BV-31	‡With combination rosette base	10	50	....	1.00

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.



BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

TURN SOCKETS

250 Watts, 250 Volts
SCHEDULE B



No. 14



Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
14	Body, without cap or base	25	100	....	$0.53
AA-14	With ⅛-inch cap	25	100	....	.60
AB-14	With ¼-inch cap	25	50	....	.69
AC-14	With ⅜-inch cap	25	50	....	.66
AD-14	With ½-inch cap	25	50	....	.72
AE-14	With ⅛-inch male cap	25	50	....	.60
AF-14	With ¼-inch male cap	25	50	....	.69
AG-14	With ⅜-inch male cap	25	50	....	.69
AH-14	With ½-inch male cap	25	50	....	.75
AK-14	With ⅛-inch fixture cap	25	50	....	.66
AL-14	With ¼-inch fixture cap	25	50	....	.69
AM-14	With ⅛-inch angle cap	25	50	....	.65
AN-14	With ¼-inch angle cap	25	50	....	.74
AP-14	With ⅜-inch angle cap	25	50	....	.71
AR-14	With ⅛-inch angle fixture cap	25	50	....	.71
AS-14	With ¼-inch angle fixture cap	25	50	....	.74
AT-14	With pendent cap	25	50	....	.60
AU-14	With strain relief cap	25	50	....	.60
AV-14	With attachment plug	10	20	....	.80
BZ-14	With canopy tap base	10	20	....	.75
AW-14	With cleat base	10	20	....	.76
BY-14	With cleat base, cov'd. connections	5	10	....	.89
AX-14	With slotted base	10	20	....	.71
AY-14	With small concealed base	10	20	....	.71
AZ-14†	With large concealed base	10	20	....	.76
BA-14	With angle concealed base	10	20	....	.76
BC-14	With base for ⅜ and ½-inch condulets	10	20	....	.76
BX-14	With base for ¾-inch condulets	10	20	....	.76
BW-14	With base for ½ and ¾-inch taplets	10	20	....	.76
BB-14	With wood molding base	10	20	....	.71
BD-14	With one-way National base	10	20	....	.71
BE-14	With two-way National base	10	20	....	.71
BH-14	With small covered base	10	20	....	.81
BK-14	With large covered base	10	20	....	.90
BL-14	With 3¼-inch box base	5	20	....	.90
BM-14	With 4-inch box base	1	20	....	1.20
BN-14	With 3¼-inch pancake base	5	20	....	1.00
BP-14	With 4-inch pancake base	1	20	....	1.30
BR-14	‡With concealed rosette base	10	10	....	1.02
BS-14*	With cleat rosette base	10	10	....	1.02
BT-14	‡With two-wire molding rosette base	10	10	....	1.02
BU-14	‡With three-wire molding rosette base	10	10	....	1.02
BV-14	‡With combination rosette base	10	10	....	1.02























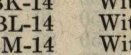


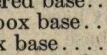


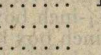


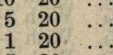


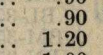


































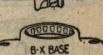












*Approved rating **2** amperes, **125** volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD HIGH CAPACITY PULL SOCKETS

660 Watts, 250 Volts

SCHEDULE B



No. 35

Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
-35	Body, without cap or base	25	250	..	$0.59
AA-35	With ⅛-inch cap	25	250	65	.66
AB-35	With ¼-inch cap	25	100	27	.75
AC-35	With ⅜-inch cap	25	100	30	.72
AD-35	With ½-inch cap	25	50	..	.78
AE-35	With ⅛-inch male cap	25	250	..	.66
AF-35	With ¼-inch male cap	25	100	..	.75
AG-35	With ⅜-inch male cap	25	100	30	.75
AH-35	With ½-inch male cap	25	50	..	.81
AK-35	With ⅛-inch fixture cap	25	100	34	.72
AL-35	With ¼-inch fixture cap	25	100	34	.75
AM-35	With ⅛-inch angle cap	25	50	18	.71
AN-35	With ¼-inch angle cap	25	50	18	.80
AP-35	With ⅜-inch angle cap	25	50	22	.77
AR-35	With ⅛-inch angle fixture cap	25	50	20	.77
AS-35	With ¼-inch angle fixture cap	25	50	20	.80
AT-35	With pendent cap	25	250	60	.66
AU-35	With strain relief cap	25	250	..	.66
AV-35	With attachment plug	10	50	25	.86
BZ-35	With canopy tap base	10	20	..	.81
AW-35	With cleat base	10	100	62	.82
BY-35	With cleat base, covered connections	5	50	..	.95
AX-35	With slotted base	10	100	..	.77
AY-35	With small concealed base	10	100	35	.77
AZ-35†	With large concealed base	10	100	..	.82
BA-35	With angle concealed base	10	50	25	.82
BC-35	With base for ⅜ and ½-inch condulets	10	100	50	.82
BX-35	With base for ¾-inch condulets	10	100	50	.82
BW-35	With base for ½ and ¾-inch taplets	10	100	..	.82
BB-35	With wood molding base	10	100	45	.77
BD-35	With one-way National base	10	100	45	.77
BE-35	With two-way National base	10	100	50	.77
BH-35	With small covered base	10	100	30	.87
BK-35	With large covered base	10	50	35	.96
BL-35	With 3¼-inch box base	5	50	40	.96
BM-35	With 4-inch box base	1	50	85	1.26
BN-35	With 3¼-inch pancake base	5	50	45	1.06
BP-35	With 4-inch pancake base	1	50	70	1.36
BR-35	‡With concealed rosette base	10	20	15	1.08
BS-35	*With cleat rosette base	10	20	15	1.08
BT-35	‡With two-wire molding rosette base	10	20	15	1.08
BU-35	‡With three-wire molding rosette base	10	20	15	1.08
BV-35	‡With combination rosette base	10	20	15	1.08

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.



BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

PULL SOCKETS—SCHEDULE B

250 Watts, 250 Volts



No. 15

Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
15	.....	Body without cap or base ..	25	250	..	$0.53
AA-15	65250	With ⅛-inch cap.....	25	250	65	.60
AB-15	4511	With ¼-inch cap.....	25	100	27	.69
AC-15	65251	With ⅜-inch cap.....	25	100	30	.66
AD-15	....	With ½-inch cap.....	25	50	..	.72
AE-15	....	With ⅛-inch male cap.....	25	250	..	.60
AF-15	....	With ¼-inch male cap.....	25	100	..	.69
AG-15	4512	With ⅜-inch male cap.....	25	100	30	.69
AH-15	....	With ½-inch male cap.....	25	50	..	.75
AK-15	4547	With ⅛-inch fixture cap.....	25	100	34	.66
AL-15	4549	With ¼-inch fixture cap.....	25	100	34	.69
AM-15	4502	With ⅛-inch angle cap.....	25	50	18	.65
AN-15	4505	With ¼-inch angle cap.....	25	50	18	.74
AP-15	4508	With ⅜-inch angle cap.....	25	50	22	.71
AR-15	4551	With ⅛-inch angle fixture cap	25	50	20	.71
AS-15	4553	With ¼-inch angle fixture cap	25	50	20	.74
AT-15	65252	With pendent cap.....	25	250	60	.60
AU-15	....	With strain relief cap.....	25	250	..	.60
AV-15	463	With attachment plug.....	10	50	25	.80
BZ-15	....	With canopy tap base.....	10	20	..	.75
AW-15	4535	With cleat base.....	10	100	62	.76
BY-15	....	With cleat base, covered connections...	5	50	..	.89
AX-15	....	With slotted base.....	10	100	..	.71
AY-15	66611	With small concealed base....	10	100	35	.71
AZ-15†	....	With large concealed base....	10	100	..	.76
BA-15	68236	With angle concealed base....	10	50	25	.76
BC-15	4531	With base for ⅜ and ½-inch condulets	10	100	50	.76
BX-15	....	With base for ¾-inch condulet	10	100	50	.76
BW-15	....	With base for ½ and ¾-inch taplets.	10	100	..	.76
BB-15	4533	With wood molding base.....	10	100	45	.71
BD-15	4517	With one-way National base..	10	100	45	.71
BE-15	4519	With two-way National base..	10	100	50	.71
BH-15	68138	With small covered base.....	10	100	30	.81
BK-15	68128	With large covered base.....	10	50	35	.90
BL-15	4515	With 3¼-inch box base.....	5	50	40	.90
BM-15	4555	With 4-inch box base.....	1	50	85	1.20
BN-15	4537	With 3¼-inch pancake base..	5	50	45	1.00
BP-15	4539	With 4-inch pancake base....	1	50	70	1.30
BR-15	68237	‡With concealed rosette base...	10	20	15	1.02
.BS-15*	68238	With cleat rosette base.....	10	20	15	1.02
BT-15	68239	‡With two-wire molding rosette base.	10	20	15	1.02
BU-15	68240	‡With three-wire molding rosette base	10	20	15	1.02
BV-15	68241	‡With combination rosette base	10	20	15	1.02

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

Sockets are regularly furnished with 8 inches of chain.





































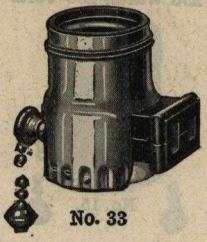


BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

PULL SOCKETS WITH SPARTAN OUTLET—SCHEDULE B

Socket Outlet, 250 Watts, 250 Volts; Spartan Outlet, 660 Watts, 250 Volts



No. 33

Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
33	Body, without cap or base	10	100	..	$0.78
AA-33	With ⅛-inch cap	10	100	..	.85
AB-33	With ¼-inch cap	10	50	..	.94
AC-33	With ⅜-inch cap	10	50	..	.91
AD-33	With ½-inch cap	10	50	..	.97
AE-33	With ⅛-inch male cap	10	50	..	.85
AF-33	With ¼-inch male cap	10	50	..	.94
AG-33	With ⅜-inch male cap	10	50	..	.94
AH-33	With ½-inch male cap	10	50	..	1.00
AK-33	With ⅛-inch fixture cap	10	50	..	.91
AL-33	With ¼-inch fixture cap	10	50	..	.94
AM-33	With ⅛-inch angle cap	10	50	..	.90
AN-33	With ¼-inch angle cap	10	50	..	.99
AP-33	With ⅜-inch angle cap	10	50	..	.96
AR-33	With ⅛-inch angle fixture cap	10	50	..	.96
AS-33	With ¼-inch angle fixture cap	10	50	..	.99
AT-33	With pendent cap	10	50	..	.85
AU-33	With strain relief cap	10	50	..	.85
AV-33	With attachment plug	10	50	..	1.05
BZ-33	With canopy tap base	10	20	..	1.00
AW-33	With cleat base	10	50	..	1.01
BY-33	With cleat base, covered connections	5	50	..	1.14
AX-33	With slotted base	10	50	..	.96
AY-32	With small concealed base	10	50	..	.96
AZ-33	†With large concealed base	10	50	..	1.01
BA-33	With angle concealed base	10	50	..	1.01
BC-33	With base for ⅜ and ½-inch condulets	10	50	..	1.01
BX-33	With base for ¾-inch condulets	10	50	..	1.01
BW-33	With base for ½ and ¾-inch taplets	10	50	..	1.01
BB-33	With wood molding base	10	50	..	.96
BD-33	With one-way National base	10	50	..	.96
BE-33	With two-way National base	10	50	..	.96
BH-33	With small covered base	10	50	..	1.06
BK-33	With large covered base	10	50	..	1.15
BL-33	With 3¼-inch box base	5	50	..	1.15
BM-33	With 4-inch box base	1	50	..	1.45
BN-33	With 3¼-inch pancake base	5	50	..	1.25
BP-33	With 4-inch pancake base	1	50	..	1.55
BR-33	‡With concealed rosette base	10	50	..	1.27
BS-33	*With cleat rosette base	10	50	..	1.27
BT-33	‡With two-wire molding rosette base	10	50	..	1.27
BU-33	‡With three-wire molding rosette base	10	50	..	1.27
BV-33	‡With combination rosette base	10	50	..	1.27

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.























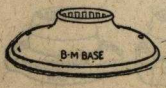


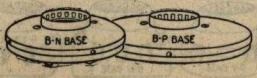


















































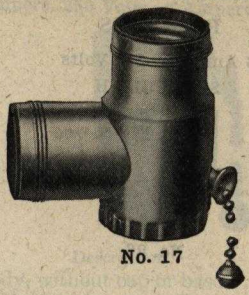




BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD TWIN PULL SOCKETS—SCHEDULE B

Top Outlet, 250 Watts, 250 Volts—Side Outlet, 660 Watts, 250 Volts



No. 17

Side Outlet On All the Time: Top Outlet On and Off























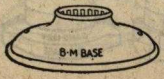


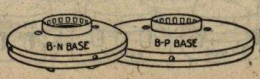








































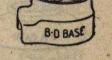


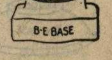












Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
17	....	Body, without cap or base..	10	20	....	$1.08
AA-17	4504	With ⅛-inch cap.....	10	20	....	1.15
AB-17	....	With ¼-inch cap.....	10	20	....	1.24
AC-17	....	With ⅜-inch cap.....	10	20	....	1.21
AD-17	....	With ½-inch cap.....	10	20	....	1.27
AE-17	....	With ⅛-inch male cap.....	10	20	....	1.15
AF-17	....	With ¼-inch male cap.....	10	20	....	1.24
AG-17	....	With ⅜-inch male cap.....	10	20	....	1.24
AH-17	....	With ½-inch male cap.....	10	20	....	1.30
AK-17	....	With ⅛-inch fixture cap....	10	20	....	1.21
AL-17	....	With ¼-inch fixture cap....	10	20	....	1.24
AM-17	....	With ⅛-inch angle cap.....	10	20	....	1.20
AN-17	....	With ¼-inch angle cap.....	10	20	....	1.29
AP-17	....	With ⅜-inch angle cap.....	10	20	....	1.26
AR-17	....	With ⅛-inch angle fixture cap..	10	20	....	1.26
AS-17	....	With ¼-inch angle fixture cap..	10	20	....	1.29
AT-17	....	With pendent cap.....	10	20	....	1.15
AU-17	....	With strain relief cap.....	10	20	....	1.15
AV-17	4510	With attachment plug.....	10	20	....	1.35
BZ-17	....	With canopy tap base.....	10	20	....	1.30
AW-17	....	With cleat base.....	10	20	....	1.31
BY-17	....	With cleat base, cov'd.connections	5	10	....	1.44
AX-17	....	With slotted base.....	10	20	....	1.26
AY-17	....	With small concealed base..	10	20	....	1.26
AZ-17†	....	With large concealed base..	10	20	....	1.31
BA-17	....	With angle concealed base..	10	20	....	1.31
BC-17	....	With base for ⅜ and ½-inch condulets.	10	20	....	1.31
BX-17	....	With base for ¾-inch condulets...	10	20	....	1.31
BW-17	....	With base for ½ and ¾-inch taplets.	10	20	....	1.31
BB-17	....	With wood molding base...	10	20	....	1.26
BD-17	....	With one-way National base.	10	20	....	1.26
BE-17	....	With two-way National base.	10	20	....	1.26
BH-17	....	With small covered base....	10	20	....	1.36
BK-17	....	With large covered base....	10	20	....	1.45
BL-17	....	With 3¼-inch box base....	5	20	....	1.45
BM-17	....	With 4-inch box base.....	1	20	....	1.75
BN-17	....	With 3¼-inch pancake base..	5	20	....	1.55
BP-17	....	With 4-inch pancake base ..	1	20	....	1.85
BR-17	....	‡With concealed rosette base..	10	10	....	1.57
BS-17*	....	With cleat rosette base.....	10	10	....	1.57
BT-17	....	‡With two-wire molding rosette base..	10	10	....	1.57
BU-17	....	‡With three-wire molding rosette base.	10	10	....	1.57
BV-17	....	‡With combination rosette base	10	10	....	1.57

*Approved rating 2 amperes, 125 volts. †This base is suitable for attachment to No. 500 Adaptiboxes. ‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass furnished without extra charge.

Sockets are regularly furnished with 8 inches of chain.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

ROSETTES

3 Amperes, 250 Volts

SCHEDULE H



No. 26

Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
26	....	Body, without cap or base	10	20	....	$0.13
AA-26	....	With 1/8-inch cap	10	20	....	.20
AB-26	....	With 1/4-inch cap	10	20	....	.29
AC-26	....	With 3/8-inch cap	10	20	....	.26
AD-26	....	With 1/2-inch cap	10	20	....	.32
AE-26	....	With 1/8-inch male cap	10	20	....	.20
AF-26	....	With 1/4-inch male cap	10	20	....	.29
AG-26	....	With 3/8-inch male cap	10	20	....	.29
AH-26	....	With 1/2-inch male cap	10	20	....	.35
AK-26	....	With 1/8-inch fixture cap	10	20	....	.26
AL-26	....	With 1/4-inch fixture cap	10	20	....	.29
AM-26	....	With 1/8-inch angle cap	10	20	....	.25
AN-26	....	With 1/4-inch angle cap	10	20	....	.34
AP-26	....	With 3/8-inch angle cap	10	20	....	.31
AR-26	....	With 1/8-inch angle fixture cap	10	20	....	.31
AS-26	....	With 1/4-inch angle fixture cap	10	20	....	.34
AT-26	....	With pendent cap	10	20	....	.20
AU-26	....	With strain relief cap	10	20	....	.20
AV-26	....	With attachment plug	10	20	....	.40
BZ-26	...	With canopy tap base	10	20	....	.35
AW-26	....	With cleat base	10	20	....	.36
BY-26	....	With cleat base, cov'd. connections	5	10	....	.49
AX-26	....	With slotted base	10	20	....	.31
AY-26	....	With small concealed base	10	20	....	.31
AZ-26†	....	With large concealed base	10	20	....	.36
BA-26	....	With angle concealed base	10	20	....	.36
BC-26	....	With base for 3/8 and 1/2-inch condulets	10	20	....	.36
BX-26	....	With base for 3/4-inch condulets	10	20	....	.36
BW-26	....	With base for 1/2 and 3/4-inch taplets	10	20	....	.36
BB-26	....	With wood molding base	10	20	....	.31
BD-26	401	With one-way National base	10	20	....	.31
BE-26	402	With two-way National base	10	20	....	.31
BH-26	....	With small covered base	10	20	....	.41
BK-26	....	With large covered base	10	20	....	.50
BL-26	....	With 3 1/4-inch box base	5	20	....	.50
BM-26	....	With 4-inch box base	1	20	....	.80
BN-26	457	With 3 1/4-inch pancake base	5	20	60	.60
BP-26	458	With 4-inch pancake base	1	20	90	.90
BR-26	....	‡With concealed rosette base	10	10	....	.62
BS-26*	....	With cleat rosette base	10	10	....	.62
BT-26	....	‡With two-wire molding rosette base	10	10	....	.62
BU-26	....	‡With three-wire molding rosette base	10	10	....	.62
BV-26	....	‡With combination rosette base	10	10	....	.62

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass when specified, will be furnished without extra charge.



BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD PULL SWITCH ROSETTES—SCHEDULE H

1 Ampere, 250 Volts—3 Amperes, 125 Volts



No. 25

Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
25	....	Body, without cap or base	10	50	....	$0.53
AA-25	....	With ⅛-inch cap	10	20	....	.60
AB-25	....	With ¼-inch cap	10	20	....	.69
AC-25	....	With ⅜-inch cap	10	20	....	.66
AD-25	....	With ½-inch cap	10	20	....	.72
AE-25	....	With ⅛-inch male cap	10	20	....	.60
AF-25	....	With ¼-inch male cap	10	20	....	.69
AG-25	....	With ⅜-inch male cap	10	20	....	.69
AH-25	....	With ½-inch male cap	10	20	....	.75
AK-25	....	With ⅛-inch fixture cap	10	20	....	.66
AL-25	....	With ¼-inch fixture cap	10	20	....	.69
AM-25	....	With ⅛-inch angle cap	10	20	....	.65
AN-25	....	With ¼-inch angle cap	10	20	....	.74
AP-25	....	With ⅜-inch angle cap	10	20	....	.71
AR-25	....	With ⅛-inch angle fixture cap	10	20	....	.71
AS-25	....	With ¼-inch angle fixture cap	10	20	....	.74
AT-25	....	With pendent cap	10	20	....	.60
AU-25	....	With strain relief cap	10	20	....	.60
AV-25	464	With attachment plug	10	20	5	.80
BZ-25	....	With canopy tap base	10	20	....	.75
AW-25	422	With cleat base	10	20	20	.76
BY-25	....	With cleat base, cov'd. connections	5	20	....	.89
AX-25	....	With slotted base	10	20	....	.71
AY-25	395	With small concealed base	10	20	18	.71
AZ-25†	....	With large concealed base	10	20	....	.76
BA-25	....	With angle concealed base	10	20	....	.76
BC-25	461	With base for ⅜ and ½-inch condulets	10	20	20	.76
BX-25	....	With base for ¾-inch condulets	10	20	20	.76
BW-25	....	With base for ½ and ¾-inch taplets	10	20	....	.76
BB-25	423	With wood molding base	10	20	20	.71
BD-25	....	With one-way National base	10	20	....	.71
BE-25	....	With two-way National base	10	20	....	.71
BH-25	....	With small covered base	10	20	....	.81
BK-25	396	With large covered base	10	20	25	.90
BL-25	....	With 3¼-inch box base	5	20	....	.90
BM-25	....	With 4-inch box base	1	20	....	1.20
BN-25	....	With 3¼-inch pancake base	5	20	....	1.00
BP-25	....	With 4-inch pancake base	1	20	....	1.30
BR-25	414	‡With concealed rosette base	10	20	25	1.02
BS-25*	415	With cleat rosette base	10	20	25	1.02
BT-25	416	‡With two-wire molding rosette base	10	20	25	1.02
BU-25	417	‡With three-wire molding rosette base	10	20	25	1.02
BV-25	418	‡With combination rosette base	10	20	25	1.02

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

Bodies are regularly furnished with short chain and 10 feet of linen cord. Extra cord, 1 cent list per foot.























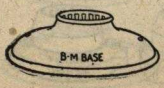


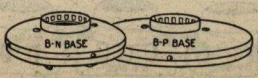




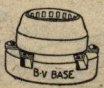


















































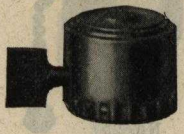
BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

KEY WALL SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

SCHEDULE H



No. 18



Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
18	....	Body, without cap or base.....	10	50	....	$0.26
AA-18	424	With ⅛-inch cap.....	10	50	....	.33
AB-18	....	With ¼-inch cap.....	10	20	....	.42
AC-18	....	With ⅜-inch cap.....	10	20	....	.39
AD-18	....	With ½-inch cap.....	10	20	....	.45
AE-18	....	With ⅛-inch male cap.....	10	20	....	.33
AF-18	....	With ¼-inch male cap.....	10	20	....	.42
AG-18	....	With ⅜-inch male cap.....	10	20	....	.42
AH-18	....	With ½-inch male cap.....	10	20	....	.48
AK-18	....	With ⅛-inch fixture cap.....	10	20	....	.39
AL-18	....	With ¼-inch fixture cap.....	10	20	....	.42
AM-18	....	With ⅛-inch angle cap.....	10	20	....	.38
AN-18	....	With ¼-inch angle cap.....	10	20	....	.47
AP-18	....	With ⅜-inch angle cap.....	10	20	....	.44
AR-18	....	With ⅛-inch angle fixture cap.	10	20	....	.44
AS-18	....	With ¼-inch angle fixture cap.	10	20	....	.47
AT-18	....	With pendent cap.....	10	20	....	.33
AU-18	....	With strain relief cap.....	10	20	....	.33
AV-18	....	With attachment plug.....	10	20	....	.53
BZ-18	....	With canopy tap base.....	10	20	....	.48
AW-18	....	With cleat base.....	10	20	....	.49
BY-18	....	With cleat base, cov'd. connections.	5	10	....	.62
AX-18	....	With slotted base.....	10	20	....	.44
AY-18	....	With small concealed base.....	10	20	....	.44
AZ-18†	....	With large concealed base.....	10	20	....	.49
BA-18	....	With angle concealed base.....	10	20	....	.49
BC-18	....	With base for ⅜ and ½-inch condulets	10	20	....	.49
BX-18	....	With base for ¾-inch condulets	10	20	....	.49
BW-18	....	With base for ½ and ¾-inch taplets	10	20	....	.49
BB-18	....	With wood molding base.....	10	20	....	.44
BD-18	....	With one-way National base...	10	20	....	.44
BE-18	....	With two-way National base...	10	20	....	.44
BH-18	....	With small covered base.....	10	20	....	.54
BK-18	....	With large covered base.....	10	20	....	.63
BL-18	....	With 3¼-inch box base.....	5	20	....	.63
BM-18	....	With 4-inch box base.....	1	20	....	.93
BN-18	....	With 3¼-inch pancake base...	5	20	....	.73
BP-18	....	With 4-inch pancake base.....	1	20	....	1.03
BR-18	....	‡With concealed rosette base....	10	10	....	.75
BS-18*	....	With cleat rosette base.....	10	10	....	.75
BT-18	....	‡With two-wire molding rosette base	10	10	....	.75
BU-18	....	‡With three-wire molding rosette base	10	10	....	.75
BV-18	....	‡With combination rosette base.	10	10	....	.75







































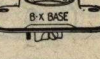






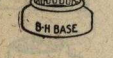














*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

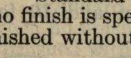
‡Not National Electrical Code Standard.

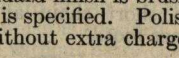
Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

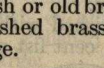


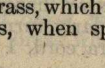


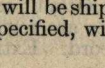


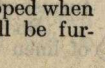














BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

PULL WALL SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

SCHEDULE H



No. 19

Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std.	Wt., Lbs. Pkg.	Price Each
19	....	Body, without cap or base.....	10	50	....		$0.53
AA-19	371	With ⅛-inch cap.....	10	50		20	.60
AB-19	..	With ¼-inch cap.....	10	20	....		.69
AC-19	....	With ⅜-inch cap.....	10	20	....		.66
AD-19	....	With ½-inch cap.....	10	20	....		.72
AE-19	....	With ⅛-inch male cap.....	10	20	....		.60
AF-19	....	With ¼-inch male cap.....	10	20	....		.69
AG-19	....	With ⅜-inch male cap.....	10	20	....		.69
AH-19	....	With ½-inch male cap.....	10	20	....		.75
AK-19	....	With ⅛-inch fixture cap.....	10	20	....		.66
AL-19	....	With ¼-inch fixture cap.....	10	20	....		.69
AM-19	....	With ⅛-inch angle cap.....	10	20	....		.65
AN-19	....	With ¼-inch angle cap.....	10	20	....		.74
AP-19	....	With ⅜-inch angle cap.....	10	20	....		.71
AR-19	....	With ⅛-inch angle fixture cap.	10	20	....		.71
AS-19	....	With ¼-inch angle fixture cap.	10	20	....		.74
AT-19	....	With pendent cap.....	10	20	....		.60
AU-19	....	With strain relief cap.....	10	20	....		.60
AV-19	....	With attachment plug.....	10	20	....		.80
BZ-19	....	With canopy tap base.....	10	20	....		.75
AW-19	....	With cleat base.....	10	20	....		.76
BY-19	....	With cleat base, cov'd. connections	5	10	....		.89
AX-19	....	With slotted base.....	10	20	....		.71
AY-19	372	With small concealed base.....	10	20		25	.71
AZ-19†	....	With large concealed base.....	10	20	....		.76
BA-19	....	With angle concealed base.....	10	20	....		.76
BC-19	....	With base for ⅜ and ½-inch condulets	10	20	....		.76
BX-19	....	With base for ¾-inch condulets	10	20	....		.76
BW-19	....	With base for ½ and ¾-inch condulets	10	20	....		.76
BB-19	....	With wood molding base.....	10	20	....		.71
BD-19	....	With one-way National base...	10	20	....		.71
BE-19	....	With two-way National base...	10	20	....		.71
BH-19	373	With small covered base.....	10	50	....		.81
BK-19	....	With large covered base.....	10	20	....		.90
BL-19	....	With 3¼-inch box base.....	5	20	....		.90
BM-19	....	With 4-inch box base.....	1	20	....		1.20
BN-19	....	With 3¼-inch pancake base ...	5	20	....		1.00
BP-19	....	With 4-inch pancake base.....	1	20	....		1.30
BR-19	....	‡With concealed rosette base....	10	10	....		1.02
BS-19*	....	With cleat rosette base.....	10	10	....		1.02
BT-19	....	‡With two-wire molding rosette base	10	10	....		1.02
BU-19	....	‡With three-wire molding rosette base	10	10	....		1.02
BV-19	....	‡With combination rosette base.	10	10	....		1.02

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

Bodies are regularly furnished with short chain and 10 feet of linen cord. Extra cord, 1 cent list per foot.























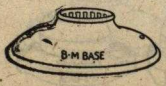


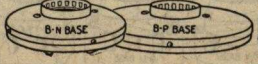




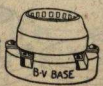


















































BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

S. P. PULL CEILING SWITCHES—SCHEDULE H

3 Amperes, 125 Volts — **1 Ampere, 250 Volts**



No. 20

Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
20	....	Body, without cap or base.....	10	50	....	$0.53
AA-20	406	With ⅛-inch cap.....	10	50	22	.60
AB-20	....	With ¼-inch cap.....	10	20	....	.69
AC-20	....	With ⅜-inch cap.....	10	20	....	.66
AD-20	....	With ½-inch cap.....	10	20	....	.72
AE-20	....	With ⅛-inch male cap.....	10	20	....	.60
AF-20	....	With ¼-inch male cap.....	10	20	....	.69
AG-20	....	With ⅜-inch male cap.....	10	20	....	.69
AH-20	....	With ½-inch male cap.....	10	20	....	.75
AK-20	....	With ⅛-inch fixture cap.....	10	20	....	.66
AL-20	....	With ¼-inch fixture cap.....	10	20	....	.69
AM-20	....	With ⅛-inch angle cap.....	10	20	....	.65
AN-20	....	With ¼-inch angle cap.....	10	20	....	.74
AP-20	....	With ⅜-inch angle cap.....	10	20	....	.71
AR-20	....	With ⅛-inch angle fixture cap.	10	20	....	.71
AS-20	....	With ¼-inch angle fixture cap.	10	20	....	.74
AT-20	....	With pendent cap.....	10	20	....	.60
AU-20	....	With strain relief cap.....	10	20	....	.60
AV-20	....	With attachment plug.....	10	20	....	.80
BZ-20	....	With canopy tap base.....	10	20	....	.75
AW-20	....	With cleat base.....	10	20	....	.76
BY-20	....	With cleat base, covered connections.	5	10	....	.89
AX-20	....	With slotted base.....	10	20	....	.71
AY-20	407	With small concealed base.....	10	20	28	.71
AZ-20†	....	With large concealed base.....	10	20	....	.76
BA-20	....	With angle concealed base.....	10	20	....	.76
BC-20	....	With base for ⅜ and ½-inch condulets	10	20	....	.76
BX-20	....	With base for ¾-inch condulet.	10	20	....	.76
BW-20	....	With base for ½ and ¾-inch taplets	10	20	....	.76
BB-20	....	With wood molding base.....	10	20	....	.71
BD-20	....	With one-way National base...	10	20	....	.71
BE-20	....	With two-way National base...	10	20	....	.71
BH-20	408	With small covered base.....	10	20	28	.81
BK-20	....	With large covered base.....	10	20	....	.90
BL-20	....	With 3¼-inch box base.....	5	20	....	.90
BM-20	....	With 4-inch box base.....	1	20	....	1.20
BN-20	....	With 3¼-inch pancake base...	5	20	....	1.00
BP-20	....	With 4-inch pancake base.....	1	20	....	1.30
BR-20	....	‡With concealed rosette base....	10	10	....	1.02
BS-20*	....	With cleat rosette base.....	10	10	....	1.02
BT-20	....	‡With two-wire molding rosette base	10	10	....	1.02
BU-20	....	‡With three-wire molding rosette base	10	10	....	1.02
BV-20	....	‡With combination rosette base.	10	10	....	1.02

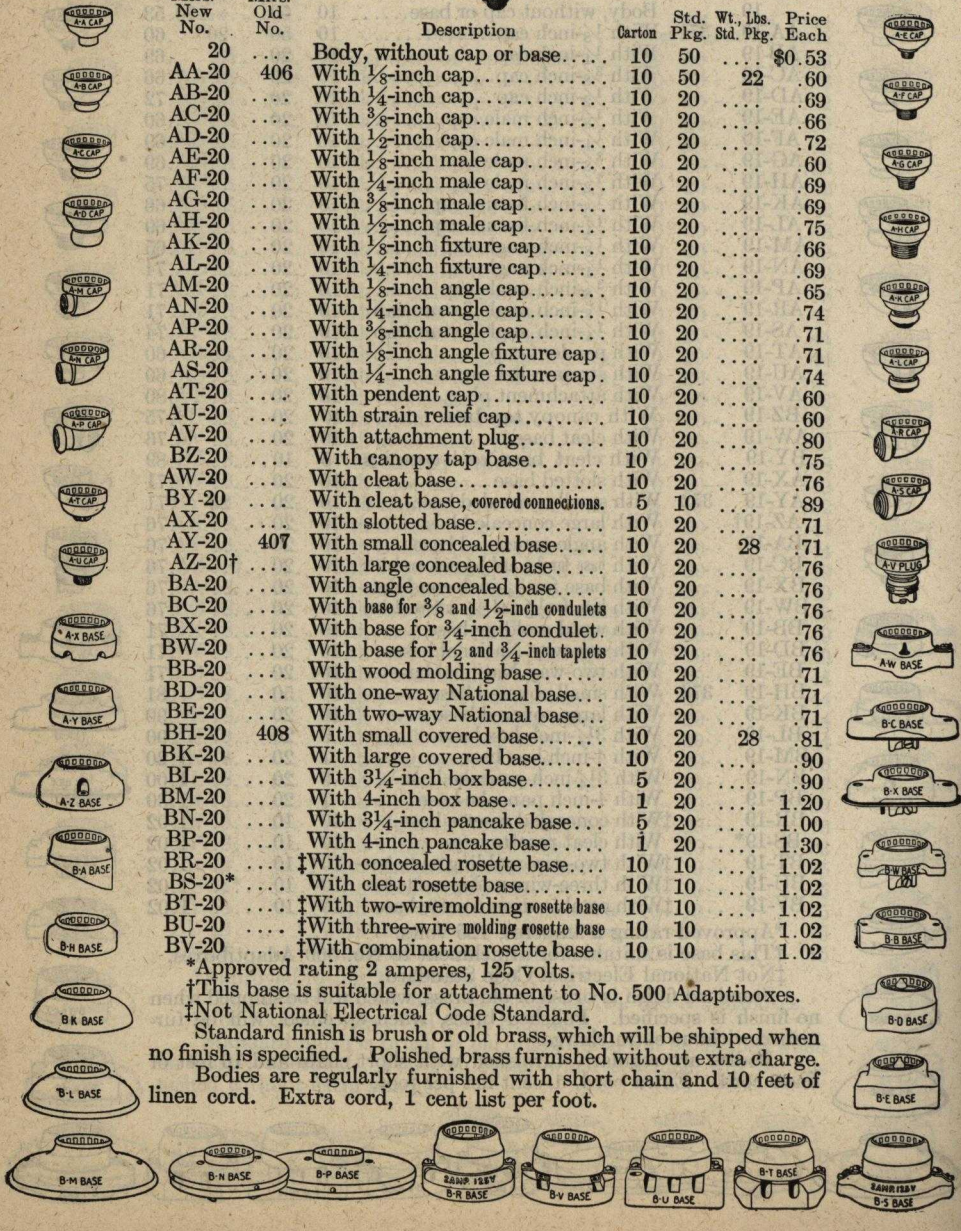
*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass furnished without extra charge.

Bodies are regularly furnished with short chain and 10 feet of linen cord. Extra cord, 1 cent list per foot.



BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

ELECTROLIER PULL CEILING SWITCHES—SCHEDULE H

Operating 1, 2, 1 and 2, off — **3 Amperes, 125 Volts—1 Ampere, 250 Volts**



No. 27

Mfrs. No.	Description	Std. Carton Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
27	Body, without cap or base	10	50	....	$0.83
AA-27	With ⅛-inch cap	10	50	....	.90
AB-27	With ¼-inch cap	10	20	....	.99
AC-27	With ⅜-inch cap	10	20	....	.96
AD-27	With ½-inch cap	10	20	....	1.02
AE-27	With ⅛-inch male cap	10	20	....	.90
AF-27	With ¼-inch male cap	10	20	....	.99
AG-27	With ⅜-inch male cap	10	20	....	.99
AH-27	With ½-inch male cap	10	20	....	1.05
AK-27	With ⅛-inch fixture cap	10	20	....	.96
AL-27	With ¼-inch fixture cap	10	20	....	.99
AM-27	With ⅛-inch angle cap	10	20	....	.95
AN-27	With ¼-inch angle cap	10	20	....	1.04
AP-27	With ⅜-inch angle cap	10	20	....	1.01
AR-27	With ⅛-inch angle fixture cap	10	20	....	1.01
AS-27	With ¼-inch angle fixture cap	10	20	....	1.04
AT-27	With pendent cap	10	20	....	.90
AU-27	With strain relief cap	10	20	....	.90
AV-27	With attachment plug	10	20	....	1.10
BZ-27	With canopy tap base	10	20	....	1.05
AW-27	With cleat base	10	20	....	1.06
BY-27	With cleat base, cov'd. connections	5	10	....	1.19
AX-27	With slotted base	10	20	....	1.01
AY-27	With small concealed base	10	20	....	1.01
AZ-27†	With large concealed base	10	20	....	1.06
BA-27	With angle concealed base	10	20	....	1.06
BC-27	With base for ⅜ and ½-inch condulets	10	20	....	1.06
BX-27	With base for ¾-inch condulet	10	20	....	1.06
BW-27	With base for ½ and ¾-inch taplets	10	20	....	1.06
BB-27	With wood molding base	10	20	....	1.01
BD-27	With one-way National base	10	20	....	1.01
BE-27	With two-way National base	10	20	....	1.01
BH-27	With small covered base	10	20	....	1.11
BK-27	With large covered base	10	20	....	1.20
BL-27	With 3¼-inch box base	5	20	....	1.20
BM-27	With 4-inch box base	1	20	....	1.50
BN-27	With 3¼-inch pancake base	5	20	....	1.30
BP-27	With 4-inch pancake base	1	20	....	1.60
BR-27	‡With concealed rosette base	10	10	....	1.32
BS-27*	With cleat rosette base	10	10	....	1.32
BT-27	‡With two-wire molding rosette base	10	10	....	1.32
BU-27	‡With three-wire molding rosette base	10	10	....	1.32
BV-27	‡With combination rosette base	10	10	....	1.32

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, furnished without extra charge.

Bodies are regularly furnished with short chain and 10 feet of linen cord. Extra cord, 1 cent list per foot.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

S. P. PULL FIXTURE SWITCHES—SCHEDULE H

3 Amperes, 125 Volts **1 Ampere, 250 Volts**

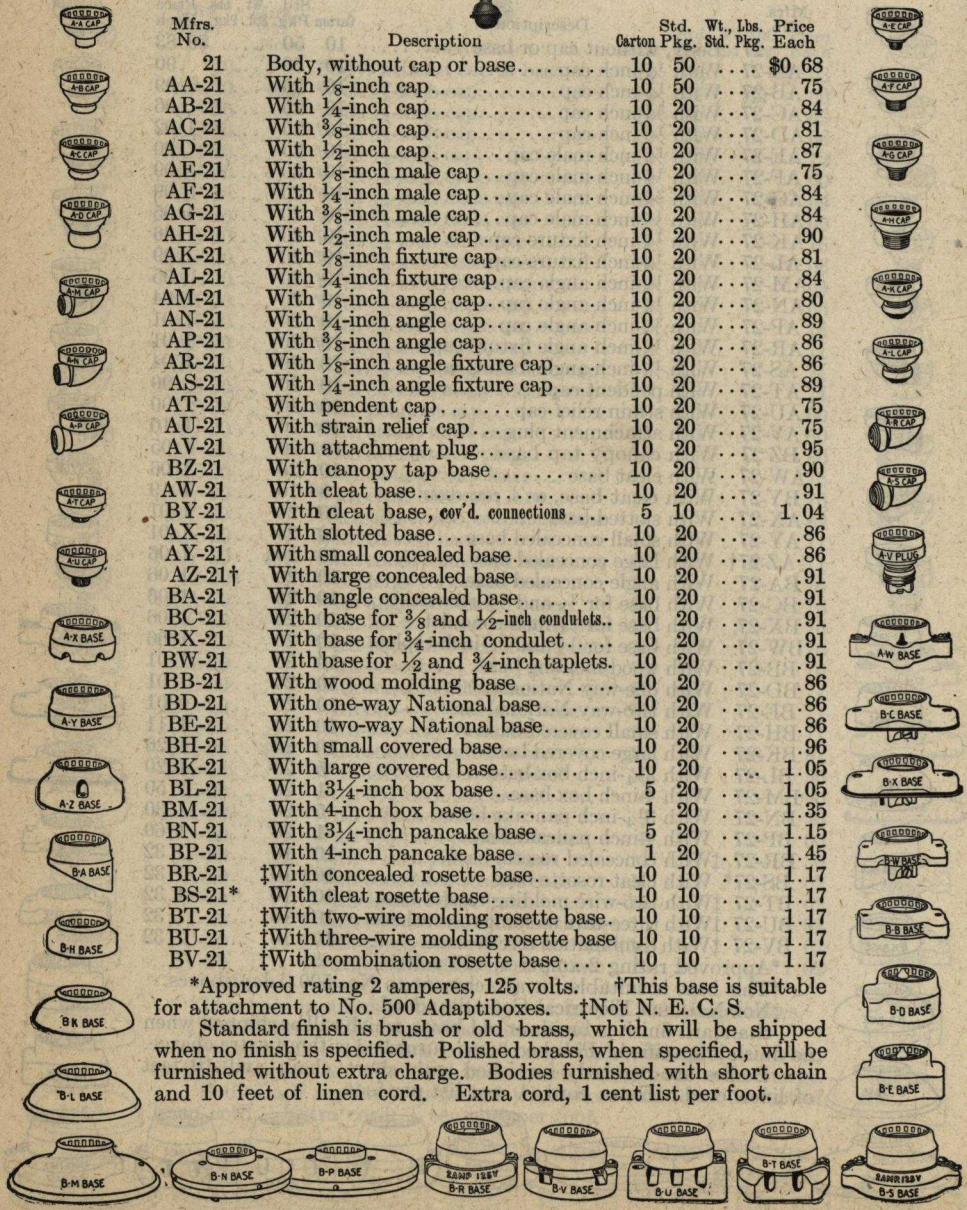


No. 21

Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
21	Body, without cap or base	10	50	....	$0.68
AA-21	With ⅛-inch cap	10	50	....	.75
AB-21	With ¼-inch cap	10	20	....	.84
AC-21	With ⅜-inch cap	10	20	....	.81
AD-21	With ½-inch cap	10	20	....	.87
AE-21	With ⅛-inch male cap	10	20	....	.75
AF-21	With ¼-inch male cap	10	20	....	.84
AG-21	With ⅜-inch male cap	10	20	....	.84
AH-21	With ½-inch male cap	10	20	....	.90
AK-21	With ⅛-inch fixture cap	10	20	....	.81
AL-21	With ¼-inch fixture cap	10	20	....	.84
AM-21	With ⅛-inch angle cap	10	20	....	.80
AN-21	With ¼-inch angle cap	10	20	....	.89
AP-21	With ⅜-inch angle cap	10	20	....	.86
AR-21	With ⅛-inch angle fixture cap	10	20	....	.86
AS-21	With ¼-inch angle fixture cap	10	20	....	.89
AT-21	With pendent cap	10	20	....	.75
AU-21	With strain relief cap	10	20	....	.75
AV-21	With attachment plug	10	20	....	.95
BZ-21	With canopy tap base	10	20	....	.90
AW-21	With cleat base	10	20	....	.91
BY-21	With cleat base, cov'd. connections	5	10	....	1.04
AX-21	With slotted base	10	20	....	.86
AY-21	With small concealed base	10	20	....	.86
AZ-21†	With large concealed base	10	20	....	.91
BA-21	With angle concealed base	10	20	....	.91
BC-21	With base for ⅜ and ½-inch condulets	10	20	....	.91
BX-21	With base for ¾-inch condulet	10	20	....	.91
BW-21	With base for ½ and ¾-inch taplets	10	20	....	.91
BB-21	With wood molding base	10	20	....	.86
BD-21	With one-way National base	10	20	....	.86
BE-21	With two-way National base	10	20	....	.86
BH-21	With small covered base	10	20	....	.96
BK-21	With large covered base	10	20	....	1.05
BL-21	With 3¼-inch box base	5	20	....	1.05
BM-21	With 4-inch box base	1	20	....	1.35
BN-21	With 3¼-inch pancake base	5	20	....	1.15
BP-21	With 4-inch pancake base	1	20	....	1.45
BR-21	‡With concealed rosette base	10	10	....	1.17
BS-21*	With cleat rosette base	10	10	....	1.17
BT-21	‡With two-wire molding rosette base	10	10	....	1.17
BU-21	‡With three-wire molding rosette base	10	10	....	1.17
BV-21	‡With combination rosette base	10	10	....	1.17

*Approved rating 2 amperes, 125 volts. †This base is suitable for attachment to No. 500 Adaptiboxes. ‡Not N. E. C. S.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge. Bodies furnished with short chain and 10 feet of linen cord. Extra cord, 1 cent list per foot.



BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

ELECTROLIER PULL FIXTURE SWITCHES—SCHEDULE H

Operating 1, 2, 1 and 2, off — **3 Amperes, 125 Volts—1 Ampere, 250 Volts**



No. 28































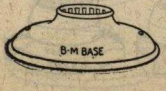


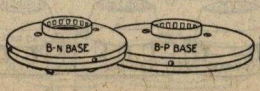
Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
28	Body, without cap or base	10	50	....	$0.98
AA-28	With 1/8-inch cap	10	50	....	1.05
AB-28	With 1/4-inch cap	10	20	....	1.14
AC-28	With 3/8-inch cap	10	20	....	1.11
AD-28	With 1/2-inch cap	10	20	....	1.17
AE-28	With 1/8-inch male cap	10	20	....	1.05
AF-28	With 1/4-inch male cap	10	20	....	1.14
AG-28	With 3/8-inch male cap	10	20	....	1.14
AH-28	With 1/2-inch male cap	10	20	....	1.20
AK-28	With 1/8-inch fixture cap	10	20	....	1.11
AL-28	With 1/4-inch fixture cap	10	20	....	1.14
AM-28	With 1/8-inch angle cap	10	20	....	1.10
AN-28	With 1/4-inch angle cap	10	20	....	1.19
AP-28	With 3/8-inch angle cap	10	20	....	1.16
AR-28	With 1/8-inch angle fixture cap	10	20	....	1.16
AS-28	With 1/4-inch angle fixture cap	10	20	....	1.19
AT-28	With pendent cap	10	20	....	1.05
AU-28	With strain relief cap	10	20	....	1.05
AV-28	With attachment plug	10	20	....	1.25
BZ-28	With canopy tap base	10	20	....	1.20
AW-28	With cleat base	10	20	....	1.21
BY-28	With cleat base, covered connections	5	10	....	1.34
AX-28	With slotted base	10	20	....	1.16
AY-28	With small concealed base	10	20	....	1.16
AZ-28†	With large concealed base	10	20	....	1.21
BA-28	With angle concealed base	10	20	....	1.21
BC-28	With base for 3/8 and 1/2-inch condulets	10	20	....	1.21
BX-28	With base for 3/4-inch condulets	10	20	....	1.21
BW-28	With base for 1/2 and 3/4-inch taplet	10	20	....	1.21
BB-28	With wood molding base	10	20	....	1.16
BD-28	With one-way National base	10	20	....	1.16
BE-28	With two-way National base	10	20	....	1.16
BH-28	With small covered base	10	20	....	1.26
BK-28	With large covered base	10	20	....	1.35
BL-28	With 3 1/4-inch box base	5	20	....	1.35
BM-28	With 4-inch box base	1	20	....	1.65
BN-28	With 3 1/4-inch pancake base	5	20	....	1.45
BP-28	With 4-inch pancake base	1	20	....	1.75
BR-28	‡With concealed rosette base	10	10	....	1.47
BS-28*	With cleat rosette base	10	10	....	1.47
BT-28	‡With two-wire molding rosette base	10	10	....	1.47
BU-28	‡With three-wire molding rosette base	10	10	....	1.47
BV-28	‡With combination rosette base	10	10	....	1.47

*Approved rating 2 amperes, 125 volts. †This base is suitable for attachment to No. 500 Adaptiboxes. ‡Not N. E. C. S.

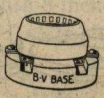
Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass furnished without extra charge.

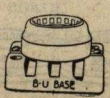
Bodies furnished with short chain and 10 ft. of linen cord. Extra cord, 1 cent list per ft.















































BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

KEY CANDLE SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

SCHEDULE H



No. 22

Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
22	....	Body, without cap or base...	10	50	....	$0.26
AA-22	425	With ⅛-inch cap.....	10	50	....	.33
AB-22	....	With ¼-inch cap.....	10	20	....	.42
AC-22	....	With ⅜-inch cap.....	10	20	....	.39
AD-22	....	With ½-inch cap.....	10	20	....	.45
AE-22	....	With ⅛-inch male cap.....	10	20	....	.33
AF-22	....	With ¼-inch male cap.....	10	20	....	.42
AG-22	....	With ⅜-inch male cap.....	10	20	....	.42
AH-22	....	With ½-inch male cap.....	10	20	....	.48
AK-22	....	With ⅛-inch fixture cap.....	10	20	....	.39
AL-22	....	With ¼-inch fixture cap.....	10	20	....	.42
AM-22	....	With ⅛-inch angle cap.....	10	20	....	.38
AN-22	....	With ¼-inch angle cap.....	10	20	....	.47
AP-22	....	With ⅜-inch angle cap.....	10	20	....	.44
AR-22	....	With ⅛-inch angle fixture cap	10	20	....	.44
AS-22	....	With ¼-inch angle fixture cap	10	20	....	.47
AT-22	....	With pendent cap.....	10	20	....	.33
AU-22	....	With strain relief cap.....	10	20	....	.33
AV-22	....	With attachment plug.....	10	20	....	.53
BZ-22	....	With canopy tap base.....	10	20	....	.48
AW-22	....	With cleat base.....	10	20	....	.49
BY-22	....	With cleat base, cov'd connections.	5	10	....	.62
AX-22	....	With slotted base.....	10	20	....	.44
AY-22	....	With small concealed base....	10	20	....	.44
AZ-22†	....	With large concealed base....	10	20	....	.49
BA-22	....	With angle concealed base....	10	20	....	.49
BC-22	....	With base for ⅜ and ½-inch condulets...	10	20	....	.49
BX-22	....	With base for ¾-inch condulets..	10	20	....	.49
BW-22	....	With base for ½ and ¾-inch taplets...	10	20	....	.49
BB-22	....	With wood molding base.....	10	20	....	.44
BD-22	....	With one-way National base..	10	20	....	.44
BE-22	....	With two-way National base..	10	20	....	.44
BH-22	....	With small covered base.....	10	20	....	.54
BK-22	....	With large covered base.....	10	20	....	.63
BL-22	....	With 3¼-inch box base.....	5	20	....	.63
BM-22	....	With 4-inch box base.....	1	20	....	.93
BN-22	....	With 3¼-inch pancake base..	5	20	....	.73
BP-22	....	With 4-inch pancake base...	1	20	....	1.03
BR-22	....	‡With concealed rosette base..	10	10	....	.75
BS-22*	....	With cleat rosette base.....	10	10	....	.75
BT-22	....	‡With two-wire molding rosette base	10	10	....	.75
BU-22	....	‡With three-wire molding rosette base	10	10	....	.75
BV-22	....	‡With combination rosette base	10	10	....	.75

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.



BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

PULL CANDLE SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

SCHEDULE H



No. 24

Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
24	Body, without cap or base	10	50	....	$0.53
AA-24	With ⅛-in. cap	10	50	....	.60
AB-24	With ¼-in. cap	10	20	....	.69
AC-24	With ⅜-in. cap	10	20	....	.66
AD-24	With ½-in. cap	10	20	....	.72
AE-24	With ⅛-in. male cap	10	20	....	.60
AF-24	With ¼-in. male cap	10	20	....	.69
AG-24	With ⅜-in. male cap	10	20	....	.69
AH-24	With ½-in. male cap	10	20	....	.75
AK-24	With ⅛-in. fixture cap	10	20	....	.66
AL-24	With ¼-in. fixture cap	10	20	....	.69
AM-24	With ⅛-in. angle cap	10	20	....	.65
AN-24	With ¼-in. angle cap	10	20	....	.74
AP-24	With ⅜-in. angle cap	10	20	....	.71
AR-24	With ⅛-in. angle fixture cap	10	20	....	.71
AS-24	With ¼-in. angle fixture cap	10	20	....	.74
AT-24	With pendent cap	10	20	....	.60
AU-24	With strain relief cap	10	20	....	.60
AV-24	With attachment plug	10	20	....	.80
BZ-24	With canopy tap base	10	20	....	.75
AW-24	With cleat base	10	20	....	.76
BY-24	With cleat base, cov'd. connections	5	10	....	.89
AX-24	With slotted base	10	20	....	.71
AY-24	With small concealed base	10	20	....	.71
AZ-24	†With large concealed base	10	20	....	.76
BA-24	With angle concealed base	10	20	....	.76
BC-24	With base for ⅜ and ½-in. conduits	10	20	....	.76
BX-24	With base for ¾-inch conduits	10	20	....	.76
BW-24	With base for ½ and ¾-in. taplets	10	20	....	.76
BB-24	With wood molding base	10	20	....	.71
BD-24	With one-way National base	10	20	....	.71
BE-24	With two-way National base	10	20	....	.71
BH-24	With small covered base	10	20	....	.81
BK-24	With large covered base	10	20	....	.90
BL-24	With 3¼-inch box base	5	20	....	.90
BM-24	With 4-inch box base	1	20	....	1.20
BN-24	With 3¼-inch pancake base	5	20	....	1.00
BP-24	With 4-inch pancake base	1	20	....	1.30
BR-24	‡With concealed rosette base	10	10	....	1.02
BS-24	*With cleat rosette base	10	10	....	1.02
BT-24	‡With two-wire molding rosette base	10	10	....	1.02
BU-24	‡With three-wire molding rosette base	10	10	....	1.02
BV-24	‡With combination rosette base	10	10	....	1.02

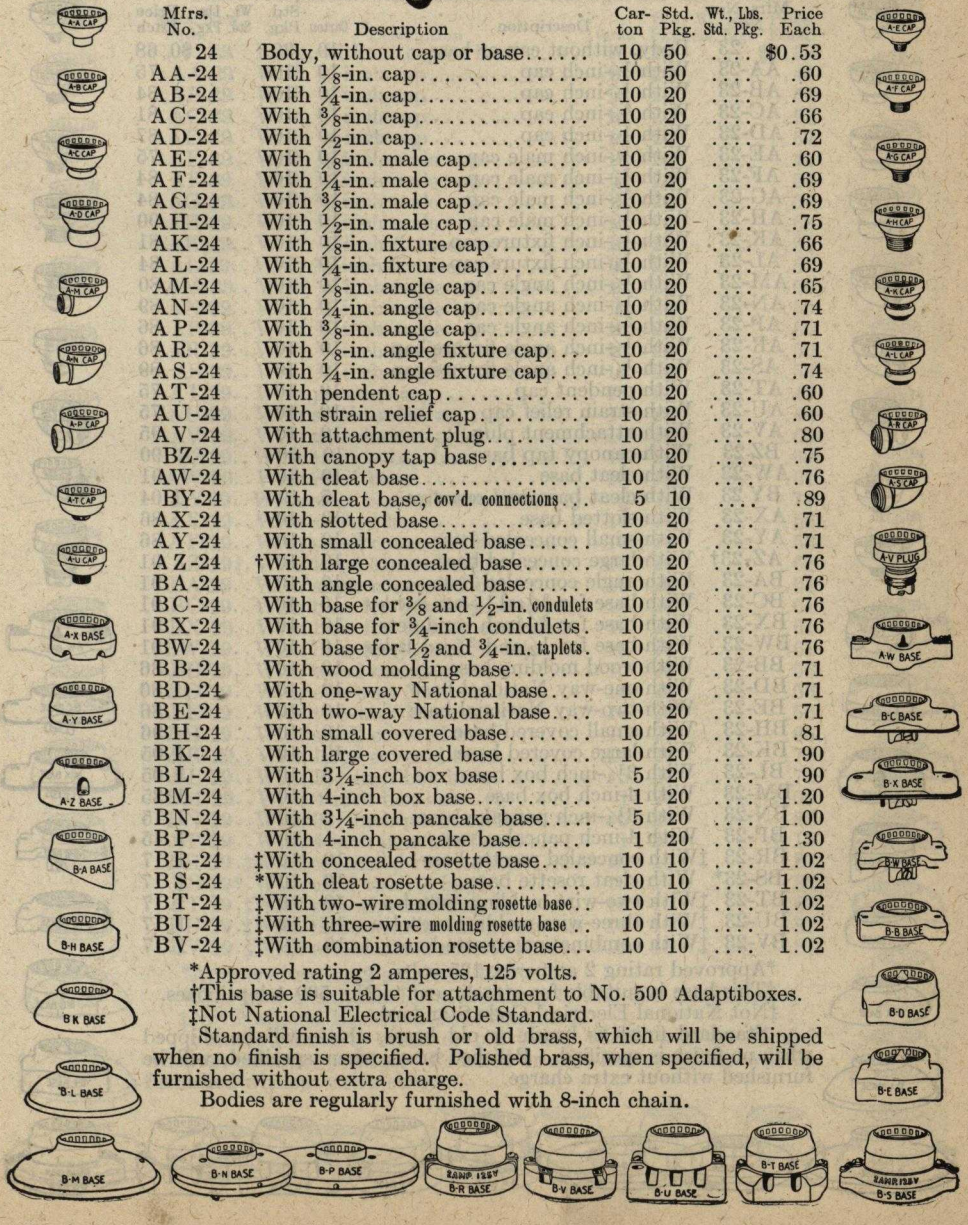
*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

Bodies are regularly furnished with 8-inch chain.



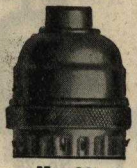
BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

TURN CANDLE SWITCHES

3 Amperes, 125 Volts—1 Ampere 250 Volts

SCHEDULE H



No. 23



Mfrs. New No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
23	Body, without cap or base	10	30	....	$0.68
AA-23	With ⅛-inch cap	10	10	....	.75
AB-23	With ¼-inch cap	10	10	....	.84
AC-23	With ⅜-inch cap	10	10	....	.81
AD-23	With ½-inch cap	10	10	....	.87
AE-23	With ⅛-inch male cap	10	10	....	.75
AF-23	With ¼-inch male cap	10	10	....	.84
AG-23	With ⅜-inch male cap	10	10	....	.84
AH-23	With ½-inch male cap	10	10	....	.90
AK-23	With ⅛-inch fixture cap	10	10	....	.81
AL-23	With ¼-inch fixture cap	10	10	....	.84
AM-23	With ⅛-inch angle cap	10	10	....	.80
AN-23	With ¼-inch angle cap	10	10	....	.89
AP-23	With ⅜-inch angle cap	10	10	....	.86
AR-23	With ⅛-inch angle fixture cap	10	10	....	.86
AS-23	With ¼-inch angle fixture cap	10	10	....	.89
AT-23	With pendent cap	10	10	....	.75
AU-23	With strain relief cap	10	10	....	.75
AV-23	With attachment plug	10	10	....	.95
BZ-23	With canopy tap base	10	20	....	.90
AW-23	With cleat base	10	10	....	.91
BY-23	With cleat base, cov'd. connections	5	10	....	1.04
AX-23	With slotted base	10	10	....	.86
AY-23	With small concealed base	10	10	....	.86
AZ-23†	With large concealed base	10	10	....	.91
BA-23	With angle concealed base	10	10	....	.91
BC-23	With base for ⅜ and ½-inch condulets	10	10	....	.91
BX-23	With base for ¾-inch condulets	10	10	....	.91
BW-23	With base for ½ and ¾-inch taplets	10	10	....	.91
BB-23	With wood molding base	10	10	....	.86
BD-23	With one-way National base	10	10	....	.86
BE-23	With two-way National base	10	10	....	.86
BH-23	With small covered base	10	10	....	.96
BK-23	With large covered base	10	10	....	1.05
BL-23	With 3¼-inch box base	5	10	....	1.05
BM-23	With 4-inch box base	1	10	....	1.35
BN-23	With 3¼-inch pancake base	5	10	....	1.15
BP-23	With 4-inch pancake base	1	10	....	1.45
BR-23	‡With concealed rosette base	10	10	....	1.17
BS-23*	With cleat rosette base	10	10	....	1.17
BT-23	‡With two-wire molding rosette base	10	10	....	1.17
BU-23	‡With three-wire molding rosette base	10	10	....	1.17
BV-23	‡With combination rosette base	10	10	....	1.17

































*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS NEW WRINKLE LINE

NATIONAL ELECTRICAL CODE STANDARD

SPARTAN PLUG RECEPTACLES

10 Amperes, 250 Volts

SCHEDULE H



No. 29

These receptacles will receive all of the Spartan line of caps.

Mfrs. New No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
29	Body, without cap or base	10	20	....	$0.38
AA-29	With ⅛-inch cap	10	20	....	.45
AB-29	With ¼-inch cap	10	20	....	.54
AC-29	With ⅜-inch cap	10	20	....	.51
AD-29	With ½-inch cap	10	20	....	.57
AE-29	With ⅛-inch male cap	10	20	....	.45
AF-29	With ¼-inch male cap	10	20	....	.54
AG-29	With ⅜-inch male cap	10	20	....	.54
AH-29	With ½-inch male cap	10	20	....	.60
AK-29	With ⅛-inch fixture cap	10	20	....	.51
AL-29	With ¼-inch fixture cap	10	20	....	.54
AM-29	With ⅛-inch angle cap	10	20	....	.50
AN-29	With ¼-inch angle cap	10	20	....	.59
AP-29	With ⅜-inch angle cap	10	20	....	.56
AR-29	With ⅛-inch angle fixture cap	10	20	....	.56
AS-29	With ¼-inch angle fixture cap	10	20	....	.59
AT-29	With pendent cap	10	20	....	.45
AU-29	With strain relief cap	10	20	....	.45
AV-29	With attachment plug	10	20	....	.65
BZ-29	With canopy tap base	10	20	....	.60
AW-29	With cleat base	10	20	....	.61
BY-29	With cleat base cov'd. connections	5	10	....	.74
AX-29	With slotted base	10	20	....	.56
AY-29	With small concealed base	10	20	....	.56
AZ-29†	With large concealed base	10	20	....	.61
BA-29	With angle concealed base	10	20	....	.61
BC-29	With base for ⅜ and ½-inch condulets	10	20	....	.61
BX-29	With base for ¾-inch condulets	10	20	....	.61
BW-29	With base for ½ and ¾-inch taplets	10	20	....	.61
BB-29	With wood molding base	10	20	....	.56
BD-29	With one-way National base	10	20	....	.56
BE-29	With two-way National base	10	20	....	.56
BH-29	With small covered base	10	20	....	.66
BK-29	With large covered base	10	20	....	.75
BL-29	With 3¼-inch box base	5	20	....	.75
BM-29	With 4-inch box base	1	20	....	1.05
BN-29	With 3¼-inch pancake base	5	20	....	.85
BP-29	With 4-inch pancake base	1	20	....	1.15
BR-29	‡With concealed rosette base	10	10	....	.87
BS-29*	With cleat rosette base	10	10	....	.87
BT-29	‡With two-wire molding rosette base	10	10	....	.87
BU-29	‡With three-wire molding rosette base	10	10	....	.87
BV-29	‡With combination rosette base	10	10	....	.87

*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

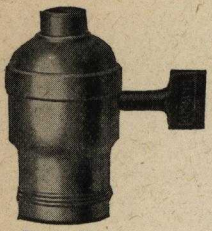
‡Not National Electrical Code Standard.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.



BRYANT-PERKINS SPECIAL SOCKETS

NATIONAL ELECTRICAL CODE STANDARD



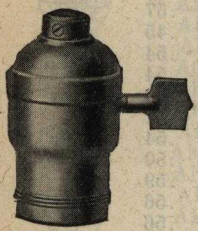
Long Key

SOCKETS WITH EXTRA LONG KEYS

All standard key sockets have keys 7/8 inch long, but, can be fitted with keys 1¼, 1½, 2 and 2½ inches long on special order, which must specify distance between outside of shell and end of handle, at an additional cost of 5 cents added to list prices of standard sockets. Standard package, 100 of one length.

On orders for sockets with extra long keys, where the length is not given, it is our rule to ship 1½-inch.

1-inch keys take the same price and standard package as regular. Sockets with 7/8-inch and 1-inch keys may be assorted to make up standard package quantity.



Metal Key

SOCKETS WITH METAL KEYS

We are prepared to fit to any key socket a metal key. This key is detachable, so that it may be given the same finish as the socket or fixture. The standard metal key measures ¾ inch from the end to the shell. Longer keys will be furnished on special order.

Sockets with metal keys not longer than 1 inch, add 7 cents to list price of standard socket. Sockets with metal keys longer than 1 inch add 12 cents to list price of standard socket. Standard package, 100 of one length.

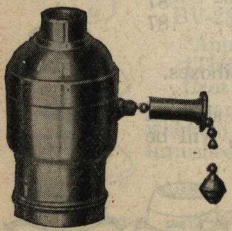


For Special Metal Key

SOCKETS WITH SPECIAL METAL KEYS

Sockets can be furnished with extension keys, designed to receive a special key, furnished by the fixture manufacturer, to match the fixture, at an additional cost of $0.07 added to list price of standard sockets.

The threaded metal part of the extension key is thoroughly insulated from the other parts of the socket. The screw is 21/64 inch in diameter, 26 threads. Standard package, 100.



Chain Guide Extension

PULL SOCKETS WITH EXTENSION CHAIN GUIDE

Pull sockets installed in husks or socket covers require extension chain guides (necessitating only a small hole in cover) to carry the chain free of cover and shade. The chain guide is not attached to the socket shell but to the socket mechanism. It is detachable and separable and can be removed for refinishing. By carrying a stock of various lengths of guides it is possible to convert the standard sockets into sockets with extension guides, making it unnecessary to carry a stock of completed sockets with various lengths of chain guides attached. The portion of the extension chain guide which is attached to socket extends less than 1/8 inch outside of socket shell, making it possible to insert the socket in any husk, no matter how closely it follows the outline of shell. Extension chain guides of following lengths furnished: 3/8, ¾, 1, 1¼ and 1½ inches.

Add 12 cents to list price for either assembled in sockets or loose.

Standard package quantity, 50 of one length or 100 of assorted lengths.

Sockets with extension chain guides may not be combined with sockets having regular chain guides to make up a standard package quantity.

BRYANT-PERKINS SPECIAL SOCKETS



Insulated Chain

PULL SOCKETS WITH CHAINS OF SPECIAL LENGTHS

The standard length of chain on all pull sockets, except miniature and candelabra, is 8 inches. Sockets with chains shorter than 8 inches will be billed at the same price as regular. For sockets with chains longer than 8 inches, add 10 cents per foot to list price. For special finishes on chains longer than 8 inches, add 2 cents per foot to list price.

PULL SOCKETS WITH SILK CORD

Pull sockets can be furnished with silk cord in any desired color instead of chain. For sockets with cords not longer than 8 inches, add 5 cents to list price. For sockets with cords longer than 8 inches, add 15 cents per foot to list price.

PULL SOCKETS WITH LINEN CORD

Pull sockets can be furnished with a short chain and 3 feet of linen cord, complete with ball, similar to that regularly furnished with pull switch rosettes, without extra charge. For cords longer than 3 feet, add 1 cent per foot to list price.

PULL SOCKETS WITH INSULATED CHAIN

Pull sockets can be furnished with insulated chain, accomplished by inserting a piece of fiber rod in the chain about 2 inches below the chain guide. For sockets so equipped, add 15 cents to the list price. The standard package quantity will be the same as for the standard socket in connection with which the chain is ordered.



No. 510



No. 512



No. 513

PULL SOCKET CHAINS AND PARTS—SCHEDULE H

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Oz. Std. Pkg.	Price Each
088190	...	Bead chain (per foot)	...	1000 ft.	..	$0.05
088191	510	Splicing link	200	200	4	.02½
088192	512	Snap-lock ball	250	250	12	.06
088193	513	Insulating link	100	100	6	.08
088194	516	Snap-lock ball for candelabra chain	...	...	..	.06

Standard finish on the above is brush or old brass, which will be supplied when no other finish is specified. All other finishes will be special and charged extra as follows: Chain, 2 cents per foot; balls and links, 2 cents each.

All New Wrinkle and Wrinklet Pull Sockets are supplied with the No. 512 ball. It may be detached and attached with the utmost ease, when necessary, but cannot be detached by any strain to which it will be subjected in service, no matter how severe.



Socket with Lamp Grip

CHAIN GUIDES—SCHEDULE H

The standard chain guide, when sold separately from the socket, will list at 5 cents. Standard package, 250.

Extension chain guides, when sold separately, will list at 12 cents. Standard package, 50 of one length or 100 of assorted lengths.

For special finishes on chain guides add 2 cents to list price.

SOCKETS FOR MAZDA GAS-FILLED LAMPS—SCHEDULE B

Sockets for Mazda C gas-filled lamps must be waxed with a compound which will not soften under heat. The mogul base sockets are regularly so made. For medium base sockets to be used with these lamps add 3 cents to list price.

SOCKETS WITH LAMP GRIP—SCHEDULE B

All mogul base sockets and most medium base sockets can be equipped with a lamp grip, as illustrated, which effectually prevents the lamp from accidentally unscrewing. For sockets so equipped add 5 cents to list price.



Socket Cap with Special Bushing

SOCKET CAPS WITH SPECIAL BUSHINGS

Most caps of brass shell sockets can be furnished with insulated bushing, as illustrated. The purpose of this construction is to provide a passage for the conductors when the support for the socket is a rod instead of a pipe or tube. For sockets so equipped add 2 cents to list price.

SOCKETS AND RECEPTACLES IN SPECIAL FINISHES

To meet the demand for sockets with special finishes, the factory is now carrying in stock sockets in special finishes for which there is a large demand, such as polished brass, oxidized copper, polished nickel, etc. Special finishes, occasionally used, are not carried regularly, but can be furnished on short notice to special order.

In placing orders for special finishes which are not standardized, we suggest the submitting, at the same time, of a sample for our information.

ADDITIONS TO LIST FOR SPECIAL FINISHES

The standard finish of all brass shell sockets is brush brass, which will be supplied on all orders where no finish is specified.

Prices of special finishes for sockets and other devices bought knocked down will be as follows: For caps and bases, one half the price given in first column for the desired finish. For bodies, deduct from prices in columns 1, 2, 3 or 4 one half the price for the same finish in first column.

The standard length of chain on pull sockets is 8 inches, unless otherwise specified.

Finish	Key, Keyless and Wall Sockets		Pull and Pull Wall Sockets	
	Without Shade Holder	With Shade Holder Attached	Without Shade Holder	With Shade Holder Attached
Bauer-barff	$0.02	$0.04	$0.03	$0.05
Brass, Antique	.04	.06	.10	.12
Brass, Brush	No advance	No advance	No advance	No advance
Brass, Flemish	.04	.06	.10	.12
Brass, Lemon	.04	.06	.10	.12
Brass, Old	No advance	No advance	No advance	No advance
Brass, Oxidized	.04	.06	.10	.12
Brass, Polished	No advance	No advance	No advance	No advance
Bronze, Acid	.06*	.08*	.10	.12
Bronze, Antique	.06*	.08*	.10	.12
Bronze, English	.06*	.08*	.10	.12
Bonze, Gold	.06*	.08*	.10	.12
Bronze, Hardware	.06*	.08*	.10	.12
Bronze, Japanese	.06*	.08*	.10	.12
Bronze, Old English	.06*	.08*	.10	.12
Bronze, Polished	.06*	.08*	.10	.12
Bronze, Pompeian	.06*	.08*	.15	.17
Bronze, Statuary	.04	.06	.10	.12
Copper, Acid	.04	.06	.10	.12
Copper, Antique	.04	.06	.10	.12
Copper, Mottled	.04	.06	.10	.12
Copper, Old	.04	.06	.10	.12
Copper, Oxidized	.04	.06	.06	.08
Copper, Polished	.04	.06	.10	.12
Enamel, White	.06*	.08*	.10	.12
Gilt, Burnished	.06*	.08*	.10	.12
Gilt, Etruscan	.06*	.08*	.10	.12
Gilt, Ormolu	.06*	.08*	.10	.12
Gilt, Polished	.02	.04	.03	.05
Gilt, Rich	.02	.04	.03	.05
Gold, Roman	.06*	.08*	.15	.17
Gold, Satin	.06*	.08*	.15	.17
Gun Metal	.06*	.08*	.15	.17
Iron, Wrought	.02	.04	.03	.05
Nickel, Brush	.06*	.08*	.10	.12
Nickel, Polished	.04	.06	.06	.08
Sand-blast, Any	.06*	.08*	.15	.17
Silver, Butler's	.06*	.08*	.15	.17
Silver, Ground	.06*	.08*	.15	.17
Silver, Oxidized	.06*	.08*	.15	.17
Silver, Polished	.06*	.08*	.15	.17
Steel, Polished	.06*	.08*	.10	.12
Verde Antique	.06*	.08*	.15	.17

Regular and special finishes of one number may be assorted to make up standard package quantity which will be the same as though all were regular finish.

Extra chain on pull sockets, add to list price per foot, 10 cents.

Pull sockets will be furnished with short chain and 3 feet of cord at the same price as listed. Extra cord, 1 cent list per foot.

Special finishes on extra chain, add to list price, per foot, 2 cents.

Special finishes for chain guides, sold separate from sockets, add to list price, 2 cents.

*When ordered in lots of 500 of one number and one finish this list will be reduced 2 cents.

BRYANT-PERKINS WRINKLET FIXTURE LINE

NATIONAL ELECTRICAL CODE STANDARD

All of These WRINKLET Caps Will Fit All of the WRINKLET Bodies on the Following Pages

SCHEDULE B

No. WA
⅛-inch Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100844	$0.07	25	500

No. WB
¼-inch Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100845	$0.16	25	100

No. WC
⅜-inch Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100846	$0.13	25	250

No. WE
⅛-inch Male Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100847	$0.07	25	50

No. WF
¼-inch Male Socket Cap



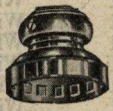
Trade No.	Price Each	Carton	Std. Pkg.
100848	$0.16	25	50

No. WG
⅜-inch Male Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100849	$0.16	25	50

No. WK
⅛-inch Fixture Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100850	$0.13	25	50

No. WL
¼-inch Fixture Socket Cap



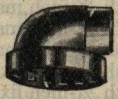
Trade No.	Price Each	Carton	Std. Pkg.
100851	$0.16	25	50

No. WM
⅛-inch Angle Socket Cap



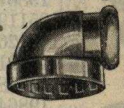
Trade No.	Price Each	Carton	Std. Pkg.
100852	$0.12	25	100

No. WN
¼-inch Angle Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100853	$0.21	25	50

No. WP
⅜-inch Angle Socket Cap



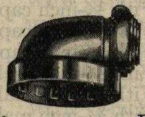
Trade No.	Price Each	Carton	Std. Pkg.
100854	$0.18	25	50

No. WR
⅛-inch Angle Fixture Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100855	$0.18	25	50

No. WS
¼-inch Angle Fixture Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100856	$0.21	25	50

No. WT
Pendent Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100857	$0.07	25	500

The sale of Wrinklet Interchangeable Devices as individual parts eliminates the labor of taking complete articles apart to interchange them. This increases the efficiency of the line, at the same time reducing the stock investment.

The standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS WRINKLET FIXTURE LINE

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE B



No. 81



No. 80



No. 82



No. WA



No. WB



No. WC



No. WE



No. WF



No. WG



No. WK



No. WL



No. WM



No. WN



No. WP



No. WR



No. WT

SINGLE-POLE PUSH BUTTON SOCKETS

660 Watts, 250 Volts

Trade No.	Mfrs No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
123234	81	....	Body, without cap	25	500	..	$0.26
123235	WA-81	....	With ⅛-inch cap	25	500	..	.33
123236	WB-81	....	With ¼-inch cap	25	250	..	.42
123237	WC-81	....	With ⅜-inch cap	25	250	..	.39
123238	WE-81	....	With ⅛-inch male cap	25	500	..	.33
123239	WF-81	....	With ¼-inch male cap	25	250	..	.42
123240	WG-81	....	With ⅜-inch male cap	25	250	..	.42
123241	WK-81	....	With ⅛-inch fixture cap	25	250	..	.39
123242	WL-81	....	With ¼-inch fixture cap	25	250	..	.42
123243	WM-81	....	With ⅛-inch angle cap	25	100	..	.38
123244	WN-81	....	With ¼-inch angle cap	25	100	..	.47
123245	WP-81	....	With ⅜-inch angle cap	25	100	..	.44
123246	WR-81	....	With ⅛-inch angle fixture cap	25	100	..	.44
123247	WS-81	....	With ¼-inch angle fixture cap	25	100	..	.47
123248	WT-81	....	With pendent cap	25	500	..	.33

SINGLE-POLE KEY SOCKETS

250 Watts, 250 Volts

105124	80	....	Body, without cap	25	500	..	.26
19855	WA-80	7000	With ⅛-inch cap	25	500	85	.33
19861	WB-80	7010	With ¼-inch cap	25	250	59	.42
19867	WC-80	7004	With ⅜-inch cap	25	250	53	.39
105119	WE-80	....	With ⅛-inch male cap	25	500	85	.33
105120	WF-80	....	With ¼-inch male cap	25	250	59	.42
105121	WG-80	....	With ⅜-inch male cap	25	250	53	.42
19858	WK-80	7014	With ⅛-inch fixture cap	25	250	64	.39
19864	WL-80	7017	With ¼-inch fixture cap	25	250	60	.42
19870	WM-80	7002	With ⅛-inch angle cap	25	100	27	.38
19876	WN-80	7021	With ¼-inch angle cap	25	100	27	.47
19882	WP-80	7024	With ⅜-inch angle cap	25	100	25	.44
19873	WR-80	7027	With ⅛-inch angle fixture cap	25	100	32	.44
19879	WS-80	7030	With ¼-inch angle fixture cap	25	100	30	.47
105122	WT-80	....	With pendent cap	25	500	85	.33

QUARTER TURN KEY SOCKETS

660 Watts, 250 Volts

105123	82	....	Body, without cap	25	500	..	.29
105100	WA-82	....	With ⅛-inch cap	25	500	85	.36
105106	WB-82	....	With ¼-inch cap	25	250	59	.45
105112	WC-82	....	With ⅜-inch cap	25	250	53	.42
105115	WE-82	....	With ⅛-inch male cap	25	500	85	.36
105116	WF-82	....	With ¼-inch male cap	25	250	59	.45
105117	WG-82	....	With ⅜-inch male cap	25	250	53	.45
105103	WK-82	....	With ⅛-inch fixture cap	25	250	64	.42
105109	WL-82	....	With ¼-inch fixture cap	25	250	60	.45
19885	WM-82	....	With ⅛-inch angle cap	25	100	27	.41
105127	WN-82	....	With ¼-inch angle cap	25	100	27	.50
105133	WP-82	....	With ⅜-inch angle cap	25	100	25	.47
19888	WR-82	....	With ⅛-inch angle fixture cap	25	100	32	.47
105130	WS-82	....	With ¼-inch angle fixture cap	25	100	30	.50
105118	WT-82	....	With pendent cap	25	500	85	.36

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.


No. WA


No. WB


No. WC


No. WE


No. WF


No. WG


No. WK


No. WL


No. WM


No. WN


No. WP


No. WR


No. WT

BRYANT-PERKINS WRINKLET FIXTURE LINE

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE B


No. 83


No. 95

STANDARD KEYLESS SOCKETS—660 WATTS, 250 VOLTS

Trade No.	Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
105136	83	....	Body, without cap.....	25	500	....	$0.23
19856	WA-83	7009	With ⅛-inch cap.....	25	500	80	.30
19862	WB-83	7011	With ¼-inch cap.....	25	250	54	.39
19868	WC-83	7013	With ⅜-inch cap.....	25	250	50	.36
105137	WE-83	....	With ⅛-inch male cap.....	25	500	..	.30
105138	WF-83	....	With ¼-inch male cap.....	25	250	..	.39
105139	WG-83	....	With ⅜-inch male cap.....	25	250	..	.39
19859	WK-83	7015	With ⅛-inch fixture cap.....	25	250	62	.36
19865	WL-83	7018	With ¼-inch fixture cap.....	25	250	55	.39
19871	WM-83	7020	With ⅛-inch angle cap.....	25	100	25	.35
19877	WN-83	7022	With ¼-inch angle cap.....	25	100	25	.44
19883	WP-83	7025	With ⅜-inch angle cap.....	25	100	24	.41
19874	WR-83	7028	With ⅛-inch angle fixture cap.	25	100	30	.41
19880	WS-83	7031	With ¼-inch angle fixture cap.	25	100	28	.44
105140	WT-83	....	With pendent cap.....	25	500	80	.30

SHORT KEYLESS SOCKETS—660 WATTS, 250 VOLTS

105141	95	....	Body, without cap.....	25	500	..	.23
105101	WA-95	7001	With ⅛-inch cap.....	25	500	80	.30
105107	WB-95	....	With ¼-inch cap.....	25	250	..	.39
105113	WC-95	7005	With ⅜-inch cap.....	25	250	45	.36
105142	WE-95	....	With ⅛-inch male cap.....	25	500	..	.30
105143	WF-95	....	With ¼-inch male cap.....	25	250	..	.39
105144	WG-95	....	With ⅜-inch male cap.....	25	250	..	.39
105104	WK-95	....	With ⅛-inch fixture cap.....	25	250	..	.36
105110	WL-95	....	With ¼-inch fixture cap.....	25	250	..	.39
19886	WM-95	7003	With ⅛-inch angle cap.....	25	100	20	.35
105128	WN-95	....	With ¼-inch angle cap.....	25	100	..	.44
105134	WP-95	....	With ⅜-inch angle cap.....	25	100	..	.41
19889	WR-95	....	With ⅛-inch angle fixture cap.	25	100	..	.41
105131	WS-95	....	With ¼-inch angle fixture cap.	25	100	..	.44
105145	WT-95	....	With pendent cap.....	25	500	80	.30

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.


No. WA


No. WB


No. WC


No. WE


No. WF


No. WG


No. WK


No. WL


No. WM


No. MN


No. WP


No. WR


No. WT

BRYANT-PERKINS WRINKLET FIXTURE LINE

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE B


No. 85


No. 84

PULL SOCKETS—250 WATTS, 250 VOLTS

Trade No.	Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
105146	85	....	Body, without cap.....	25	250	..	$0.53
19857	WA-85	7006	With ⅛-inch cap.....	25	250	50	.60
19863	WB-85	7012	With ¼-inch cap.....	25	100	27	.69
19869	WC-85	7007	With ⅜-inch cap.....	25	100	27	.66
123264	WE-85	....	With ⅛-inch male cap.....	25	250	..	.60
123265	WF-85	....	With ¼-inch male cap.....	25	100	..	.69
123266	WG-85	....	With ⅜-inch male cap.....	25	100	..	.69
19860	WK-85	7016	With ⅛-inch fixture cap.....	25	100	30	.66
19866	WL-85	7019	With ¼-inch fixture cap.....	25	100	30	.69
19872	WM-85	7008	With ⅛-inch angle cap.....	25	50	15	.65
19878	WN-85	7023	With ¼-inch angle cap.....	25	50	15	.74
19884	WP-85	7026	With ⅜-inch angle cap.....	25	50	15	.71
19875	WR-85	7029	With ⅛-inch angle fixture cap.	25	50	19	.71
19881	WS-85	7032	With ¼-inch angle fixture cap.	25	50	16	.74
123267	WT-85	....	With pendent cap.....	25	250	50	.60

TURN SOCKETS—250 WATTS, 250 VOLTS

123268	84	....	Body, without cap.....	25	100	..	.53
105102	WA-84	....	With ⅛-inch cap.....	25	100	..	.60
105108	WB-84	....	With ¼-inch cap.....	25	50	..	.69
105114	WC-84	....	With ⅜-inch cap.....	25	50	..	.66
123269	WE-84	....	With ⅛-inch male cap.....	25	50	..	.60
123270	WF-84	....	With ¼-inch male cap.....	25	50	..	.69
123271	WG-84	....	With ⅜-inch male cap.....	25	50	..	.69
105105	WK-84	....	With ⅛-inch fixture cap.....	25	50	..	.66
105111	WL-84	....	With ¼-inch fixture cap.....	25	50	..	.69
19887	WM-84	....	With ⅛-inch angle cap.....	25	50	..	.65
105129	WN-84	....	With ¼-inch angle cap.....	25	50	..	.74
105135	WP-84	....	With ⅜-inch angle cap.....	25	50	..	.71
105126	WR-84	....	With ⅛-inch angle fixture cap.	25	50	..	.71
105132	WS-84	....	With ¼-inch angle fixture cap.	25	50	..	.74
123272	WT-84	....	With pendent cap.....	25	100	..	.60

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS WRINKLET FIXTURE LINE

NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE H


No. WA


No. WB


No. WC


No. WE


No. WF


No. WG


No. WK


No. WL


No. WM


No. WN


No. WP


No. WR


No. WT


No. 96


No. 92


No. 94

PUSH BUTTON CANDLE SWITCHES

6 Amperes, 125 Volts—3 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
123286	96	Body, without cap	10	50	....	$0.26
123287	WA-96	With 1/8-inch cap	10	50	....	.33
123288	WB-96	With 1/4-inch cap	10	20	....	.42
123289	WC-96	With 3/8-inch cap	10	20	....	.39
123290	WE-96	With 1/8-inch male cap	10	20	....	.33
123291	WF-96	With 1/4-inch male cap	10	20	....	.42
123292	WG-96	With 3/8-inch male cap	10	20	....	.42
123293	WK-96	With 1/8-inch fixture cap	10	20	....	.39
123294	WL-96	With 1/4-inch fixture cap	10	20	....	.42
123295	WM-96	With 1/8-inch angle cap	10	20	....	.38
123296	WN-96	With 1/4-inch angle cap	10	20	....	.47
123297	WP-96	With 3/8-inch angle cap	10	20	....	.44
123298	WR-96	With 1/8-inch angle fixture cap	10	20	....	.44
123299	WS-96	With 1/4-inch angle fixture cap	10	20	....	.47
123300	WT-96	With pendent cap	10	50	....	.33

KEY CANDLE SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

123301	92	Body, without cap	10	50	....	.26
123302	WA-92	With 1/8-inch cap	10	50	....	.33
123303	WB-92	With 1/4-inch cap	10	20	....	.42
123304	WC-92	With 3/8-inch cap	10	20	....	.39
123305	WE-92	With 1/8-inch male cap	10	20	....	.33
123306	WF-92	With 1/4-inch male cap	10	20	....	.42
123307	WG-92	With 3/8-inch male cap	10	20	....	.42
123308	WK-92	With 1/8-inch fixture cap	10	20	....	.39
123309	WL-92	With 1/4-inch fixture cap	10	20	....	.42
123310	WM-92	With 1/8-inch angle cap	10	20	....	.38
123311	WN-92	With 1/4-inch angle cap	10	20	....	.47
123312	WP-92	With 3/8-inch angle cap	10	20	....	.44
123313	WR-92	With 1/8-inch angle fixture cap	10	20	....	.44
123314	WS-92	With 1/4-inch angle fixture cap	10	20	....	.47
123315	WT-92	With pendent cap	10	50	....	.33

PULL CANDLE SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

123316	94	Body, without cap	10	50	....	.53
123317	WA-94	With 1/8-inch cap	10	50	....	.60
123318	WB-94	With 1/4-inch cap	10	20	....	.69
123319	WC-94	With 3/8-inch cap	10	20	....	.66
123320	WE-94	With 1/8-inch male cap	10	20	....	.60
123321	WF-94	With 1/4-inch male cap	10	20	....	.69
123322	WG-94	With 3/8-inch male cap	10	20	....	.69
123323	WK-94	With 1/8-inch fixture cap	10	20	....	.66
123324	WL-94	With 1/4-inch fixture cap	10	20	....	.69
123325	WM-94	With 1/8-inch angle cap	10	20	....	.65
123326	WN-94	With 1/4-inch angle cap	10	20	....	.74
123327	WP-94	With 3/8-inch angle cap	10	20	....	.71
123328	WR-94	With 1/8-inch angle fixture cap	10	20	....	.71
123329	WS-94	With 1/4-inch angle fixture cap	10	20	....	.74
123330	WT-94	With pendent cap	10	50	....	.60

Bodies of pull candle switches are regularly furnished with short chain and 10 feet of linen cord. Extra cord, 1 cent list per foot.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

BRYANT-PERKINS WRINKLET FIXTURE LINE

NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE H


No. WA


No. WB


No. WC


No. WE


No. WF


No. WG

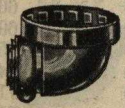

No. WK


No. WL


No. WM


No. WN

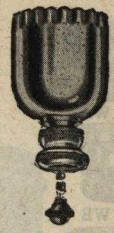

No. WP


No. WR


No. WT


No. 93


No. 90


No. 91

TURN CANDLE SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

Trade No.	Mfrs No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
123345	93	Body, without cap	10	30	....	$0.68
123346	WA-93	With 1/8-inch cap	10	10	....	.75
123347	WB-93	With 1/4-inch cap	10	10	....	.84
123348	WC-93	With 3/8-inch cap	10	10	....	.81
123349	WE-93	With 1/8-inch male cap	10	10	....	.75
123350	WF-93	With 1/4-inch male cap	10	10	....	.84
123351	WG-93	With 3/8-inch male cap	10	10	....	.84
123352	WK-93	With 1/8-inch fixture cap	10	10	....	.81
123353	WL-93	With 1/4-inch fixture cap	10	10	....	.84
123354	WM-93	With 1/8-inch angle cap	10	10	....	.80
123355	WN-93	With 1/4-inch angle cap	10	10	....	.89
123356	WP-93	With 3/8-inch angle cap	10	10	....	.86
123357	WR-93	With 1/8-inch angle fixture cap	10	10	....	.86
123358	WS-93	With 1/4-inch angle fixture cap	10	10	....	.89
123359	WT-93	With pendent cap	10	10	....	.75

SINGLE-POLE PULL SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

123360	90	Body, without cap	10	50	....	.53
123361	WA-90	With 1/8-inch cap	10	50	....	.60
123362	WB-90	With 1/4-inch cap	10	20	....	.69
123363	WC-90	With 3/8-inch cap	10	20	....	.66
123364	WE-90	With 1/8-inch male cap	10	20	....	.60
123365	WF-90	With 1/4-inch male cap	10	20	....	.69
123366	WG-90	With 3/8-inch male cap	10	20	....	.69
123367	WK-90	With 1/8-inch fixture cap	10	20	....	.66
123368	WL-90	With 1/4-inch fixture cap	10	20	....	.69
123369	WM-90	With 1/8-inch angle cap	10	20	....	.65
123370	WN-90	With 1/4-inch angle cap	10	20	....	.74
123371	WP-90	With 3/8-inch angle cap	10	20	....	.71
123372	WR-90	With 1/8-inch angle fixture cap	10	20	....	.71
123373	WS-90	With 1/4-inch angle fixture cap	10	20	....	.74
123374	WT-90	With pendent cap	10	50	....	.60

SINGLE-POLE PULL FIXTURE SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

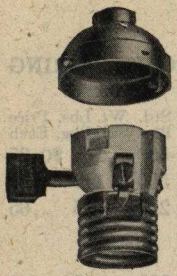
123375	91	Body, without cap	10	50	....	.68
123376	WA-91	With 1/8-inch cap	10	50	....	.75
123377	WB-91	With 1/4-inch cap	10	20	....	.84
123378	WC-91	With 3/8-inch cap	10	20	....	.81
123379	WE-91	With 1/8-inch male cap	10	20	....	.75
123380	WF-91	With 1/4-inch male cap	10	20	....	.84
123381	WG-91	With 3/8-inch male cap	10	20	....	.84
123382	WK-91	With 1/8-inch fixture cap	10	20	....	.81
123383	WL-91	With 1/4-inch fixture cap	10	20	....	.84
123384	WM-91	With 1/8-inch angle cap	10	20	....	.80
123385	WN-91	With 1/4-inch angle cap	10	20	....	.89
123386	WP-91	With 3/8-inch angle cap	10	20	....	.86
123387	WR-91	With 1/8-inch angle fixture cap	10	20	....	.86
123388	WS-91	With 1/4-inch angle fixture cap	10	20	....	.89
123389	WT-91	With pendent cap	10	50	....	.75

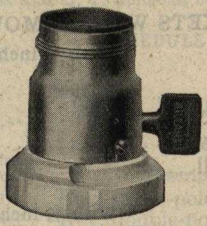
Bodies of pull switches are regularly furnished with short chain and 10 feet of linen cord. Extra cord, 1 cent list per foot.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

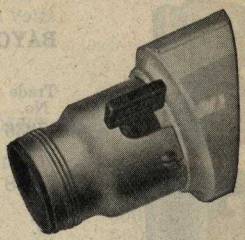
BRYANT BAYONET SHELL SOCKETS

NATIONAL ELECTRICAL CODE STANDARD
Key and Pull Sockets, 250 Watts, 250 Volts—Keyless Sockets, 660 Watts, 250 Volts
SCHEDULE B





No. 9184



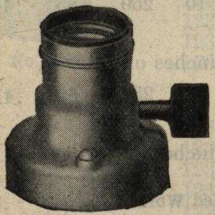
No. 50753



No. 9386



No. 50717



No. 60018



No. 60020



No. 4117

PENDENT SOCKETS

Trade No.	Mfrs. No.	Style	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
		With ⅛-inch Cap				
065243	9386	Key	25	500	120	$0.33
065244	9392	Keyless	25	500	110	.30
17830	35000	Pull	25	250	65	.60
		With ⅜-inch Cap				
065245	50760	Key	25	250	65	.39
065246	50768	Keyless	25	250	60	.36
17831	35001	Pull	25	100	30	.66
		With Pendent Cap				
065249	99386	Key	25	500	113	.33
065250	99392	Keyless	25	500	103	.30
17832	35040	Pull	25	250	60	.60

WALL SOCKETS

		With Base for Concealed Work				
17823	9184	Key	10	250	85	.44
17824	9185	Keyless	10	250	80	.41

Outside diameter of base is 2⅛ inches.
Holes for supporting screws are spaced 1⅝ inches on centers.

		With Angle Base for Concealed Work				
17825	50753	Key	10	100	50	.49
17826	50755	Keyless	10	100	45	.46
		Pony Wall Sockets				
065432	50717	Keyless	10	250	63	.25
17822	88258	Keyless	10	250	63	.25

Outside diameter of base is 2 inches.
Holes for supporting screws are spaced 1 3/16 inches on centers.

		With Small Covered Base for Concealed Work				
17827	60018	Key	10	250	100	.44
17828	60019	Keyless	10	250	95	.41

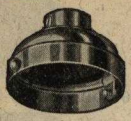
Outside diameter of base is 2 5/16 inches.
Holes for supporting screws are spaced 1⅝ inches on centers.

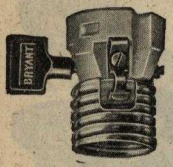
		With Large Covered Base for Concealed Work				
17829	60020	Keyless	10	100	65	.45

Outside diameter of base is 3 5/16 inches.
Holes for supporting screws are spaced 1⅝ and 2 inches on centers.

132790	4117	Keyless*	10	100	20	.40

*For switchboard. Has studs for rear connections.
Outside diameter of base is 2⅛ inches.









No. 50740



No. 50747



No. 50748



No. 50785



No. 24998

BRYANT SOCKETS

KEY AND PULL SOCKETS, 250 WATTS, 250 VOLTS
KEYLESS AND Q. T. SOCKETS, 660 WATTS, 250 VOLTS

SCHEDULE B

BAYONET SOCKETS WITH REMOVABLE COMPOSITION RING

With ⅛-inch Cap

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
17836	50740	*Key	25	500	115	$0.35
17837	50741	*Keyless	25	500	110	.32
17838	35037	†Pull	25	250	65	.65

With ⅜-inch Cap

17839	50762	*Key	25	250	65	.41
17840	50771	*Keyless	25	250	60	.38
17841	35044	†Pull	25	100	30	.71

With Base for Concealed Work

17842	50747	Key	10	250	85	.44

Outside diameter of base is 2⅛ inches.
Holes for supporting screws are spaced 1⅝ inches on centers.

17843	50723	Keyless, solid white base	10	100	25	.30
17844	50745	Keyless, slotted white base	10	250	60	.30
17845	29176	Keyless, solid brown base	10	100	25	.30
17846	50786	Keyless, slotted brown base	10	250	60	.30

Outside diameter of base is 2⅛ inches.
Holes for supporting screws are spaced 1¼ inches on centers.

With Small Covered Base for Concealed Work

17847	50748	Key	10	250	85	.44

Outside diameter of base is 2 inches.
Holes for supporting screws are spaced $1\frac{15}{32}$ inches on centers.

17848	50746	Keyless	10	250	60	.41

Outside diameter of base is 2 inches.
Holes for supporting screws are spaced 1¼ inches on centers.

With Large Covered Base for Concealed Work

17849	50785	Keyless	10	100	55	.45

Outside diameter of base is 3$\frac{3}{16}$ inches.
Holes for supporting screws are spaced 2 inches on centers.

17850	24998	Keyless	10	100	20	.30

No. 24998 is for switchboard. Has studs for rear connection.
Outside diameter of base is 2⅛ inches.

Wall Sockets with Double-pole Fuse

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
065433	50783	Key	10	250	150	$0.60
065434	50784	Keyless	10	250	140	.57

Holes for supporting screws are spaced 2 inches on centers.
Outside diameter of base is 2¾ inches.

*White porcelain rings will be supplied, when specified, instead of black composition rings, without extra charge.

†These sockets have porcelain rings.



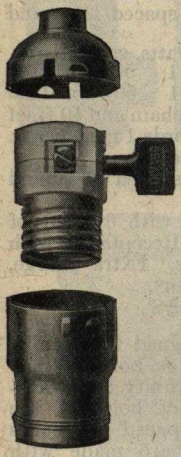
No. 50783

BRYANT SOCKETS

NATIONAL ELECTRICAL CODE STANDARD

Key and Pull Sockets, 250 Watts, 250 Volts
Keyless and Q. T. Sockets, 660 Watts, 250 Volts

SCHEDULE B



No. 7401

SOCKETS WITH TWO-POINT SHELLS

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
		With ⅛-inch Cap				
071202	7401	Key, single-pole	25	500	125	$0.33
071203	4401	Key, double-pole	25	500	125	.33
17833	4477	Key, quarter turn	25	500	125	.36
071204	7402	Keyless	25	500	110	.30
071205	4402	Pull	25	250	60	.60
		With ¼-inch Cap				
071206	7403	Key, single-pole	25	250	70	.42
071207	4403	Key, double-pole	25	250	70	.42
17834	4478	Key, quarter turn	25	250	70	.45
071208	7404	Keyless	25	250	65	.39
071209	4404	Pull	25	100	30	.69
		With ⅜-inch Cap				
071210	7405	Key, single-pole	25	250	70	.39
071211	4405	Key, double-pole	25	250	70	.39
17835	4479	Key, quarter turn	25	250	70	.42
071212	7406	Keyless	25	250	65	.36
071213	4406	Pull	25	100	30	.66
		With Pendent Cap				
123409	7407	Key, single-pole	25	500	125	.33
123410	4407	Key, double-pole	25	500	125	.33
123411	4499	Key, quarter turn	25	500	125	.36
123412	7408	Keyless	25	500	110	.30
123413	4408	Pull	25	250	60	.60
		With Strain Relief Cap				
123414	7409	Key, single-pole	25	500	130	.33
123415	4409	Key, double-pole	25	500	130	.33
123416	4514	Key, quarter turn	25	500	130	.36
123417	7410	Keyless	25	500	115	.30
123418	4410	Pull	25	250	65	.60

PARTS OF SOCKETS

Description	Mogul Std. Pkg.	Mogul Price Each	Medium Candlelabra or Miniature Std. Pkg.	Medium Candlelabra or Miniature Price Each
Shells, key, without linings	..	...	250	$0.07½
Shells, keyless, without linings	50	.45	250	.07½
Shells, pull, without linings	..	...	250	.07½
Caps, ⅛-inch, without linings	..	...	250	.06½
Caps, ¼-inch, without linings	..	...	250	.15½
Caps, ⅜-inch, without linings	50	.63	250	.12½
Caps, pendent, without linings	..	...	250	.06½
Linings, shell, all kinds	50	.09	250	.02½
Linings, cap, all sizes	50	.02	250	.00½
Interiors, key and push	..	...	250	.16
Interiors, key quarter turn (660 watts)	..	...	250	.19
Interiors, keyless	50	.31	250	.13
Interiors, pull (250 watts), without chain or guide	..	...	250	.30
Interiors, pull (250 watts), with chain, ball and guide	..	...	250	.43

Other parts of sockets will be sold at prices bearing the same proportion to the price of the total article that the above prices bear to the price of the complete device of which the parts mentioned form a part.

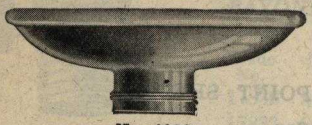
BRYANT RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE B

CEILING RECEPTACLES

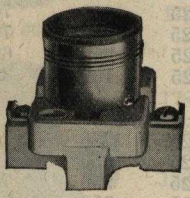
These receptacles have flat backs and can be used for ordinary ceiling work as well as for attachment to outlet boxes.



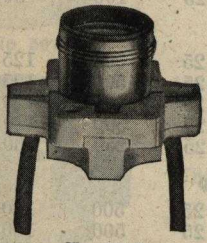
No. 4100



No. 4104



No. 4030



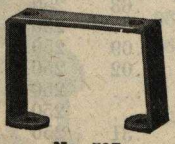
No. 4055



No. 4032



No. 519



No. 537



No. 538

For 3¼-inch Outlet Boxes—660 Watts, 250 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
17875	4102	Keyless, with binding posts	1	100	70	$0.45
17876	4103	Keyless, with wires	1	100	75	.50

Outside diameter of base is 3⅝ inches.

Holes for supporting screws are spaced 2¾ in. on centers.

For 3¼ and 4-inch Outlet Boxes—660 Watts, 250 Volts

17877	4100	Keyless, with binding posts	1	100	100	.60
17878	4101	Keyless, with wires	1	100	105	.65

Outside diameter of base is 4⅝ inches.

Holes for supporting screws are spaced 2¾ and 3½ inches on centers.

For 3¼ and 4-inch Outlet Boxes—250 Watts, 250 Volts

105147	4104	Pull, with binding posts	1	50	70	1.30
105148	4105	Pull, with wires	1	50	75	1.35

Each socket is supplied with a short chain and 10 ft. of best quality black linen cord. Longer cords 1 cent per ft.

Outside diameter of base is 4⅝ inches.

Holes for supporting screws are spaced 2¾ and 3½ inches on centers.

Nos. 4103, 4101 and 4105 are fitted with 6 inches of No. 14 stranded rubber covered wire. Receptacles with longer wires furnished on special order. Extra charge, 9 cents per foot (4½ cents each conductor).

PANCAKE RECEPTACLES

660 Watts, 250 Volts

These receptacles are primarily designed for installation in so-called "pancake" boxes; that is, boxes ½ inch or ¾ inch deep in which the only opportunity for attaching the receptacle consists of a pair of holes in the bottom of the box ¼ inch in diameter spaced 1½ inches on centers. Most other outlet boxes are made with similar holes so that these receptacles are available for a variety of uses. Each receptacle is fitted with two expansion bolts designed to be inserted into the above-mentioned holes. In boxes which are not provided with these holes, the receptacles may be attached by means of the bridges listed below.

071214	4030	Receptacle, with binding screws, no cover	10	100	45	.30
17873	4055	Receptacle, with wires, no cover	10	100	48	.35
071215	4031	Brass cover for 3¼-in. box	10	100	20	.25
071216	4032	Brass cover for 4-in. box	10	100	25	.40

Outside diameter of No. 4031 is 3¾ inches; of No. 4032, 4¾ inches.

No. 4055 is fitted with 6 inches of No. 14 stranded rubber-covered wire. Receptacles with longer wires furnished on special order. Extra charge, 9 cents per foot (4½ cents each conductor).

BRIDGES FOR PANCAKE RECEPTACLES

SCHEDULE H

105149	519	For 3¼ and 4-inch round boxes	50pr.	50pr.	3	*.05
105150	537	For 4-inch square boxes with open covers	50	50	4	.05
105151	538	With ⅜-inch female thread for fixture stud or iron pipe	50	50	4	.05

The above bridges may also be used with BN and BP New Wrinkle Bases listed on other pages.

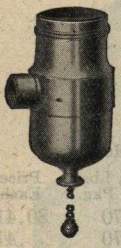
*Per pair.

BRYANT SOCKETS

NATIONAL ELECTRICAL CODE STANDARD

Key Sockets, 250 Watts, 250 Volts—Keyless Sockets, 660 Watts, 250 Volts

SCHEDULE B



No. 4068



No. 66237

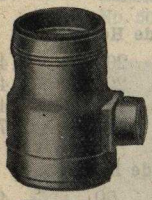
PULL SOCKETS WITH BOTTOM CHAIN GUIDE

These sockets are especially adapted for lighting fixtures and side wall brackets.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
17874	4068	Pull, 1/8-inch nozzle	10	50	22	$0.75
123428	4116	Pull, 1/8-inch three-step nozzle	10	50	22	.80

ELECTROLIER SOCKETS

065425	66237	Keyless, 1/8-inch cap	50	250	45	.40
123429	50766	Keyless, 3/8-inch cap	10	100	20	.46



No. 4043



No. 4004

ANGLE SOCKETS

These sockets are quite generally used for showcase and trough reflector lighting.

17871	4043	Keyless, 1/8-inch cap	25	100	25	.35
17872	4044	Keyless, 3/8-inch cap	25	100	28	.41

SOCKETS FOR CANDLE FIXTURES

These sockets can be used in tubing measuring not less than 1 3/16 inches inside diameter.

065426	4004	Keyless, 1/8-inch nipple	25	250	15	.30



No. 4106

ALUMINUM SHELL SOCKETS

These sockets, having aluminum shells, are suitable for outdoor work. The shells are lined with porcelain and the sockets are therefore suitable for show window work and conform to the specifications of the National Board of Fire Underwriters as to the conditions under which insulating joints may be omitted.

123430	4106	Keyless, 3/8-inch cap	10	50	23	.50
123431	4107	Keyless, 1/2-inch cap	10	50	22	.50

TWIN SOCKETS

Twin Keyless Sockets

065427	46750	Keyless, 1/8-inch cap	25	50	10	.65
065428	46751	Keyless, 3/8-inch cap	25	50	10	.70

Twin Keyless Extension Sockets

17812	4061	With Edison plug	10	50	30	1.00

Twin Pull Sockets

17814	4051	*Pull, 1/8-inch cap	10	50	20	1.00
17815	4052	*Pull, 3/8-inch cap	10	50	20	1.06

Operating both ends simultaneously.

065430	4005	Pull, 1/8-inch cap	10	50	20	1.00
065431	4006	Pull, 3/8-inch cap	10	50	20	1.06

Operating by successive pulls as follows: First, end No. 1; second, both ends; third, end No. 2; fourth, both off.

17816	4053	Pull, 1/8-inch cap	10	50	20	1.00
17817	4054	Pull, 3/8-inch cap	10	50	20	1.06

One socket on all the time.

Twin Pull Extension Sockets

071220	4029	*With Edison plug	5	50	30	1.35

Operating both ends simultaneously.

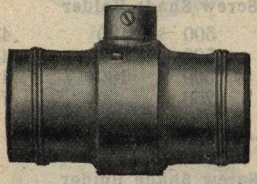
078197	4039	With Edison plug	5	50	30	1.35

Operating by successive pulls as follows: First, end No. 1; second, both ends; third, end No. 2; fourth, both off.

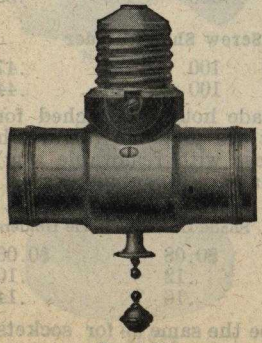
17813	4040	With Edison plug	5	50	30	1.35

One socket on all the time.

*Not National Electrical Code Standard.



No. 46750



No. 4029

BRYANT AND PERKINS NEW WRINKLE SOCKETS

NATIONAL ELECTRICAL CODE STANDARD

KEY AND PULL SOCKETS—250 WATTS, 250 VOLTS

KEYLESS SOCKET—660 WATTS, 250 VOLTS

SCHEDULE B



No. 7540

NEW WRINKLE SOCKETS

With ⅛-inch Cap and 2¼-inch New Wrinkle Shade Holder

Trade No.	Mfrs. No.	Style	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
19574	7540	Key, single-pole	25	500	170	$0.41
19575	4540	Key, double-pole	25	500	170	.41
19576	7541	Keyless	25	500	160	.38
19577	4541	Pull	25	250	166	.68

With ⅛-inch Cap and Form H New Wrinkle Shade Holder

19578	7542	Key, single-pole	25	500	200	.45
19579	4542	Key, double-pole	25	500	200	.45
19580	7543	Keyless	25	500	180	.42
19581	4543	Pull	25	250	75	.72

With ⅛-inch Cap and 3¼-inch New Wrinkle Shade Holder

19582	7544	Key, single-pole	10	100	50	.49
19583	4544	Key, double-pole	10	100	50	.49
19584	7545	Keyless	10	100	45	.46
19585	4545	Pull	10	100	48	.76

With ⅛-inch Cap and 2¼-inch Three-Screw Shade Holder

065279	59488	Key, single-pole	25	500	140	.39
065280	4493	Key, double-pole	25	500	140	.39
065281	59490	Keyless	25	500	130	.36
065282	65253	Pull	25	250	70	.66

With ⅛-inch Cap and 3¼-inch Three-Screw Shade Holder

065291	59494	Key, single-pole	10	100	50	.47
065292	4496	Key, double-pole	10	100	50	.47
065293	59496	Keyless	10	100	45	.44
065294	65256	Pull	10	100	30	.74

With ⅛-inch Cap and Form H Three-Screw Shade Holder

065303	7520	Key, single-pole	25	500	190	.43
065304	4520	Key, double-pole	25	500	190	.43
065305	7521	Keyless	25	500	180	.40
065306	4521	Pull	25	250	90	.70

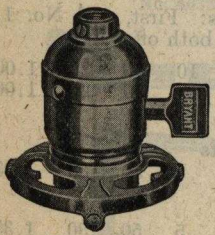
BAYONET SOCKETS

With ⅛-inch Cap and 2¼-inch Three-Screw Shade Holder

19586	27740	Key	25	500	150	.39
19587	27741	Keyless	25	500	140	.36

With ⅛-inch Cap and 3¼-inch Three-Screw Shade Holder

19588	29400	Key	10	100	40	.47
19589	29402	Keyless	10	100	40	.44



No. 27740

Above we list those sockets with shade holders attached for which there is the most frequent call, but are prepared to furnish any of the brass shell sockets (except those with removable ring) with shade holders attached, at the following additional prices:

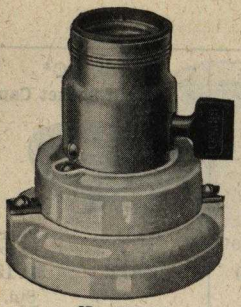
Trade No.		Std. Pkg.	New Wrinkle Shade Holders	Three-Screw Shade Holders
19590	2¼-inch	*	$0.08	$0.06
19591	Form H	*	.12	.10
19592	3¼-inch	100	.16	.14

*The standard package quantity will be the same as for sockets without shade holders.

BRYANT-PERKINS SOCKETS AND RECEPTACLES

250 Watts, 125 Volts

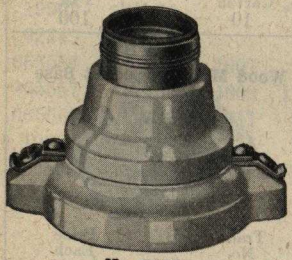
SCHEDULE B



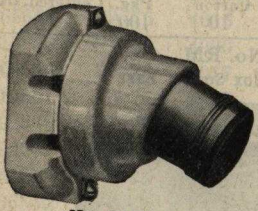
No. 50729



No. 9404



No. 9436



No. 9439



No. 25094

K-W ROSETTE SOCKETS

Trade No.	Mfrs. No.	Style	Sup. Screws Centered, In.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
		With Concealed Rosette Base					
065263	50729	Key	1 5/8	10	100	81	$0.75
065264	50732	Keyless	1 5/8	10	50	50	.72
		Outside diameter of base is 2 7/8 inches.					
		With Cleat Rosette Base					
065265	50730	*Key	1 5/8	10	100	84	.75
065266	50733	*Keyless	1 5/8	10	50	50	.72
		Two-wire Molding Rosette Base					
065267	50731	Key	1 5/8	10	100	84	.75
065268	50734	Keyless	1 5/8	10	50	45	.72
		With Three-wire Molding Rosette Base					
065269	45361	Key	2 5/8	10	100	90	.75
065270	45362	Keyless	2 5/8	10	50	45	.72
		With Combination Rosette Base					
065271	28727	Key	1 5/8	10	100	90	.75
065272	28732	Keyless	1 5/8	10	50	45	.72

THOMAS ROSETTE SOCKETS

		With Concealed Rosette Base					
065273	24990	Key	1 5/8	10	100	95	.75
065274	24993	Keyless	1 5/8	10	50	47	.72
		Outside diameter of base is 2 7/8 inches.					
		With Cleat Rosette Base					
065275	24991	*Key	1 5/8	10	100	95	.75
065276	24994	*Keyless	1 5/8	10	50	47	.72
		With Two-wire Molding Rosette Base					
065277	24992	Key	1 5/8	10	100	90	.75
065278	24995	Keyless	1 5/8	10	50	43	.72

All rosette sockets have brass shell body similar to illustration of No. 50729.

K-W ROSETTE RECEPTACLES

065451	†9404	Concealed	1 5/8	10	50	45	.40
065452	†9434	*Cleat	1 5/8	10	50	45	.40
065453	†9435	Two-wire molding	1 5/8	10	50	45	.40
065454	†45364	Three-wire molding	2 5/8	10	50	45	.40
065455	†29173	Combination	1 5/8	10	50	45	.40
		For Shade Holders					
065456	9405	Concealed	1 5/8	10	50	45	.50
065457	9436	*Cleat	1 5/8	10	50	45	.50
065458	9437	Two-wire molding	1 5/8	10	50	45	.50
065459	45365	Three-wire molding	2 5/8	10	50	45	.50
065460	29174	Combination	1 5/8	10	50	45	.50
		Angle—For Shade Holders					
065461	9406	Concealed	1 5/8	10	50	45	.80
065462	9438	*Cleat	1 5/8	10	50	45	.80
065463	9439	Two-wire molding	1 5/8	10	50	45	.80
065464	45366	Three-wire molding	2 5/8	10	50	45	.80
065465	29175	Combination	1 5/8	10	50	45	.80

All caps are interchangeable, and will fit any K-W Rosette Base.

THOMAS ROSETTE RECEPTACLES

065466	†25094	Concealed	1 5/8	10	50	40	.40
065467	†25092	*Cleat	1 5/8	10	50	40	.40
065468	†25096	Two-wire molding	1 5/8	10	50	40	.40
		For Shade Holders					
065469	25093	Concealed	1 5/8	10	50	40	.50
065470	25091	*Cleat	1 5/8	10	50	40	.50
065471	25095	Two-wire molding	1 5/8	10	50	40	.50

Thomas rosette receptacles for shade holders have brass shell body similar to illustration of No. 9436.

Caps are interchangeable, and will fit any Thomas 125-volt Rosette Base.

*National Electrical Code Standard.

†New Wrinkle Emergency Shade Holders may be attached to these receptacles.

BRYANT-PERKINS PORCELAIN LINE

NATIONAL ELECTRICAL CODE STANDARD

All of The Porcelain Bodies Listed on the Two Following Pages Will Fit All of These Porcelain Caps and Bases

SCHEDULE B

No. PT
Pendent Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100876	$0.08	10	250

No. PA
⅛-inch Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100870	$0.12	10	100

No. PB
¼-inch Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100871	$0.20	10	100

No. PC*
⅜-inch Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100872	$0.15	10	100

No. PD
½-inch Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100873	$0.35	10	100

No. PP*
⅜-inch Angle Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100874	$0.30	10	100

No. RW
½-inch Angle Socket Cap



Trade No.	Price Each	Carton	Std. Pkg.
100875	$0.55	10	100

No. PW
Cleat Socket Base



Trade No.	Price Each	Carton	Std. Pkg.	Sup. Screws Centered, In.
100890	$0.10	10	100	1 15/16

No. PZ†
Large Concealed Socket Base



Trade No.	Carton	Std. Pkg.	Each	Outside Diam., In.	Sup. Screws Centered, In.
100891	10	100	$0.10	2¾	1⅛ and 2 5/16

No. RB
Wood Molding Socket Base



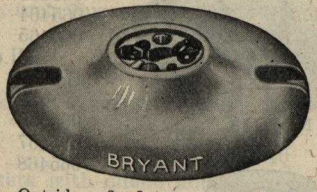
Trade No.	Price Each	Carton	Std. Pkg.	Sup. Screws Centered, In.
100892	$0.10	10	100	2

No. RL
3¼-inch Box Socket Base



Trade No.	Outside Diam., In.	Sup. Screws Centered, In.	Carton	Std. Pkg.	Price Each
100893	3½	2¾	10	100	$0.25

No. RM
4-inch Box Socket Base



Trade No.	Outside Diam., In.	Sup. Screws Centered In.	Carton	Std. Pkg.	Price Each
100894	4½	3½	5	100	$0.30

The sale of porcelain interchangeable devices as individual parts eliminates the labor of taking complete articles apart to interchange them. This increases the efficiency of the line, at the same time reducing the stock investment. Standard finish of brass caps is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

*This cap can be furnished in aluminum at 15 cents extra.

†This base is suitable for attachment to No. 500 Adaptiboxes.

BRYANT-PERKINS PORCELAIN LINE

NATIONAL ELECTRICAL CODE STANDARD

KEY AND PULL SOCKETS

SCHEDULE B



No. 70



No. 75

SINGLE-POLE KEY SOCKETS

250 Watts, 250 Volts

Trade No.	Mfrs. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
100867	70	....	Body, without cap or base	10	250	....	$0.25
065545	PT-70	9395	With pendent cap	10	250	105	.33
065548	PA-70	50799	With ⅛-inch cap	10	100	50	.37
19890	PB-70	4058	With ¼-inch cap	10	100	55	.45
065551	PC-70	34947	*With ⅜-inch cap	10	100	55	.40
19899	PD-70	4065	With ½-inch cap (aluminum)	10	100	50	.60
19902	PP-70	....	*With ⅜-inch angle cap	10	100	....	.55
92349	RW-70	....	With ½-inch angle cap (aluminum)	10	100	...	.80
065554	PW-70	4007	With cleat base	10	100	55	.35
065557	PZ-70	4009	†With large concealed base	10	100	55	.35
065560	RB-70	4011	With wood molding base	10	100	55	.35
19893	RL-70	4045	With 3¼-inch box base	10	100	85	.50
19896	RM-70	4048	With 4-inch box base	1	100	136	.55

PULL SOCKETS

250 Watts, 250 Volts

100869	75	....	Body, without cap or base	10	100	....	.75
065547	PT-75	4015	With pendent cap	10	100	55	.83
065550	PA-75	4016	With ⅛-inch cap	10	50	30	.87
19892	PB-75	4060	With ¼-inch cap	10	50	30	.95
065553	PC-75	4017	*With ⅜-inch cap	10	50	30	.90
19901	PD-75	4067	With ½-inch cap (aluminum)	10	50	32	1.10
92348	PP-75	....	*With ⅜-inch angle cap	10	50	....	1.05
92351	RW-75	....	With ½-inch angle cap (aluminum)	10	50	....	1.30
065556	PW-75	4018	With cleat base	10	50	30	.85
065559	PZ-75	4019	†With large concealed base	10	50	30	.85
065562	RB-75	4020	With wood molding base	10	50	30	.85
19895	RL-75	4047	With 3¼-inch box base	10	50	50	1.00
19898	RM-75	4050	With 4-inch box base	1	50	50	1.05

Pull sockets are regularly furnished with 8 inches of chain with insulation.

*This cap can be furnished in aluminum at 15 cents extra.

†This base is suitable for attachment to No. 500 Adaptiboxes.

New Wrinkle Emergency Shade Holders listed on another page may be attached to all sockets listed above.

Standard finish of brass caps is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

Caps and bases listed above are illustrated on a preceding page.

BRYANT-PERKINS PORCELAIN LINE

NATIONAL ELECTRICAL CODE STANDARD

KEYLESS SOCKETS AND SPARTAN RECEPTACLES



No. 73



No. 79

KEYLESS SOCKETS

660 Watts, 250 Volts

SCHEDULE B

Trade No.	Mfr. New No.	Mfrs. Old No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
100868	73	....	Body, without cap or base	10	250	....	$0.22
065546	PT-73	9393	With pendent cap	10	250	80	.30
065549	PA-73	50896	With ⅛-inch cap	10	100	45	.34
19891	PB-73	4059	With ¼-inch cap	10	100	35	.42
065552	PC-73	34948	*With ⅜-inch cap	10	100	35	.37
19900	PD-73	4066	With ½-inch cap (aluminum)	10	100	40	.57
19903	PP-73	....	*With ⅜-inch angle cap	10	100	....	.52
92350	RW-73	....	With ½-inch angle cap (aluminum)	10	100	....	.77
065555	PW-73	4008	With cleat base	10	100	55	.30
065558	PZ-73	4010	†With large concealed base	10	100	55	.30
065561	RB-73	4012	With wood molding base	10	100	55	.32
19894	RL-73	4046	With 3¼-inch box base	10	100	75	.47
19897	RM-73	4049	With 4-inch box base	1	100	132	.52

New Wrinkle Emergency Shade Holders listed on another page may be attached to all sockets listed above.

SPARTAN RECEPTACLES

10 Amperes, 250 Volts

SCHEDULE H

123446	79	....	Body, without cap or base	10	50	....	.20
123447	PT-79	....	With pendent cap	10	50	....	.28
123448	PA-79	....	With ⅛-inch cap	10	50	....	.32
123449	PB-79	....	With ¼-inch cap	10	50	....	.40
123450	PC-79	....	*With ⅜-inch cap	10	50	....	.35
123451	PD-79	....	With ½-inch cap (aluminum)	10	20	....	.55
123452	PP-79	....	*With ⅜-inch angle cap	10	20	....	.50
123453	RW-79	....	With ½-inch angle cap (aluminum)	10	20	....	.75
123454	PW-79	....	With cleat base	10	20	....	.30
123455	PZ-79	....	†With large concealed base	10	20	....	.30
123456	RB-79	....	With wood molding base	10	20	....	.30
123457	RL-79	....	With 3¼-inch box base	10	20	....	.45
123458	RM-79	....	With 4-inch box base	1	20	....	.50

*This cap can be furnished in aluminum at 15 cents extra.

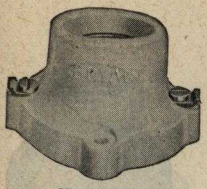
†This base is suitable for attachment to No. 500 Adaptiboxes.

Standard finish of brass caps is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge.

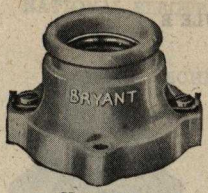
Caps and bases listed above are illustrated on a preceding page.

BRYANT PORCELAIN CLEAT RECEPTACLES

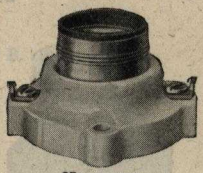
NATIONAL ELECTRICAL CODE STANDARD—660 WATTS, 250 VOLTS
SCHEDULE B



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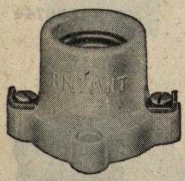


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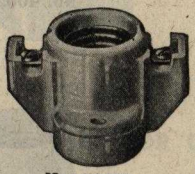

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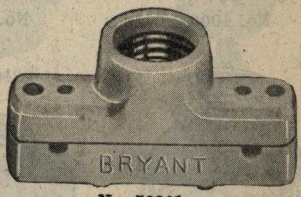


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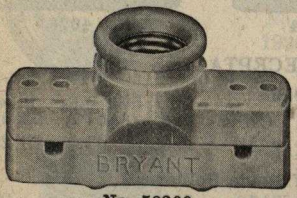


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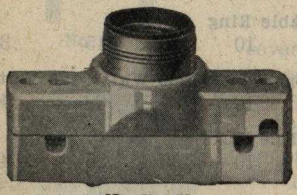

No. 59275



No. 58301



No. 58300


No. 58949



No. 9171



No. 9394

Trade No.	Mfrs. No.	Description	Sup. Screws Centered, In.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043144	*9402	Cleat	2⅜	10	250	100	$0.15
043145	*4013	Cleat	2⅜	10	250	110	.20
		No. 4013 is for weatherproof shade holders.					
043146	9403	Cleat	2⅜	10	250	100	.25
		No. 9403 has brass ring for standard shade holders.					
043147	*28795	Cleat	1⅞	10	250	95	.15
043140	*50715	Pony cleat	1⅝	10	250	79	.15
043139	*59275	Cleat, 1-inch separation	2	10	250	106	.18
043136	*58301	Cleat	1⅛	5	250	165	.25
043137	*58300	Cleat	1⅛	5	250	165	.30
		No. 58300 is for weatherproof shade holders.					
043138	58949	Cleat	1⅛	5	250	160	.35
		No. 58949 has brass ring for standard shade holders.					
043148	*9171	‡Cleat	†	10	500	135	.10
043149	*50757	‡Cleat	†	10	250	70	.20
		No. 50757 has copper fittings and screws.					
043150	9394	‡Cleat	†	10	250	70	.20

*New Wrinkle Emergency Shade Holders may be attached to these receptacles.

†Supported by one screw in the center.

‡Not National Electrical Code Standard.

BRYANT RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD—660 WATTS, 250 VOLTS

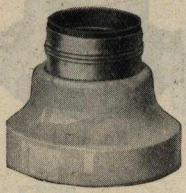
SCHEDULE B



No. 4000

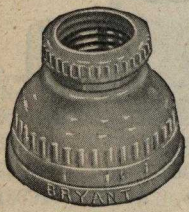


No. 4001


No. 4002



No. 50744



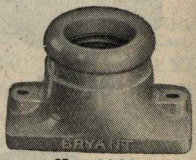
No. 9447



No. 9401



No. 4024



No. 4026


No. 4025



No. 42453



No. 58302



No. 58950

CONCEALED RECEPTACLES

Trade No.	Mfrs. No.	Outside Diam. Base, In.	Sup. Screws Centered Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
065437	*4000	2 5/16	1 5/8	10	250	95	$0.25
		For Weatherproof Shade Holder					
065438	*4001	2 5/16	1 5/8	10	250	95	.30
		With Brass Ring for Standard Shade Holder					
065439	4002	2 5/16	1 5/8	10	250	90	.35
		With Removable Ring					
065440	50744	2 3/8	1 1/4	10	100	45	.30
		With Removable Ring and Double-pole Fuse—250 Watts, 125 Volts					
065441	9447	2 1/2	1 5/8	10	100	60	.45
		With Single-Pole Fuse†					
043151	*9401	2 3/4	1 13/16	10	100	55	.40

WOOD MOLDING RECEPTACLES

071217	*4024	.....	2 9/32	10	250	85	.25
		For Weatherproof Shade Holder					
071218	*4026	.....	2 9/32	10	250	90	.30
		With Brass Ring for Standard Shade Holder					
071219	4025	.....	2 9/32	10	250	85	.35

Nos. 4024, 4026 and 4025 may also be used on 1/2 and 3/4-inch pipe taplets.

		Without Shade Holder Groove					
065442	*42453	.....	1 13/16	10	250	128	.25
		For Weatherproof Shade Holder					
065443	*58302	.....	1 13/16	10	250	130	.30
		With Brass Ring for Standard Shade Holder					
065444	58950	.....	1 13/16	10	250	123	.35

*New Wrinkle Emergency Shade Holders listed on another page may be attached to these receptacles.

†Not National Electrical Code Standard.

BRYANT PORCELAIN RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE B



No. 4063



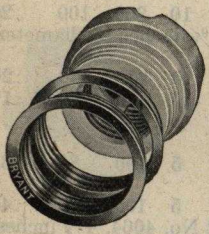
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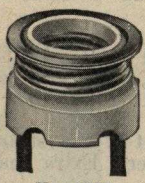
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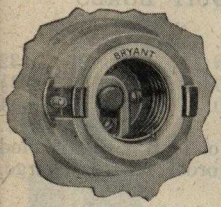
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No. 4014

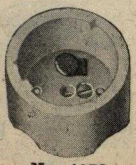


No. 4057



No. 4023





No. 4072

RECEPTACLES FOR CONDUIT BOXES AND METAL SIGNS

660 Watts, 250 Volts

Trade No.	Mfrs. No.	Description	Diam. of Hole Req., In.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
19907	4063	Sign receptacle	1⅜	10	250	75	$0.14
		Holes for supporting screws are spaced 1$^{13}/_{16}$ inches on centers.					
19906	61777	Sign receptacle	1⅜	10	250	83	.17
		Holes for supporting screws are spaced 1$^{13}/_{16}$ inches on centers.					
043129	40488	Pony sign receptacle	1⅜	10	250	60	.17
		Holes for supporting screws are spaced 1$^{13}/_{16}$ inches on centers.					
043119	59107	Conduit box receptacle (600 volts)	1$^{11}/_{16}$	10	250	100	.22
19911	4074	Receptacle with loop terminals	1$^{11}/_{16}$	10	250	..	.17

No. 59107 is fitted with 6 inches of No. 14 B. & S. stranded rubber covered wire. Longer wires on special order. Extra charge, 9 cents list per foot.

No. 4074 is the same as No. 59107, except that the wires are omitted. Terminal plates to which conductors may readily be soldered are provided.

Holes for supporting screws are spaced 2⅛ inches on centers.

071028	4014	Ruby sign receptacle with binding screws	1⅝	10	250	65	.20
19908	4057	Ruby sign receptacle with stranded wires	1⅝	10	250	75	.25

No. 4057 is fitted with 6 inches of No. 14 B. & S. stranded rubber covered wire. Longer wires on special order. Extra charge, 9 cents list per foot.

071029	4023	Universal sign receptacle	1½	10	250	85	.20

This receptacle may be installed in any position and all work is done from the rear.

19910	4072	Sign receptacle, 1-inch back	1$^{7}/_{16}$	10	250	85	.20

The receptacle is prevented from turning by three fins which bite into the metal of the sign.

All of the above receptacles may be used with New Wrinkle Emergency Shade Holders listed on another page. No. 4072 may also be used with New Wrinkle Receptacle Shade Holders listed on another page.

BRYANT PORCELAIN RECEPTACLES

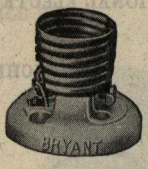
NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE B



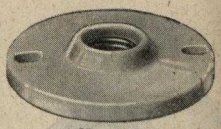
No. 9514



No. 9397



No. 40507


No. 4064

RECEPTACLES FOR CONDUIT BOXES

660 Watts, 250 Volts

Trade No.	Mfrs. No.	Description	Sup. Screws Centered, In.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043214	9514	Flush receptacle, two-piece	1⅞	10	250	100	$0.30
075696	4033	Flush receptacle, one-piece	1⅞	10	250	100	.20

The hole required for these receptacles is 1 9/16 inches in diameter. Outside diameter of base is 2⅜ inches.

043120	*9397	Conduit box receptacle	1½	10	250	40	.20
043121	*40507	Conduit box receptacle	1¼	10	250	40	.17

Outside diameter of base is 1 5/16 inches.

043125	62357	Receptacle for 3¼-inch boxes	2¾	5	100	80	.35
17756	4064	Receptacle for 4-inch boxes	3½	5	100	120	.45

Outside diameter of No. 62357 is 3½ inches; No. 4064, 4⅜ inches.


No. 4110

RECEPTACLES FOR 3¼-INCH CONDUIT BOXES

660 Watts, 600 Volts

17759	4110	With black japanned cover	2¾	1	100	70	.30
17760	4111	With sherardized cover	2¾	1	100	70	.31
17761	4112	With brush brass cover	2¾	1	100	70	.40

Outside diameter is 3¼ inches.

Each receptacle is fitted with 6 inches of No. 14 B. & S. stranded rubber covered wire. Longer wires on special order. Extra charge, 9 cents list per foot.


No. 4113

RECEPTACLES FOR 4-INCH CONDUIT BOXES

660 Watts, 600 Volts

17762	4113	With black japanned cover	3½	1	100	96	.32
17763	4114	With sherardized cover	3½	1	100	96	.33½
17764	4115	With brush brass cover	3½	1	100	96	.44

Outside diameter is 4 1/16 inches.

Each receptacle is fitted with 6 inches of No. 14 B & S. stranded rubber covered wire. Longer wires on special order. Extra charge, 9 cents list per foot.



No. 62355

RECEPTACLES FOR ⅜ AND ½-INCH OBROUND CONDULETS

660 Watts, 250 Volts

043123	62355	Condulet receptacle	..	10	250	103	.25
043124	62356	Condulet receptacle with groove for shade holder	..	10	250	110	.30

RECEPTACLES FOR ADAPTIBOXES

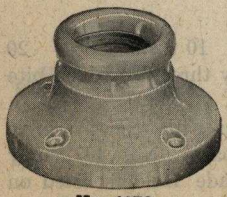
660 Watts, 250 Volts

17757	4076	Receptacle, with binding screws	2 5/16	10	250	57	.30
17758	4108	Receptacle, with loop terminals	2 5/16	10	250	57	.30

Outside diameter of base is 2⅞ inches.

New Wrinkle Emergency Shade Holders listed on another page may be attached to all the above receptacles.

*Not National Electrical Code Standard.


No. 4076

BRYANT PORCELAIN RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

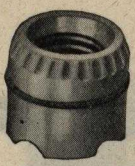
SCHEDULE B



No. 61988


No. 4099


No. 4035


No. 59108


No. 4003

RECEPTACLES FOR CONDUIT BOXES AND METAL SIGNS

660 Watts, 250 Volts

Trade No.	Mfrs. No.	Description	Diam. of Hole Req., In.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043134	61988	Receptacle with screw ring, 1-inch back	1½	10	250	83	$0.20
123474	*4099	Same as No. 61988, with covered terminals	1½	10	250	102	.25
19904	4035	Receptacle with stranded wires, 1-inch back	1½	10	250	95	.28
19905	4036	Same as No. 4035, less wires, 1-inch back	1½	10	250	80	.20



No. 1700

No. 4035 is fitted with 6 inches of No. 14 B. & S. stranded rubber covered wire. Longer wires on special order. Extra charge, 9 cents list per foot.

No. 4036 is the same as No. 4035, except that the wires are omitted. Terminal plates to which conductors may be readily soldered are provided.

043133	59108	Receptacle with screw ring, ⅝-inch back	1½	10	250	63	.20
123475	*4109	Same as No. 59108, with covered terminals	1½	10	250	82	.25
043135	4003	Weatherproof receptacle, screw ring, ⅝-inch back	1½	10	250	100	.28



No. 4037

No. 4003 is like No. 59108, except that it has wire leads. It is fitted with 6 inches of No. 14 B. & S. stranded rubber covered wire. Longer wires on special order. Extra charge, 9 cents list per foot.

Shade holders which may be used in connection with the above receptacles are listed on another page.

RECEPTACLES FOR WOOD SIGNS

660 Watts, 250 Volts

043131	1700	†Pony sign receptacle	1 9/16	10	250	78	.14
043130	50899	†Sign receptacle	1 9/16	10	100	30	.25
043128	50782	†Sign receptacle	1 9/16	10	100	50	.25

Holes for supporting screws are spaced 1⅞ inches on centers.

Nos. 50899 and 50782 differ only in the length of skirt, which is 1 inch in the former and 1¾ inches in the latter.

RECEPTACLES FOR TEMPORARY LIGHTING

660 Watts, 250 Volts

17746	4037	Porcelain temporary decorative receptacle	..	10	250	82	.24

This receptacle is provided with pointed binding screws designed to pierce the insulation, making it unnecessary to strip the wires. Stranded wire is preferable for this use.

17747	4056	Mica temporary decorative receptacle	..	10	250	100	.30

This receptacle is designed to be used in the same manner as No. 4037.

17748	4038	Temporary decorative cleat receptacle	..	10	250	103	.18

This receptacle is designed to be used in the same manner as No. 4037.

Holes for supporting screws are spaced 1 5/16 inches on centers.

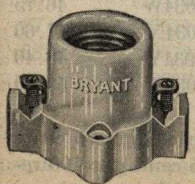
New Wrinkle Emergency Shade Holders listed on another page may be attached to above receptacles for wood signs and temporary lighting.

*In these receptacles a porcelain button covers the live terminals and takes the place of the usual method of waxing. This button is readily put in place without the use of tools.

†Not National Electrical Code Standard.



No. 4056

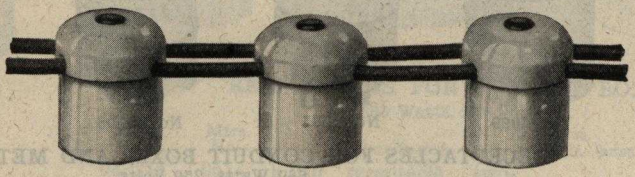


No. 4038

BRYANT RECEPTACLES FOR DECORATIVE LIGHTING

NATIONAL ELECTRICAL CODE STANDARD—660 WATTS, 250 VOLTS

SCHEDULE B



Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
17743	4034	Porcelain decorative receptacle.....	10	250	60	$0.20

These receptacles will be furnished "ready -wired," that is, supplied with approved stranded single braid rubber covered wire, connections soldered, and then filled with insulating compound, making the receptacles absolutely weatherproof.

These receptacles are put up in lengths of about 500 feet and will be so shipped, unless otherwise specified.

Additional lengths of wire can be supplied on either end of the streamers. Add 9 cents list per foot (4½ cents each conductor) for No. 14 wire, and 10 cents list per foot (5 cents each conductor) for No. 12 wire.

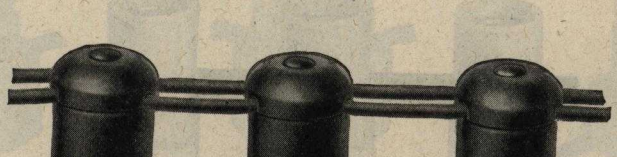
Receptacles Centered Inches	Wired with No. 14 Wire Trade No.	Mfrs. No.	Price per 100	Wired with No. 12 Wire Trade No.	Mfrs. No.	Price per 100
4	123489	4034A	$26.00	123512	124034A	$28.60
5	123490	4034B	26.75	123513	124034B	29.45
6	123491	4034C	27.50	123514	124034C	30.50
7	123492	4034D	28.25	123515	124034D	31.10
8	123493	4034E	29.00	123516	124034E	31.50
9	123494	4034F	29.75	123517	124034F	32.75
10	123495	4034G	30.50	123518	124034G	33.55
11	123496	4034H	31.25	123519	124034H	34.40
12	123497	4034J	32.00	123520	124034J	35.20
14	123498	4034K	33.50	123521	124034K	36.85
15	123499	4034M	34.25	123522	124034M	37.70
16	123500	4034N	35.00	123523	124034N	38.50
17	123501	4034P	35.75	123524	124034P	39.35
18	123502	4034Q	36.50	123525	124034Q	40.15
20	123503	4034R	38.00	123526	124034R	41.80
21	123504	4034S	38.75	123527	124034S	42.65
23	123505	4034T	39.50	123528	124034T	43.45
24	123506	4034U	41.00	123529	124034U	45.10
25	123507	4034V	41.75	123530	124034V	46.00
26	123508	4034W	42.50	123531	124034W	46.75
27	123509	4034X	43.25	123532	124034X	47.60
28	123510	4034Y	44.00	123533	124034Y	48.40
30	123511	4034Z	45.50	123534	124034Z	50.10

The price of receptacles spaced more than 30 inches apart is obtained by adding 75 cents per 100 receptacles per inch to the price of No. 4034Z for No. 14 wire, and 85 cents per 100 receptacles per inch to the price of No. 124034Z for No. 12 wire.

BRYANT RECEPTACLES FOR DECORATIVE LIGHTING

NATIONAL ELECTRICAL CODE STANDARD—660 WATTS, 250 VOLTS

SCHEDULE B



Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
17744	4041	Mica decorative receptacle.....	10	250	75	$0.25

These receptacles will be furnished "ready-wired," that is, supplied with approved stranded single braid rubber covered wire, connections soldered, and then filled with insulating compound, making the receptacles absolutely weatherproof.

These receptacles are put up in lengths of about 500 feet and will be so shipped, unless otherwise specified.

Additional lengths of wire can be supplied on either end of the streamers. Add 9 cents list per foot (4½ cents each conductor) for No. 14 wire, and 10 cents list per foot (5 cents each conductor) for No. 12 wire.

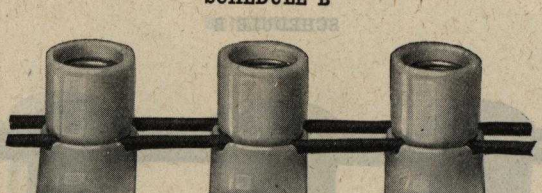
Receptacles Centered Inches	Wired with No. 14 Wire Trade No.	Mfrs. No.	Price per 100	Wired with No. 12 Wire Trade No.	Mfrs. No.	Price per 100
4	123551	4041A	$31.00	123574	124041A	$33.60
5	123552	4041B	31.75	123575	124041B	34.45
6	123553	4041C	32.50	123576	124041C	35.50
7	123554	4041D	33.25	123577	124041D	36.10
8	123555	4041E	34.00	123578	124041E	36.50
9	123556	4041F	34.75	123579	124041F	37.75
10	123557	4041G	35.50	123580	124041G	38.55
11	123558	4041H	36.25	123581	124041H	39.40
12	123559	4041J	37.00	123582	124041J	40.20
14	123560	4041K	38.50	123583	124041K	41.85
15	123561	4041M	39.25	123584	124041M	42.70
16	123562	4041N	40.00	123585	124041N	43.50
17	123563	4041P	40.75	123586	124041P	44.35
18	123564	4041Q	41.50	123587	124041Q	45.15
20	123565	4041R	43.00	123588	124041R	46.80
21	123566	4041S	43.75	123589	124041S	47.65
22	123567	4041T	44.50	123590	124041T	48.45
24	123568	4041U	46.00	123591	124041U	50.10
25	123569	4041V	46.75	123592	124041V	51.00
26	123570	4041W	47.50	123593	124041W	51.75
27	123571	4041X	48.25	123594	124041X	52.60
28	123572	4041Y	49.00	123595	124041Y	53.40
30	123573	4041Z	50.50	123596	124041Z	55.10

The price of receptacles spaced more than 30 inches apart is obtained by adding 75 cents per 100 receptacles per inch to the price of No. 4041Z for No. 14 wire, and 85 cents per 100 receptacles per inch to the price of No. 124041Z for No. 12 wire.

BRYANT RECEPTACLES FOR DECORATIVE LIGHTING

NATIONAL ELECTRICAL CODE STANDARD—660 WATTS, 250 VOLTS

SCHEDULE B



These receptacles provide a convenient and inexpensive means of outlining buildings, towers and other structures.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
17745	4042	Decorative cleat receptacle.....	10	250	100	$0.28½

Holes for supporting screws are spaced 2 11/32 inches on centers.

These receptacles will be furnished "ready-wired," that is, supplied with approved stranded single braid rubber covered wire, connections soldered, and then filled with insulating compound, making the receptacles absolutely weatherproof.

These receptacles are put up in lengths of about 500 feet and will be so shipped unless otherwise specified.

Additional lengths of wire can be supplied on either end of the streamers. Add 9 cents list per foot (4½ cents each conductor) for No. 14 wire, and 10 cents list per foot (5 cents each conductor) for No. 12 wire.

Receptacles Centered Inches	Wired with No. 14 Wire Trade No.	Mfrs. No.	Price per 100	Wired with No. 12 Wire Trade No.	Mfrs. No.	Price per 100
4	123612	4042A	$34.50	123635	124042A	$37.10
5	123613	4042B	35.25	123636	124042B	37.95
6	123614	4042C	36.00	123637	124042C	39.00
7	123615	4042D	36.75	123638	124042D	39.60
8	123616	4042E	37.50	123639	124042E	40.00
9	123617	4042F	38.25	123640	124042F	41.25
10	123618	4042G	39.00	123641	124042G	42.05
11	123619	4042H	39.75	123642	124042H	42.90
12	123620	4042J	40.50	123643	124042J	43.70
14	123621	4042K	42.00	123644	124042K	45.35
15	123622	4042M	42.75	123645	124042M	46.20
16	123623	4042N	43.50	123646	124042N	47.00
17	123624	4042P	44.25	123647	124042P	47.85
18	123625	4042Q	45.00	123648	124042Q	48.65
20	123626	4042R	46.50	123649	124042R	50.30
21	123627	4042S	47.25	123650	124042S	51.15
22	123628	4042T	48.00	123651	124042T	51.95
24	123629	4042U	49.50	123652	124042U	53.60
25	123630	4042V	50.25	123653	124042V	54.50
26	123631	4042W	51.00	123654	124042W	55.25
27	123632	4042X	51.75	123655	124042X	56.10
28	123633	4042Y	52.50	123656	124042Y	56.90
30	123634	4042Z	54.00	123657	124042Z	58.60

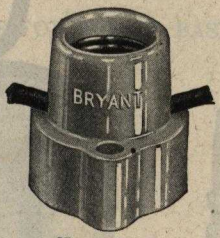
The price of receptacles spaced more than 30 inches apart is obtained by adding 75 cents per 100 receptacles per inch to the price of No. 4042Z for No. 14 wire, and 85 cents per 100 receptacles per inch to the price of No. 124042Z for No. 12 wire.

BRYANT WEATHERPROOF RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD SCHEDULE B



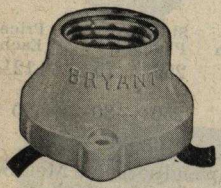
No. 9407



No. 44912



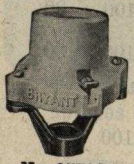
No. 9408



No. 9411



No. 30000



No. 25706



No. 25707

WEATHERPROOF RECEPTACLES

660 WATTS, 600 VOLTS

With Side Wires

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043218	9407	Weatherproof receptacle	10	100	79	$0.40

Outside diameter of base is 2¾ inches.

Holes for supporting screws are spaced 2 3/16 inches on centers.

043217	44912	Pony weatherproof receptacle.....	10	100	55	.35

Outside diameter of base is 2 inches.

Holes for supporting screws are spaced 1 29/32 inches on centers.

With Bottom Wires

043216	9408	Weatherproof receptacle	10	100	80	.40

Outside diameter of base is 2 11/16 inches.

Holes for supporting screws are spaced 2¼ inches on centers.

043215	9411	Pony weatherproof receptacle	10	100	57	.35

Outside diameter of base is 2⅜ inches.

Holes for supporting screws are spaced 2⅜ inches on centers.

Angle, with Side Wires

043219	30000	Angle weatherproof receptacle	10	100	85	.45

WEATHERPROOF STREETHOOD SOCKETS

250 WATTS, 250 VOLTS

043142	25706	With side lugs.....	10	100	75	.27

The malleable iron yoke is threaded for ⅜-inch iron pipe.

660 WATTS, 600 VOLTS

043143	25707	With wire leads.....	10	100	80	.44

All of the above, except No. 25706, are fitted with 6 inches of No. 14 B. & S. stranded rubber covered wire. Longer wires on special order. Extra charge, 9 cents list per foot (4½ cents each conductor).

New Wrinkle Emergency Shade Holders listed on another page may be attached to any of the above sockets or receptacles.

BRYANT WEATHERPROOF SOCKETS

NATIONAL ELECTRICAL CODE STANDARD SCHEDULE B



No. 399



No. 9366



No. 50997



No. 60666



No. 43310



No. 43311



No. 43314



No. 9448

PORCELAIN SOCKETS

Trade No.	Mfrs. No.		Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
050558	*399	Weatherproof socket.....	10	250	75	$0.12½
073106	*9366	Weatherproof socket for shade holder.....	10	250	80	.20

BRAGDON SOCKETS

Extension edge carries the drip away from the lamp and socket. Method of wiring at the top removes the strain from the socket itself and places it on the porcelain. Extra hole in porcelain at top allows for independent suspension, if desired.

073107	*50997	Weatherproof socket.....	10	250	165	.50

COMPOSITION SOCKETS

073108	60666	Weatherproof socket.....	10	250	85	.24

HARD RUBBER SOCKETS

073110	50788	Weatherproof socket.....	10	250	60	1.00

The above weatherproof sockets are fitted with 6 inches of No. 14 B. & S. stranded rubber covered wire.

MOLDED SOCKETS

073112	43310	Weatherproof socket.....	10	250	60	.22

The above weatherproof sockets are fitted with 6 inches of No. 14 B. & S. stranded rubber covered wire.

Sockets with longer wires furnished on special order. Extra charge, 9 cents list per foot.

MOLDED BRACKET SOCKETS

Wires Inside of Pipe—660 Watts, 250 Volts

073115	43311	Weatherproof bracket socket, ⅛-inch.....	10	100	30	.60
073116	43312	Weatherproof bracket socket, ⅜-inch.....	10	100	30	.60

Wires Outside of Pipe—660 Watts, 600 Volts

073117	43313	Weatherproof bracket socket, ⅛-inch.....	10	100	30	.60
073118	43314	Weatherproof bracket socket, ⅜-inch.....	10	100	30	.60

PORCELAIN BRACKET SOCKETS

660 Watts, 250 Volts

073113	*9448	Weatherproof socket, ⅛-inch...	10	100	40	.60
073114	*9496	Weatherproof socket, ⅜-inch...	10	100	45	.60

Cap is a brass casting, polished and lacquered and fitted with steel set screw.

The above sockets are fitted with 6 inches of No. 18 B. & S. solid rubber-covered fixture wire. Sockets with longer wires furnished on special order. Extra charge, 9 cents list per foot.

*New Wrinkle Emergency Shade Holders listed on another page may be attached to these sockets.

BRYANT SOCKETS

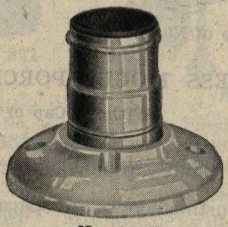
NATIONAL ELECTRICAL CODE STANDARD—1500 WATTS, 600 VOLTS

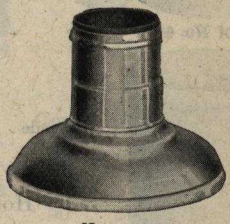
SCHEDULE B

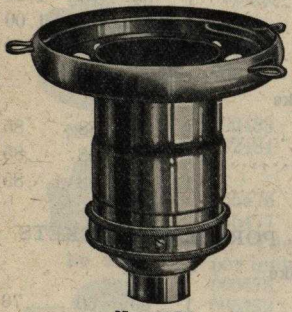
SOCKETS FOR MOGUL BASE LAMPS



No. 4021


No. 4095


No. 4097


No. 4027

BRASS SHELL SOCKETS

Trade No.	Mfrs. No.	Style	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
065435	4021	Keyless, $\frac{3}{8}$-inch cap	10	50	35	$1.50
065436	4022	Keyless, $\frac{1}{2}$-inch cap	10	50	35	1.50
		With 3¼-inch Shade Holder Attached				
076595	4027	Keyless, $\frac{3}{8}$-inch cap	1	50	50	1.80
076596	4028	Keyless, $\frac{1}{2}$-inch cap	1	50	55	1.80

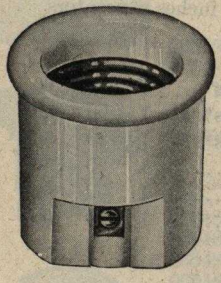
MOGUL WALL SOCKETS

Porcelain Base for 3¼ and 4-inch Outlet Boxes

92339	4095	Keyless	1	50	100	1.50
92340	4096	Keyless, with 3¼-inch shade holder	1	50	105	1.80

Diameter of base is 4⅝ inches.

Holes for supporting screws are spaced 2¾ and 3½ inches on centers.


No. 4062

Brass Covered Base for 3¼ and 4-inch Outlet Boxes

92341	4097	Keyless	1	50	95	1.75
92342	4098	Keyless, with 3¼-inch shade holder	1	50	100	2.05

Diameter of base is 4⅝ inches.

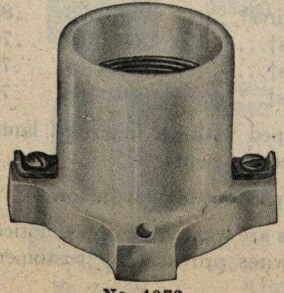
Holes for supporting screws are spaced 2¾ and 3½ inches on centers.

PORCELAIN SOCKETS

17732	4062	Keyless	1	20	15	.55

Outside diameter of base is 2¼ inches.

Holes for supporting screws are spaced $1\frac{5}{32}$ inches on centers.


No. 4073

PORCELAIN RECEPTACLES

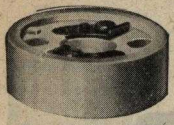
92338	4073	Cleat base.....	1	50	50	.75

Holes for supporting screws are spaced 2⅞ inches on centers.

All of the above sockets can be equipped with an improved lamp grip, when so specified, at an additional price of 5 cents.

BRYANT PORCELAIN SOCKETS

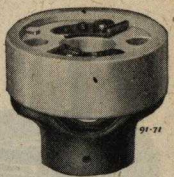
NATIONAL ELECTRICAL CODE STANDARD—1500 WATTS, 600 VOLTS
SCHEDULE B



Cap of No. 4077



Cap of No. 4069



Cap of No. 4078



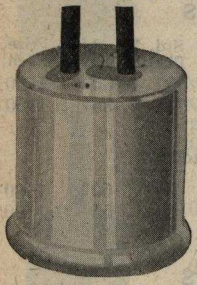
Socket Body of No. 4077

KEYLESS MOGUL PORCELAIN SOCKETS

Without Cap or Yoke

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
105201	4077	Without cap or yoke	1	50	70	$0.70

Holes for supporting screws are spaced 1½ inches on centers.



No. 4081

With Aluminum Cap

105202	4069	With ⅜-inch cap	1	50	75	1.00
105203	4070	With ½-inch cap	1	50	78	1.00
105204	4071	With ¾-inch cap	1	50	80	1.00

With Cast Iron Yoke

105205	4078	With ⅜-inch cap	1	50	88	.85
105206	4079	With ½-inch cap	1	50	88	.85
105207	4080	With ¾-inch cap	1	50	88	.85

WEATHERPROOF KEYLESS MOGUL PORCELAIN SOCKETS

Without Cap or Yoke

105208	4081	With 15-inch wires*	1	50	60	.70
105209	4088	No wires†	1	50	46	.55

Holes for supporting screws are spaced 1$\frac{13}{32}$ inches on centers.



No. 4082

With Aluminum Cap

105210	4082	With ⅜-inch cap, 15-inch wires*	1	50	60	1.00
105211	4083	With ½-inch cap, 15-inch wires*	1	50	60	1.00
105212	4084	With ¾-inch cap, 15-inch wires*	1	50	60	1.00
105213	4089	With ⅜-inch cap, no wires†	1	50	60	.85
105214	4090	With ½-inch cap, no wires†	1	50	60	.85
105215	4091	With ¾-inch cap, no wires†	1	50	60	.85



No. 4085

With Cast Iron Yoke

105216	4085	With ⅜-inch cap, 15-inch wires*	1	50	60	.85
105217	4086	With ½-inch cap, 15-inch wires*	1	50	73	.85
105218	4087	With ¾-inch cap, 15-inch wires*	1	50	73	.85
105219	4092	With ⅜-inch yoke, no wires†	1	50	60	.70
105220	4093	With ½-inch yoke, no wires†	1	50	68	.70
105221	4094	With ¾-inch yoke, no wires†	1	50	68	.70

Any of the above sockets can be equipped with an improved lamp grip, when so specified, at an additional price of 5 cents.

*Longer wires furnished at 4½ cents list per foot per conductor.

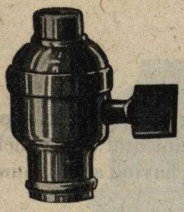
†Preferable where wires of various lengths are wanted at short notice. Equipped with loop terminals into which wires provided by customers may be hooked and soldered.

BRYANT SOCKETS AND RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD—SCHEDULE H

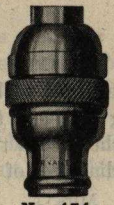
CANDELABRA AND MINIATURE

75 Watts, 125 Volts


No. 434


No. 321


No. 386


No. 474

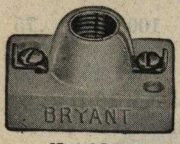

No. 328


No. 347


No. 323


No. 367


No. 9445


No. 325


No. 388


No. 390


No. 25705

Key Sockets

Trade No.	Mfrs. No.	Style	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
17766	433	Miniature, ⅛-inch cap	25	100	20	$0.33
17767	434	Candelabra, ⅛-inch cap	25	100	23	.33

Keyless Sockets

065472	320	Miniature, ⅛-in. screw cap	50	200	17	.23¼
065473	321	Candelabra, ⅛-in. screw cap	50	200	19	.23½
92481	470	Miniature, ⅛-in. 2-point cap	50	200	17	.23¼
92482	471	Candelabra, ⅛-in. 2-point cap	50	200	19	.23½

Pull Sockets

065474	385	Miniature, ⅛-inch cap	10	50	10	.60
065475	386	Candelabra, ⅛-inch cap	10	50	12	.60

Turn Sockets

92483	473	Miniature, ⅛-inch cap	10	50	7	.60
92484	474	Candelabra, ⅛-inch cap	10	50	8	.60

Sockets for Candle Fixtures

065476	327	Miniature, male thread	50	200	9	.12
065477	328	Candelabra, male thread	50	200	10	.12

The supporting stud of above sockets is threaded .312 inch, 27 threads per inch. Outside diameter of porcelain shell is ¾ inch.

065478	346	Miniature, female thread	50	200	10	.12
065479	347	Candelabra, female thread	50	200	11	.12

The nipple of above sockets is ⅛ inch for pipe, .405-inch outside diam., 27 threads per inch. Outside diameter of porcelain shell is ¾ inch.

Weatherproof Pendent Sockets

065480	322	Miniature	25	200	9	.12
065481	323	Candelabra	25	200	10	.13½

Made in green-glazed porcelain. Each socket fitted with 6 inches of No. 18 B. & S. stranded rubber covered wire. Sockets with longer wires furnished on special order. Extra charge, $0.09 list, per foot (4½ cents each conductor).

Cleat Receptacles

Trade No.	Mfrs. No.	Style	Sup. Screws Centered, In.	Dimens. Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
065484	366	Miniature	1 1/16	1 7/16*	25	200	30	$0.07½
065485	367	Candelabra	1 1/16	1 7/16*	25	200	30	.09
065486	9445	Miniature	15/16	1 3/16*	25	500	30	.06½
065487	9446	Candelabra	1 1/16	1 11/32*	25	500	30	.07¼
065488	324	Miniature, oblong base	1 3/32	....	25	200	24	.10
065489	325	Candelabra, " base	1 7/32	....	25	200	26	.10
065490	326	Candelabra, with spring screw-shell, oblong base	1 3/16	....	25	200	28	.15

Receptacles for Metal Signs

065491	387	Miniature	1 1/16	21/32†	10	250	30	.12
065492	388	Candelabra	1 3/16	¾†	10	250	32	.16

Receptacles for Metal Signs, with Removable Ring

065493	389	Miniature	...	¾†	25	250	30	.17
065494	390	Candelabra	...	¾†	25	250	32	.17

Receptacles for Wooden Signs

065495	279	Miniature	1 5/32	15/16†	10	100	12	.24
065496	25705	Candelabra	1 5/32	15/16†	10	100	12	.24

*Outside diameter of base. †Hole required for receptacle.

BRYANT FIXTURE SPECIALTIES

NATIONAL ELECTRICAL CODE STANDARD



No. 4120

CANDLE PULL SOCKETS

½ Ampere, 125 Volts

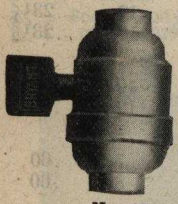
Designed to be mounted with the chain passing between the supporting stem and the candle tube and through the ornamental cup, which forms the base of the candle. It requires a candle tube having a minimum inside diameter of ¾ inch.

Trade No.	Mfrs. No.	Description	Schedule	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
19850	540	Candelabra base	H	25	50	..	$0.75
19852	4120	Medium base	B	10	50	..	.75

The standard length of chain on No. 540 is 4 inches; on No. 4120, 8 inches.

CANDLE TURN SOCKETS

19853	560	Candelabra base	H	10	20	..	1.50
19854	4121	Medium base	B	10	20	..	1.50



No. 493

CANDELABRA CANDLE SWITCHES

½ Ampere, 125 Volts

19845	493	Key candle switch	H	25	50	7	.33
19836	420	Pull candle switch	H	10	50	7	.60
19839	455	Turn candle switch	H	10	50	7	.75

CANOPY SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

19842	451	For spun canopy	H	10	100*	7	.75
19843	452	For cast canopy	H	10	100*	8	.80
19846	491	With leads for spun canopy	H	10	100*	12	.75
19847	492	With leads for cast canopy	H	10	100*	11	.80

½ Ampere, 125 Volts

19848	541	Junior switch with leads for spun canopy	H	10	100*	14	.75
19849	542	Junior switch with leads for cast canopy	H	10	100*	15	.80



No. 451

Nos. 491, 492, 541 and 542 are fitted with 6 inches of No. 18 B. & S. stranded rubber covered wires. Switches with longer wires furnished on special order. Extra charge, 9 cents list per foot (4½ cents each conductor).

The stem on Nos. 451, 491 and 541 is long enough for a canopy not more than 1/16 inch thick. Nos. 452, 492 and 542 may be used on canopies up to ¼ inch. The key stems are threaded 21/64 inch, 26 threads per inch.



No. 541

KEY ARM SWITCHES

½ Ampere, 125 Volts

19844	2424	Key arm switch	H	10	100	20	1.00

The casing of this switch is threaded to receive standard ⅛-inch pipe at each end. Keys are not supplied with switches, as these are usually furnished by the fixture manufacturer in a design to harmonize with the fixture. The stem is threaded 5/32 inch long with 9/32 thread.



No. 2424

UNO FIXTURE RINGS

The purpose of this ring is to attach ornamental pieces to sockets. It has the same thread as Uno Shade Holders and can therefore be attached to any socket having the Uno bead. The ring measures 2 inches in diameter and is pierced with two diametrically opposite holes spaced 1¾ inches on centers.

19851	549	Uno Fixture Ring	H	50	200	..	.06¼

*Mfrs. Nos. 451, 452, 491, 492, 541 and 542 may be assorted to make up standard package quantity of 100.

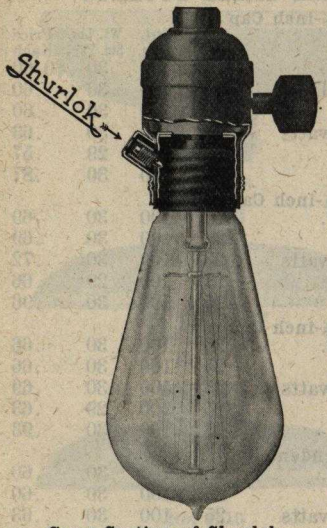


No. 549

Illustrations are one half actual size.

P & S SHURLOK SOCKETS

NATIONAL ELECTRICAL CODE STANDARD



Cross Section of Shurlok, Showing Lamp locked in Place. Note the Screw, Deeply Recessed in the Condensite Bushing

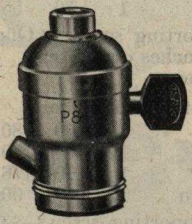
P & S Shurlok is a device sold already attached to P & S Sockets and receptacles, whereby the theft of the lamp is absolutely prevented.

In these pages we have indicated the devices sold with the Shurlok attachment, together with price, schedule and standard package.

The illustrations show how the theft of the lamp is prevented. A small set screw with a triangular head and pointed end is introduced into the base of the lamp by means of a special key. When this set screw is placed in position, it is impossible to remove it without the use of this special key. The head of the set screw is recessed a considerable distance down into the condensite bushing, so it cannot be reached with tools. The key required is of peculiar shape, and keys of various descriptions already on the market will not fit. The Shurlok is not an experiment, but is a proved success of which hundreds of thousands are in daily use.

The Shurlok Socket finds a wide range of use in hotels, apartments, factories, colleges, public institutions, office buildings, mines, packing houses, railroads, steamboats, etc.

In addition to the prevention of theft, it also accomplishes many other purposes, for example:



Key Socket with Shurlok Attachment

Prevents guests in hotels from installing high wattage lamps, heating appliances, etc., which tend to overload the circuits and cause trouble. Prevents the guests using electric flatirons without permission of the proprietor.

Insures that lamps over fire exits and dark stairways will not be removed.

A careful account on one of the County Buildings in the State of Illinois showed that three thousand 60-watt Tungsten lamps were stolen in four years.

Damage suits on account of falls down dark stairways will be reduced if the lamps are locked in place.

The lamps in moving vehicles of all kinds are subject to heavy vibration, which sometimes results in the lamps working loose.

Any of the Fluto or Passmour style Shurlok sockets can be supplied with a shade holder rigidly attached.



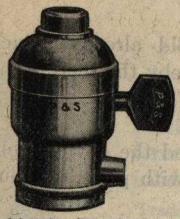
No. 1299 Key

The keys for the Shurlok are not given away, but are sold 35 cents each net, regardless of quantity. Strict watch is kept to see that no keys get into the hands of unauthorized parties.

P & S SHURLOK SOCKETS AND RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE L



No. 100421 Shurlok



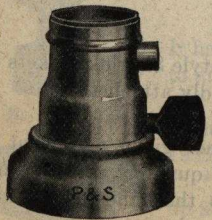
No. 90 Shurlok



No. 7 Shurlok



No. 156 Shurlok



No. 68136 Shurlok

FLUTO INTERCHANGEABLE SHELL SOCKETS

Trade No.	Mfrs. No.	Style	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
Sockets with ⅛-inch Cap						
76888	100421 Shurlok	Key, D. P.	25	100	30	$0.60
120917	298 Shurlok	1-in. key, D. P.	25	100	30	.60
120918	59480 Shurlok	Key, S. P.	25	100	30	.60
120919	600 Shurlok	Key, 660 watts	25	100	30	.63
76890	59482 Shurlok	Keyless	25	100	29	.57
76891	90 Shurlok	Pull	25	100	30	.87
Sockets with ¼-inch Cap						
76892	60 Shurlok	Key, D. P.	25	100	30	.69
120920	7509 Shurlok	Key, S. P.	25	100	30	.69
120921	606 Shurlok	Key, 660 watts	25	100	30	.72
76893	7510 Shurlok	Keyless	25	100	29	.66
76894	120 Shurlok	Pull	25	100	30	.96
Sockets with ⅜-inch Cap						
76895	100423 Shurlok	Key, D. P.	25	100	30	.66
120922	59481 Shurlok	Key, S. P.	25	100	30	.66
120923	612 Shurlok	Key, 660 watts	25	100	30	.69
76896	59483 Shurlok	Keyless	25	100	29	.63
76900	91 Shurlok	Pull	25	100	30	.93
Sockets with Pendent Cap						
76897	100425 Shurlok	Key, D. P.	25	100	30	.60
120924	59486 Shurlok	Key, S. P.	25	100	30	.60
120925	614 Shurlok	Key, 660 watts	25	100	30	.63
76898	59487 Shurlok	Keyless	25	100	29	.57
76899	92 Shurlok	Pull	25	100	30	.87

The pendent cap is provided with double bushing, the inner one having a $\frac{9}{32}$-inch hole. This inner bushing may be removed when larger cord is to be used, leaving another bushing with $\frac{13}{32}$-inch hole.

FLUTO INTERCHANGEABLE SHELL RECEPTACLES

Receptacles for Use on 3¼-inch Outlet Boxes						
076708	7 Shurlok	Key	1	100	102	.90
120930	621 Shurlok	Key, 660 watts	1	100	102	.93
076709	1 Shurlok	Keyless	1	100	98	.87
76979	128 Shurlok	Pull	1	50	55	1.27

The are two sets of holes for supporting screws. One set is $2\frac{3}{4}$-inches on centers and the other $2\frac{5}{16}$-inches on centers.
Outside diameter of base is $3\frac{21}{32}$-inches.

Receptacles for Use on 3¼ and 4-inch Outlet Boxes						
76983	42 Shurlok	Key	1	100	180	1.20
120931	623 Shurlok	Key, 660 watts	1	100	180	1.23
76984	44 Shurlok	Keyless	1	100	176	1.17
76985	149 Shurlok	Pull, 18-in. chain	1	50	90	1.57

There are two sets of holes for supporting screws. One set being $2\frac{3}{4}$-inches on centers and the other $3\frac{1}{2}$ inches on centers.
Outside diameter of base is $4\frac{21}{32}$-inches.

Receptacles with Large Porcelain Base						
76960	60430 Shurlok	Key	10	100	69	.76
120932	619 Shurlok	Key, 660 watts	10	100	69	.79
76962	60431 Shurlok	Keyless	10	100	65	.73
76964	156 Shurlok	Pull	10	100	69	1.03

Holes for supporting screws are spaced $2\frac{3}{16}$-inches on centers. Recess in base is $\frac{1}{2}$-inch deep and $1\frac{7}{8}$-inches wide.
Outside diameter of base is $2\frac{5}{8}$-inches.

Receptacles with Brass Covered Base						
120933	68136 Shurlok	Key	10	100	45	.81
120934	627 Shurlok	Key, 660 watts	10	100	45	.84
77035	68137 Shurlok	Keyless	10	100	44	.78
77036	68138 Shurlok	Pull	10	100	38	1.08

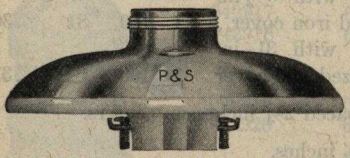
Holes for supporting screws are spaced $1\frac{3}{4}$-inches on centers.
Outside diameter of base is $2\frac{5}{16}$-inches.

P & S OUTLET BOX RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD



No. 428



No. 10



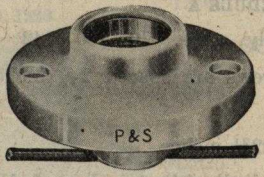
No. 1010



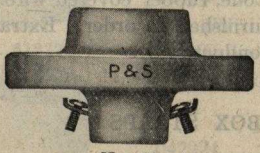
No. 1009



No. 40



No. 122



No. 41



No. 110

SCHEDULE A

BRASS SHELL RECEPTACLES

For 3¼ or 4-inch Boxes

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
12272	428	Pull.....	1	50	67	$1.30

In outward appearance No. 428 resembles No. 1010, but contains a complete, double break, pull mechanism.

Packed one in a paper carton, each carton containing the screws to fasten to outlet boxes. Each receptacle is supplied with 6 inches of chain to which is attached 10 feet of black linen cord, complete with ball.

There are two sets of screw holes for fastening to box, one set 2¾ inches on centers and the other set 3½ inches on centers. Outside diameter, 4$\frac{21}{32}$ inches.

Terminals are ½ in. from surface wired over, which permits its use for many types of concealed wiring.

068248	10	With binding posts	1	100	134	.60
101752	1010	With binding posts	1	100	110	.60
068250	78	With wires*.....	1	100	120	.65

Intended for use on 4-inch outlet box, but may be used on 3¼-inch. There are two sets of holes for supporting screws, one 3½ inches on centers, and the other 2¾ inches. Outside diameter 4$\frac{21}{32}$ inches.

The porcelain projects under the shell and insulates it from the box or metal ceiling.

Terminals of Nos. 1010 and 78 are ½ inch from surface wired over, which permits its use for many types of concealed wiring.

For 3¼-inch Boxes

068247	1009	With binding posts	1	100	75	.45
068249	85	With wires*	1	100	100	.50

Holes for supporting screws are spaced 2¾ inches on centers. Outside diameter, 3$\frac{21}{32}$ inches.

Terminals are ½ in. from surface wired over, which permits its use for many types of concealed wiring.

WEATHERPROOF PORCELAIN RECEPTACLES

For 3¼-inch Boxes

068259	40	With wires,* with shade holder groove.....	1	100	85	.40
068255	109	With wires,* without shade holder groove.....	1	100	85	.35

Holes for supporting screws are spaced 2¾ inches on centers. Outside diameter, 3½ inches.

For 4-inch Boxes

068260	122	With wires,* with shade holder groove.....	1	100	115	.55
068256	121	With wires,* without shade holder groove.....	1	100	115	.50

Holes for supporting screws are spaced 3½ inches on centers. Outside diameter, 4½ inches.

PORCELAIN RECEPTACLES

For 3¼-inch Boxes

068257	41	With shade holder groove.....	1	100	85	.40
068253	62357	Without shade holder groove.....	1	100	85	.35

Holes for supporting screws are spaced 2¾ inches on centers. Outside diameter, 3½ inches.

For 4-inch Boxes

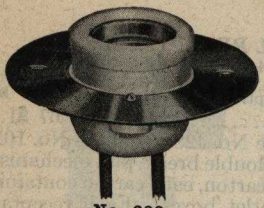
068258	110	With shade holder groove.....	1	100	124	.50
068254	111	Without shade holder groove.....	1	100	124	.45

Holes for supporting screws are spaced 3½ inches on centers. Outside diameter, 4½ inches.

*Each receptacle is fitted with 6 inches of No. 14 stranded, single-braid, rubber covered New Code wire. Receptacles with longer wires furnished to order. Extra wire 4½ cents per foot, each conductor.

P & S OUTLET BOX RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD



No. 288

RECEPTACLES WITH COVERS

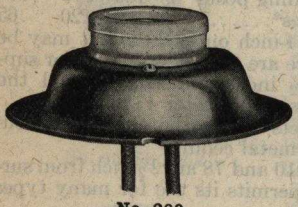
SCHEDULE A

For 3¼-inch Boxes

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
12262	288	Complete, with 3½-in. brush brass cover....	1	100	81	$0.40
		No extra charge for polished brass.				
12263	442	Complete, with 3½-in. japanned iron cover..	1	100	81	.30
12273	1176	Complete, with 3½-in. sherardized iron cover	1	100	81	.31

Holes in cover are spaced 2¾ inches on centers.

Outside diameter, 3½ inches.



No. 289

For 4-inch Boxes

12264	289	Complete, with 4-in. brush brass cover....	1	100	100	.45
		No extra charge for polished brass.				
12265	443	Complete, with 4-in. japanned iron cover.....	1	100	100	.32
12274	1177	Complete, with 4-in. sherardized iron cover	1	100	100	.33½

Holes in cover are spaced 3½ inches on centers.

Outside diameter, 4 1/16 inches.

Each receptacle is supplied with 6 inches of No. 14 stranded, single braid, New Code, rubber covered wire. Receptacles with longer wires furnished to order. Extra wire, 4½ cents list per foot, each conductor.



No. 372

PORCELAIN WEATHERPROOF SIGN AND OUTLET BOX RECEPTACLES

SCHEDULE A

076605	372	Receptacle only.....	10	100	42	.22

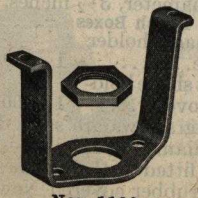
Holes for supporting screws are spaced 2 5/32 inches on centers.

Outside dimensions, 1 15/16 x 2 23/32 inches.

Each receptacle is supplied with 6 inches of No. 14 stranded, single braid, New Code, rubber covered wire. Receptacles with longer wires furnished to order. Extra wire, 4½ cents list per foot, each conductor.



Nos. 1179 and 1182



Nos. 1180 and 1181

CONDUIT BOX STRAPS

SCHEDULE XA

12275	1179	With ⅜-inch locknut...	25	100	14	.05
12278	1182	With ½-inch locknut...	25	100	14	.05
12276	1180	With ⅜-inch locknut...	25	100	17	.07
12277	1181	With ½-inch locknut...	25	100	17	.07

P & S PORCELAIN INTERCHANGEABLE SOCKETS



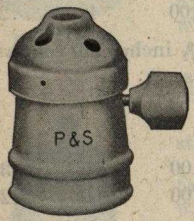
No. 61217

NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE B

SOCKETS WITH PENDENT CAP

To be Used with Lamp Cord

Trade No.	Mfrs. No.	Style	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
042915	61217	Key	10	250	100	$0.30
042916	60217	Keyless	10	250	88	.25



No. 61317

SOCKETS WITH PENDENT CAP

To be Used with Re-enforced Lamp Cord

042917	61317	Key	10	250	100	30
042918	60317	Keyless	10	250	92	.25

SOCKETS WITH ⅛-INCH BRASS CAP*

042919	61227	Key	10	100	42	.35
042920	60227	Keyless	10	100	38	.30

SOCKETS WITH ¼-INCH BRASS CAP*

12807	434	Key	10	100	42	.35
12808	435	Keyless	10	100	38	.30



No. 61227

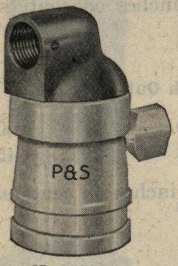
SOCKETS WITH ⅜-INCH BRASS CAP*

12805	61327	Key	10	100	42	.35
12806	60327	Keyless	10	100	38	.30

SOCKETS WITH ⅜-INCH BRASS ANGLE CAP*

12813	1218	Key	10	100	37	.40
12814	1219	Keyless	10	100	35	.35

*The brass cap supplied in special finishes at one-half the advance charged for standard brass sockets. See one of the preceding pages.



No. 1220

SOCKETS WITH ⅜-INCH ALUMINUM CAP

12810	488	Key	10	100	43	.50
12811	448	Keyless	10	100	39	.45

SOCKETS WITH ⅜-INCH ALUMINUM ANGLE CAP

12815	1220	Key	10	100	25	.55
12816	1221	Keyless	10	100	23	.50

SOCKETS WITH ½-INCH ALUMINUM CAP

12812	485	Key	10	100	42	.50
12809	241	Keyless	10	100	38	.45

SOCKETS WITH ½-INCH ALUMINUM ANGLE CAP

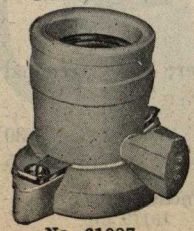
12817	1222	Key	10	100	26	.55
12818	1223	Keyless	10	100	24	.50


No. 61237

RECEPTACLES WITH CONCEALED BASE

042926	61237	Key	10	100	45	.34
042927	60237	Keyless	10	100	43	.29
042928	61250	†Keyless	10	100	45	.25

†Without shade holder groove.
Holes for supporting screws are spaced 1 inch on centers.
Outside diameter of base, 2 inches.


No. 61087

RECEPTACLES WITH CLEAT BASE

042924	61087	Key	10	100	48	.34
042925	61107	Keyless	10	100	45	.29

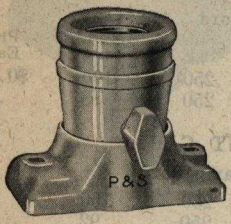
Holes for supporting screws are spaced 1 inch on centers.
Outside diameters of base, 2 13/16 and 2 inches.

FINISH: Regular finish, brush brass. No extra charge for polished brass finish.

P & S PORCELAIN RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE B



No. 100136

INTERCHANGEABLE PORCELAIN RECEPTACLES

With Base for Use on Wood Molding or Conduit Fittings

Trade No.	Mfrs. No.	Style	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
042921	100136	Key	10	100	50	$0.34
77051	426	Keyless	10	100	48	.29

Holes for supporting screws are spaced $2\frac{9}{32}$ inches on centers.
Outside dimensions of base, $2\frac{3}{4}$x$1\frac{21}{32}$ inches.

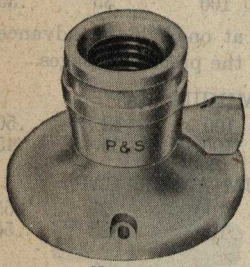


No. 62247

With Concealed Base

042929	62247	Key	10	100	62	.34
042930	60247	Keyless	10	100	59	.29
77053	490	Keyless, without shade groove	10	250	157	.25

Recess in base is $\frac{1}{2}$ inch deep and $1\frac{7}{8}$ inches wide.
Holes for supporting screws are spaced $2\frac{1}{4}$ inches on centers.
Outside diameter of base, $2\frac{21}{32}$ inches.



No. 46

Receptacles which may also be Used on 3¼-inch Outlet Boxes

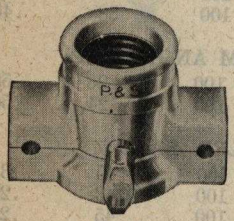
042931	46	Key	1	100	95	.45
068266	4	Keyless	1	100	92	.40

Holes for supporting screws are spaced $2\frac{3}{4}$ inches on centers.
Outside diameter of base, $3\frac{21}{32}$ inches.

Receptacles which may also be Used on 4-inch Outlet Boxes

042932	82	Key	1	100	152	.50
042933	83	Keyless	1	100	149	.45

Holes for supporting screws are spaced $3\frac{1}{2}$ inches on centers.
Outside diameter of base, $4\frac{21}{32}$ inches.



No. 5

PORCELAIN RECEPTACLES WITH CONCEALED CONTACTS, FOR CLEAT WORK

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
77052	5	Key, with shade holder groove	1	100	72	$0.40

Holes for supporting screws are spaced 1 inch on centers.
Outside dimensions of base, $3\frac{1}{8}$ and 2 inches.



No. 599

PORCELAIN TWO-PIECE SEPARABLE RECEPTACLES

Open or Concealed Wiring

Easy to take apart; quick to put together; heavy terminal screws and plates. Free wiring room.

77054	599	With shade holder groove	10	250	143	.30
77055	598	Without shade holder groove	10	250	145	.25

Holes for supporting screws are spaced $1\frac{1}{2}$ inches on centers.
Diameter of base, $2\frac{1}{4}$ inches.

P & S SOCKETS

NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE B

PORCELAIN WEATHERPROOF SOCKETS



No. 0116½

With ⅛-inch Brass Cap

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
054306	0116½	With shade holder groove	25	100	35	$0.60

Brass cap supplied in special finishes at one-half the advance charged for standard brass sockets. See one of the preceding pages.

Each socket is fitted with 6 inches of No. 18 New Code rubber covered fixture wire. Sockets with longer wires furnished on special order. Extra wire, 4½ cents list, per foot, each conductor.



No. 423

With ⅜-inch Brass Cap

054307	116½	Similar to No. 0116½...	25	100	35	.60

Brass cap supplied in special finishes at one-half the advance charged for standard brass sockets. See one of the preceding pages.

Each socket is fitted with 6 inches of No. 18 New Code rubber covered fixture wire. Sockets with longer wires furnished on special order. Extra wire, 4½ cents list, per foot, each conductor.

FINISH: Regular finish, brush brass. No extra charge for polished brass finish.

With ½-inch Aluminum Cap

660 Watts, 600 Volts

063824	423	With shade holder groove	25	100	35	.60

Each socket is fitted with 6 inches of No. 14 stranded New Code rubber covered wire. Receptacles with longer wires to order. Extra wire, 4½ cents list, per foot, each conductor.



No. 487

ALUMINUM WEATHERPROOF SOCKETS

660 Watts, 600 Volts

Bayonet Joint Connection

77082	486	With ⅜-inch cap.....	10	50	23	.50
77083	487	With ½-inch cap.....	10	50	22	.50

PORCELAIN DECORATIVE SOCKETS FOR TEMPORARY WORK

054310	61417	.....	10	250	95	.24

The binding screws have pointed ends to puncture the insulation and make contact with the conductor. We recommend the use of rubber covered stranded wire. Same design as No. 464.



No. 464

MOLDED MICA DECORATIVE SOCKETS FOR TEMPORARY WORK

77078	464	.....	10	250	82	.30

The binding screws have pointed ends to puncture the insulation and make contact with the conductor. We recommend the use of rubber covered stranded wire.



No. 61161

WEATHERPROOF RECEPTACLES

With Side Wires

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
021466	61161	Without shade holder groove	10	100	74	$0.35
021467	61163	With shade holder groove..	10	100	74	.40

Holes for supporting screws are spaced 2 inches on centers. Outside diameter of base, 2⅜ inches.

Each receptacle is fitted with 6 inches of No. 14 stranded, single braid, New Code rubber covered wire. Receptacles with longer wires to order. Extra wire, 4½ cents list, per foot, each conductor.

P & S MOGUL BASE SOCKETS

1500 WATTS, 600 VOLTS



No. 243



No. 597 Shurlok



No. 521

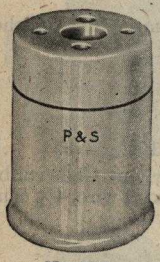


No. 524

PORCELAIN WEATHERPROOF SOCKETS

With Brass Cap

Trade No.	Mfrs. No.	Description	Schedule	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
77041	455	With ⅜-inch cap	B	10	50	65	$1.00
054313	243	With ½-inch cap	B	10	50	65	1.00
56653	591	With ¾-inch cap	B	10	50	65	1.00
		With Cast Iron Yoke					
56654	577	With ⅜-inch yoke	B	10	50	65	.85
56655	589	With ½-inch yoke	B	10	50	65	.85
56656	590	With ¾-inch yoke	B	10	50	65	.85



No. 523

The brass cap supplied in special finishes at one half the advance charged for standard brass sockets. See one of the preceding pages.

Each socket is fitted with 15 inches of No. 14 stranded single braid New Code rubber covered wire.

Sockets with longer wires furnished to order.

Extra wire, 4½ cents list per foot, each conductor.

PORCELAIN SOCKETS

With Brass Cap, with Short Body

77042	522	With ⅜-inch cap	B	10	50	60	.85
109514	597 Shurlok	With ⅜-inch cap	L	2	50	65	1.27
77043	521	With ½-inch cap	B	10	50	65	.85
109515	596 Shurlok	With ½-inch cap	L	2	50	65	1.27
56657	592	With ¾-inch cap	B	10	50	60	.85
109516	541 Shurlok	With ¾-inch cap	L	2	50	65	1.27
77044	524	Without cap	B	10	50	50	.55
77045	525	Without cap, with 15-in. wires	B	10	50	55	.70
		With Cast Iron Yoke, with Short Body					
56658	593	With ⅜-inch yoke	B	10	50	60	.70
56659	594	With ½-inch yoke	B	10	50	60	.70
56660	595	With ¾-inch yoke	B	10	50	60	.70
		With Brass Cap, with Long Body					
77046	519	With ⅜-inch cap	B	2	50	70	1.00
77047	518	With ½-inch cap	B	2	50	70	1.00
77048	517	With ¾-inch cap	B	2	50	70	1.00
77049	523	Without cap	B	2	50	55	.70
		With Cast Iron Yoke, with Long Body					
109511	1183	With ⅜-inch yoke	B	2	50	..	.85
109512	1184	With ½-inch yoke	B	2	50	..	.85
109513	1185	With ¾-inch yoke	B	2	50	..	.85



No. 1183

The brass cap supplied in special finishes at one half the advance charged for standard brass sockets. See one of the preceding pages.

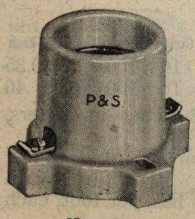
PORCELAIN RECEPTACLES

77050	520	Without shade holder groove	B	1	50	50	.75

Holes for supporting screws are spaced 2⅞ inches on centers.

Outside dimensions are 3½x3½ inches.

Add 5 cents to list when supplied with lamp grip.



No. 520

P & S PORCELAIN RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE C

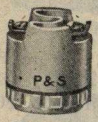
FOR METAL SIGNS AND OUTLET BOXES



No. 61988

Sign receptacles are equipped with contact shells very rich in copper. Receptacles with terminal contact plates made of copper and with all exposed screws copper plated can be furnished at an advance of 5 cents list. Rings only can be furnished at a list price of 6 cents each.

Trade No.	Mfrs. No.	Diam., Inches Punch Required	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
054974	61988	1½	25	250	80	$0.20



No. 878

The terminals are recessed in the groove so sealing compound may be poured in.

054973	878	25/32	25	250	32	.17

No. 878 has candelabra base.



No. 497

014367	497	1½	25	250	80	.20

No. 497 is constructed in general like No. 61988 with the exception of the five notches in the base, which are provided to permit the receptacle being installed so that it is impossible for it to turn. When installing this receptacle, it is not necessary to cut five notches in the metal face. One projection will answer. This projection, when bent down into the notch, will give practically any position of the receptacle and insure against its turning.

The terminals are recessed in the groove so sealing compound may be poured in.



No. 102704

054976	102704	1½	25	250	102	.25

The button on the back is readily removed without tools. Replacing the button after the contact is made completely encloses the contacts.

014365	437	1½	25	250	80	.20

No. 437 has wide porcelain ring.



No. 437

054977	61577	1½	10	250	114	.28
054978	61578	1½	10	250	115	.36

The ring of No. 61577 is glazed, the body being unglazed.

No. 61578 is identical with No. 61577 except that the entire body of the receptacle is glazed.

Nos. 61577 and 61578 are fitted with 6 inches stranded No. 14 double braid New Code rubber covered wire. Receptacles with longer wires furnished to order. Extra wire 4½ cents per foot, each conductor.



No. 61577

054980	86	1⅝	25	250	92	.20

The front of this receptacle is practically flush with the face of the sign, and may be painted to match the sign. The ring is made of non-corrosive gilders' metal, rich in copper. Each paper box contains one special wrench to tighten up the ring.



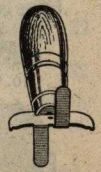
No. 86

A wrench can be supplied which is somewhat handier to use, which will be furnished free of charge to sign manufacturers on application.

All the above receptacles are furnished complete with porcelain ring and rubber gasket. Leather gasket will be supplied, when specified, without extra charge.



Special Wrench

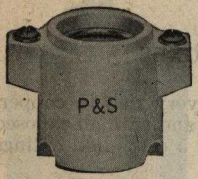


Sign Mfrs. Wrench

P & S PORCELAIN RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE C



No. 54

Sign receptacles are equipped with contact shells very rich in copper. Receptacles with terminal contact plates made of copper and with all exposed screws copper-plated can be furnished at an advance of 5 cents list. Rings only can be furnished at a list price of 6 cents list.

FOR METAL SIGNS AND OUTLET BOXES



No. 61977

Trade No.	Mfrs. No.	Diam., Inches Punch Required	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
054988	54	1⅜	25	250	75	$0.14

Holes for supporting screws are spaced 1 13/16 inches on centers.

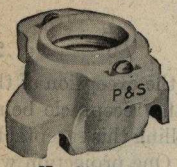
054982	61977	1⅜	25	250	70	.17

Holes for supporting screws are spaced 1 13/16 inches on centers.

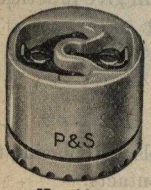
054985	61777	1⅜	25	250	75	.17

Holes for supporting screws are spaced 1 13/16 inches on centers.

The above receptacles are furnished complete with fastening screws.



No. 61777



No. 427

FOR CEILING FIXTURES AND OUTLET BOXES

054979	427	1½	25	250	77	.20

Furnished complete with porcelain ring and rubber gasket. Leather gaskets will be supplied, when specified, without extra charge.

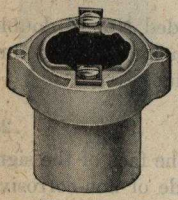


No. 900

TULIP ONE MAN SIGN RECEPTACLES FOR METAL SIGNS

109497	900	1½	25	250	80	.20

Without screws or rings. Cannot turn when fastened. Springs and claws are galvanized. Can be installed without a helper.


No. 61072

FOR WOOD SIGNS

054989	61072	1½	25	250	65	.14

No. 61072 has 1-inch skirt.

Holes for supporting screws are spaced 1 13/16 inches on centers.



No. 677

CANDELABRA BASE SIGN RECEPTACLES FOR METAL SIGNS

109498	677	25/32	25	250	30	.16

Furnished complete with fastening screws.

Holes for supporting screws are spaced 1 3/16 inches on centers.

109499	778	25/32	25	250	20	.16

Furnished complete with fastening screws.

Holes for supporting screws are spaced 1 3/16 inches on centers.



No. 778

C-H PUSH SOCKETS

NATIONAL ELECTRICAL CODE STANDARD—660 WATTS, 250 VOLTS



No. 7500

BRASS SHELL SOCKETS

C-H Brass Shell Sockets have four distinctive features. Push buttons replace the ordinary key; the quick make and break mechanism has the high rating of 660 watts, 250 volts; they are indicating; a locking nozzle replaces the tiny and weak set-screw for securing the socket to the fixture.

All pendent sockets are provided with an easily wired, effective strain relief, at no additional charge.



No. 7506



No. 7560



No. 7510



No. 7501



No. 7511

Push Sockets

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
87168	7500	1/8-inch cap	25	500	100	$0.33
87169	7502	1/4-inch cap	25	250	55	.42
87170	7504	3/8-inch cap	25	250	58	.39
87171	7506	Pendent, with strain relief	25	500	100	.33
87184	7520	1/8-inch male cap	25	500	100	.33
87185	7522	1/4-inch male cap	25	250	55	.42
87186	7524	3/8-inch male cap	25	250	58	.42
87187	7560	1/8-inch cap with extra insulation bushed inlet	25	250	55	.35
126101	7562	1/8-inch cap with extra metal bushed inlet	25	250	55	.35

Removable Button Push Sockets

126107	7510	1/8-inch cap	25	250	50	.40
126108	7512	1/4-inch cap	25	250	55	.49
126109	7514	3/8-inch cap	25	250	58	.46
126110	7530	1/8-inch male cap	25	250	50	.40
126111	7532	1/4-inch male cap	25	250	55	.49
126112	7534	3/8-inch male cap	25	250	58	.49

Keyless Sockets

87172	7501	1/8-inch cap	25	500	100	.30
87173	7503	1/4-inch cap	25	250	55	.39
87174	7505	3/8-inch cap	25	250	58	.36
87175	7507	Pendent, with strain relief	25	500	91	.30
126102	7521	1/8-inch male cap	25	500	100	.30
126103	7523	1/4-inch male cap	25	250	55	.39
126104	7525	3/8-inch male cap	25	250	58	.39
126105	7571	1/8-inch cap with extra insulation bushed inlet	25	250	55	.32
126106	7573	1/8-inch cap with extra metal bushed inlet	25	250	55	.32

Electrolier Keyless Sockets

87176	7511	1/8-inch cap	25	100	20	.30
87177	7513	1/4-inch cap	25	100	20	.39
87178	7515	3/8-inch cap	25	100	20	.36
87179	7531	1/8-inch male cap	25	100	20	.30
87180	7533	1/4-inch male cap	25	100	20	.39
87181	7535	3/8-inch male cap	25	100	20	.39
87182	7575	1/8-inch cap with extra insulation bushed inlet	25	100	20	.32
87183	7577	1/8-inch cap with extra metal bushed inlet	25	100	20	.32

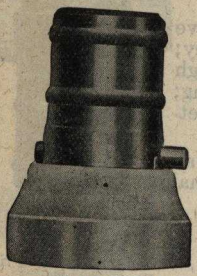
Standard finishes are brush brass and polished brass. Brush brass shipped unless otherwise specified. Other finishes can be furnished at the regular advance.

Standard push buttons measure 1 21/32 over all. Special push buttons 2 1/16 or 2 3/16 over all will be furnished when specified without extra charge.

C-H WALL SOCKETS

WITH PORCELAIN BASE FOR CONCEALED WORK

NATIONAL ELECTRICAL CODE STANDARD—660 WATTS, 250 VOLTS



No. 7550

PUSH WALL SOCKETS

Trade No.	Mfrs. No.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
126118	7550	10	250	80	$0.44



No. 7551

KEYLESS WALL SOCKETS

Trade No.	Mfrs. No.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
126119	7551	10	250	80	$0.41



No. 7561

SHORT KEYLESS WALL SOCKETS

Trade No.	Mfrs. No.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
126120	7561	10	250	75	$0.41

Standard finishes are polished brass and brush brass. Brush brass shipped unless otherwise specified. Other finishes can be furnished at the regular advance.

Supporting screw holes in porcelain bases are spaced 1-inch on centers. Outside diameter base 2 inches.

The brass shells of these wall sockets are interchangeable with C-H brass shell fixture and pendent sockets.

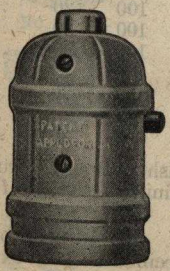


No. 7400

PORCELAIN PUSH SOCKETS

Porcelain indicating push sockets are made in both the pendent and fixture styles. The fixture sockets have the automatic locking nozzle which firmly secures the socket to the fixture and eliminates the small set screw.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
058199	7400	Pendent	10	100	42	$0.30
66717	7401	1/8-inch brass cap	10	100	42	.35
66718	7405	3/8-inch brass cap	10	100	42	.35



No. 7401

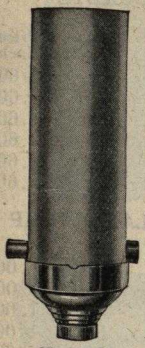
Standard finishes of porcelain sockets are gray, brown and white. Gray shipped unless otherwise specified.

Standard finishes of nozzles are polished brass and brush brass. Brush brass shipped unless otherwise specified. For polished nickel finish, add 2 cents to list price.

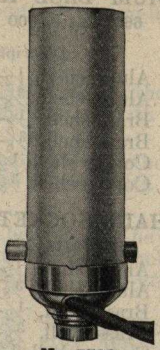
C-H SOCKETS

CANDLE LENGTH TYPE

660 Watts, 250 Volts



No. 7516



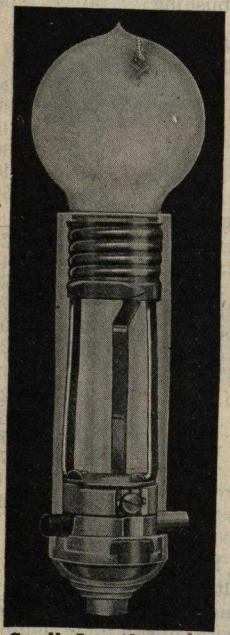
No. 7528



No. 7517



No. 7529



Candle Length Socket Showing Unit Construction; Substantial Supports hold the Screw Shell and also Serve as Conductors

Candle length sockets are furnished in one complete unit, thus eliminating the need for stocking, handling and assembling the various parts required for the usual candle light fixture. This makes the work of installing as easy as with the regular standard lamp sockets. Being in one unit entirely assembled, the C-H candle length sockets save considerable time in making up fixtures.

Two styles of these sockets are made, one having the standard cap and the other a cap with an extra inlet in the side. Both styles are made with or without push buttons.

Candle length sockets Nos. 7528 and 7529 are particularly useful where a solid pedestal is used. There is a side inlet in the cap through which the lamp cord may be passed, making it unnecessary to wire the pedestal.

Like all C-H Sockets, these candle length types have the highest socket rating of 660 watts, 250 volts.

PUSH-BUTTON SOCKETS

White Candle, Brush Brass Cap

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
132378	7516*	1/8-inch cap	10	50	12	$0.85
132379	7518*	1/4-inch cap	10	50	12	.94
132380	7526*	3/8-inch cap	10	50	12	.91
132381	7536	1/8-inch cap, with extra insulation bushed inlet	10	50	12	.87
132382	7528	1/8-inch cap, with extra metal bushed inlet	10	50	12	.87
132389	7564	1/8-inch cap, with removable push buttons	10	50	12	.92

KEYLESS SOCKETS

White Candle, Brush Brass Cap

132383	7517*	1/8-inch cap	10	50	12	.70
132384	7519*	1/4-inch cap	10	50	12	.79
132385	7527*	3/8-inch cap	10	50	12	.76
132386	7537	1/8-inch cap, with extra insulation bushed inlet	10	50	12	.72
132387	7529	1/8-inch cap, with extra metal bushed inlet	10	50	12	.72

Length of candles, exclusive of cap, 4 inches. Five and six inch candles furnished at additional cost of 5 cents per inch.

White caps will be furnished on above instead of brush brass without extra charge.



No. 7509

CANDLE FIXTURE SOCKETS

No. 7509 Fiber Candle Socket is arranged to be supported inside the candle on an adjustable stem with fixture wires connecting to a switch mechanism below or directly into fixture arm when no switch is used. This socket can be used in candles measuring 1 3/16 inches or more inside diameter.

132388	7509*	Keyless, 1/8-inch nipple	25	250	15	.30

*National Electrical Code Standard.

BENJAMIN SOCKETS

NATIONAL ELECTRICAL CODE STANDARD



No. 4200

BENCO MEDIUM BASE KEYLESS SOCKETS

660 Watts, 600 Volts

Trade No.	Mfrs. No.	Description	Std. Pkg.	Price Each
020944	4200	Alum. shell, ½-in. bushing	50	$0.60
020945	4201	Alum. shell, ⅜-in. bushing	50	.60
020946	4202	Brass shell, ½-in. bushing	50	.60
020947	4203	Brass shell, ⅜-in. bushing	50	.60
27496	4204	Copper shell, ½-in. bushing	50	.60
27497	4205	Copper shell, ⅜-in. bushing	50	.60



No. 4207

BENCO PULL CHAIN SOCKETS—WITH LAMP GRIP

660 Watts, 250 Volts

120405	4225	Alum. shell, ½-in. bushing	50	1.00
120406	4226	Alum. shell, ⅜-in. bushing	50	1.00
120407	4207	Brass shell, ½-in. bushing	50	1.00
120408	4208	Brass shell, ⅜-in. bushing	50	1.00
120409	4236	Copper shell, ½-in. bushing	50	1.00
120410	4237	Copper shell, ⅜-in. bushing	50	1.00

TYPE S MEDIUM SCREW BASE HOLDERS

Frosted Aluminum—Weatherproof

120411	4215	2¼-inch Form O	50	20
120412	4216	2¼-inch Form H	50	30
120413	4217	3¼-inch	50	35
120414	4365	3-inch screw	50	.30
120415	4366	4-inch screw	50	.40
120416	4367	4¼-inch screw	50	.50

Natural Copper—Weatherproof

120417	4370	2¼-inch Form O	50	.20
120418	4371	2¼-inch Form H	50	.40
120419	*4372	3¼-inch	50	.60
120420	*4373	4-inch	50	.70
120421	*4374	5-inch	50	1.00
120422	*4375	6-inch	50	1.20

Brush Brass

120423	*4377	2¼-inch Form O	50	.20
120424	*4378	2¼-inch Form H	50	.35
120425	*4379	3¼-inch	50	.40
120426	*4380	4-inch	50	.70
120427	*4381	5-inch	50	1.00
120428	*4382	6-inch	50	1.20

*Ventilated.



No. 4366



No. 4370



No. 4371



No. 4379



No. 4210

BENCO MOGUL BASE SOCKETS

1500 Watts, 600 Volts

Bencos Nos. 4210–4299 are highly insulated, porcelain-lined, brass shell keyless sockets for use with mogul base lamps. Standard finishes are brush brass and natural copper.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Price Each
047316	4210	Brush brass, ⅜-inch bushing	20	$1.40
120378	4297	Brush brass, ½-inch bushing	20	1.40
120379	4298	Natural copper, ⅜-inch bushing	20	1.40
120380	4299	Natural copper, ½-inch bushing	20	1.40

Type S Screw Threaded Shade Holders

These shade holders are designed for use with Mogul Bencos Nos. 4210–4299. They are of proper depth and adequately ventilated.

120381	B-4252	Brush brass, 3¼-inch	20	.60
120382	B-4254	Brush brass, 4-inch	20	.80
120383	B-4256	Brush brass, 5-inch	20	1.10
120384	B-4258	Brush brass, 6-inch	20	1.30
120385	C-4252	Natural copper, 3¼-inch	20	.60
120386	C-4254	Natural copper, 4-inch	20	.80
120387	C-4256	Natural copper, 5-inch	20	1.10
120388	C-4258	Natural copper, 6-inch	20	1.30



No. B-4252



No. C-4252

BENJAMIN PORCELAIN SOCKETS



No. 241

MEDIUM BASE SOCKETS

Medium base sockets have pendant cap with $\frac{13}{32}$-inch opening for accommodating re-inforced lamp cord.

Keyless, 660 Watts, 600 Volts

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt. Lbs.	Price Each
150084	256	Without lamp grip	250	69	$0.25
150085	257	With lamp grip	100	26	.30
		Lever Key, 250 Watts, 250 Volts			
150086	241	Without lamp grip	250	69	.30
150087	249	With lamp grip	100	26	.35



No. 342

WALL SOCKETS

These sockets have wall base 2 inches in diameter for concealed wiring. Supporting screw holes are slotted, spaced for $1\frac{3}{16}$ to $1\frac{5}{16}$-inch centers. For car lighting, lamp grip is an important item.

Keyless, 660 Watts, 600 Volts

150088	341	Without lamp grip	100	25	.29
150089	342	With lamp grip	100	25	.34
150090	358	With lamp grip, less bead	100	25	.34
		Lever Key, 250 Watts, 250 Volts			
150091	343	Without lamp grip	100	25	.34
150092	344	With lamp grip	100	25	.39



No. 4410

COPPER CAP SOCKETS

These sockets have copper cap with threaded bushing. They can be used for either indoor or outdoor service. Standard cap finish is natural copper.

Keyless, 660 Watts, 600 Volts

150093	4408	Without lamp grip, $\frac{1}{8}$-inch bushing	100	27	.35
150094	4409	Without lamp grip, $\frac{1}{4}$-inch bushing	100	27	.40
150095	4410	Without lamp grip, $\frac{3}{8}$-inch bushing	100	27	.40
150096	4411	Without lamp grip, $\frac{1}{2}$-inch bushing	100	27	.45
		Lever Key, 250 Watts, 250 Volts			
150097	4425	Without lamp grip, $\frac{1}{8}$-inch bushing	100	27	.40
150098	4426	Without lamp grip, $\frac{1}{4}$-inch bushing	100	27	.45
150099	4427	Without lamp grip, $\frac{3}{8}$-inch bushing	100	27	.45
150100	4428	Without lamp grip, $\frac{1}{2}$-inch bushing	100	27	.50

For Benjamin lamp grip, add 5 cents list.



No. 69

MOGUL BASE SOCKETS

1500 Watts, 600 Volts

Porcelain sockets are arranged for attaching to a surface or bracket by means of screws passing through the base. Wires in Nos. 69 and 691 lead in at the sides; in Nos. 169 and 692 through the base. The latter are used in Benjamin Reflector Sockets. Screw holes are spaced $1\frac{5}{32}$ inches on centers.

047318	69	Open terminals	20	9	.55
106246	691	Open terminals, with lamp grip	20	9	.65
27464	169	Concealed terminals	20	9	.55
106247	692	Concealed terminals, with lamp grip	20	9	.65
		Cast Iron Fittings			
106252	3846	Open fitting, tapped $\frac{1}{2}$ inch	20	5	.15
106253	3847	Open fitting, tapped $\frac{3}{8}$ inch	20	5	.15
106254	2569	Weatherproof flange, tapped $\frac{1}{2}$ inch	20	4	.20
106255	2669	Weatherproof flange, tapped $\frac{3}{8}$ inch	20	4	.20

Two-piece porcelain sockets have means for attaching to a flange or surface. Wires are brought in through side outlets in upper base of Nos. 693 and 695, and screw holes are spaced $1\frac{3}{4}$ inches on centers; in Nos. 696 and 698, through central opening, with screw holes slotted for $1\frac{1}{2}$ to $1\frac{3}{4}$ inch centers.

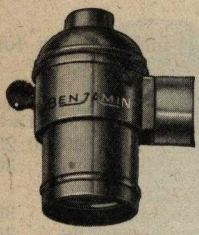
120391	693	Without lamp grip	20	12	.70
120392	695	With lamp grip	20	12	.80
120393	696	Without lamp grip	20	12	.70
120394	698	With lamp grip	20	12	.80
		Weatherproof Cast Iron Fittings for Nos. 696 and 698			
106256	2571	Flange, tapped $\frac{1}{2}$ inch	20	5	.30
106257	2573	Flange, tapped $\frac{3}{4}$ inch	20	5	.30
106258	2575	Flange, tapped 1 inch	20	5	.40
106259	2577	Flange, tapped $1\frac{1}{4}$ inch	20	5	.40



No. 695

BENJAMIN SOCKETS

NATIONAL ELECTRICAL CODE STANDARD



No. 496



No. 97

CURRENT TAP SOCKETS

Furnished with lever switch which controls the lamp. The plugs have reliable cord grips and are identical with those used on the No. 96 current tap. In the pendent forms ample room is provided for knotting the cord.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Price Each
106265	*496	Multiple, ⅛-inch	50	$0.90
106266	*496½	Series, ⅛-inch	50	.90
106267	*497	Multiple, ¼-inch	50	.90
106268	*497½	Series, ¼-inch	50	.90
106269	*498	Multiple, ⅜-inch	50	.95
106270	*498½	Series, ⅜-inch	50	.95
106271	*499	Multiple, insulated bushing, 11/32-inch opening	50	.90
106272	*499½	Series, insulated bushing, 11/32-inch opening	50	.90



No. 4320



No. 4328

UNIT-SHELL SOCKETS

Beaded Type

27475	*4320	Tapped, ⅛-inch	100	.28
27476	*4322	Tapped, ¼-inch	100	.32
27477	*4324	Tapped, ⅜-inch	100	.34
27478	*4326	With insulated bushing, 11/32-inch opening	100	.28

Threaded Type

106261	**4328	Tapped, ⅛-inch	100	.30
106262	**4330	Tapped, ¼-inch	100	.34
106263	**4332	Tapped, ⅜-inch	100	.36
106264	**4334	With insulated bushing, 11/32-inch opening	100	.30

Threaded type used with threaded holder reflectors.



No. 411



No. 435

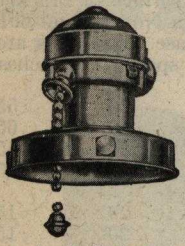
ANGLE SOCKETS

020919	**411	⅛-inch, keyless	50	.35
020920	**451	¼-inch, keyless	50	.40
020921	**431	⅜-inch, keyless	50	.40
27479	*413	⅛-inch, key	50	.38
27480	*453	¼-inch, key	50	.43
27481	*433	⅜-inch, key	50	.43
106273	**435	⅛-inch, pull	50	.65
106274	**436	¼-inch, pull	50	.71
106275	**437	⅜-inch, pull	50	.71

Shade Holders Attached

Angle sockets above are furnished with shade holders attached as below. Holders for pull sockets have opening sufficiently large to pass chain ornament.

Size of Holder, In.	Form of Holder	Std. Pkg.	Price Additional
2¼	O	50	$0.10
2¼	H	50	.20



Angle Socket with Shade Holder



No. 412

TWIN SOCKETS

Fiber-lined

Trade No.	Mfrs. No.	Description	Std. Pkg.	Price Each
020922	**412	Multiple, ⅛-inch	50	$0.65
020923	**452	Multiple, ¼-inch	50	.70
020924	**432	Multiple, ⅜-inch	50	.70

Porcelain-lined

27485	**455	Multiple, ⅛-inch	50	.70
27486	**456	Multiple, ¼-inch	50	.75
27487	**457	Multiple, ⅜-inch	50	.75

Porcelain

106278	†424	2-wire Multiple, ½-inch	50	.90
106279	†425	2-wire Multiple, ⅜-inch	50	.90
106280	†424½	2-wire Series, ½-inch	50	.90
106281	†425½	2-wire Series, ⅜-inch	50	.90
120580	†426	3-wire Multiple, ½-inch	50	.90
120581	†427	3-wire Multiple, ⅜-inch	50	.90

*250 watts, 250 volts.
**660 watts, 250 volts.
†660 watts, 600 volts.

Standard metal finish is brush brass.



No. 455



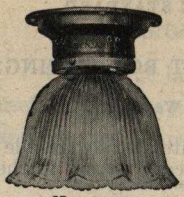
No. 424

BENJAMIN RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD



No. 81



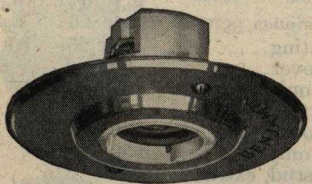
No. 2377



No. 61



No. 61 Receptacle with Cover



No. 6C Receptacle with Cover



No. 6



No. 6T



No. 88



No. 9401



No. 2073

CAR SOCKETS—660 WATTS, 250 VOLTS

Adapted for street railway lighting circuits, or for any service where high insulation is desirable. Can be attached to ceiling block, flange or outlet box cover.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Price Each
120592	81	1-light	50	$0.45
120593	81F	1-light with 3/8-in. flange	50	.50

CAR FIXTURES—660 WATTS, 600 VOLTS

Intended for car lighting with glassware having 2¼-inch fitter. Special safety holder. Receptacle has lamp grip.

27640	2377	Form O	10	2.00

CAR RECEPTACLES—660 WATTS, 600 VOLTS

No. 61

No. 61 is a two-piece wall receptacle with concealed binding terminals and lamp grip. Measures 2 3/16 inches at the base.

27491	61	With lamp grip	100	.35
27492	650	With 2 5/16-in. brass cover.	100	.50
27493	652	With 3¼-in. brass cover.	100	.60

Screw holes spaced 1¾ inches on centers.

No. 6C

No. 6C with cover consists of a steel plate to which a lamp grip receptacle is attached, and brass plate. Designed for use where receptacle is desired practically flush with the surface.

27488	6C	Receptacle, with bolts	100	.22
27494	36256	Cover for 3-inch box	100	.25
27495	36258	Cover for 4-inch box	100	.30

SIGN RECEPTACLES—660 WATTS, 250 VOLTS

Nos. 6 and 6T have exposed binding terminals in rear. No. 6T has the terminals in cavities for soldering and cementing.

020937	6	Receptacle, with bolts	100	.17
27490	6T	Receptacle, with bolts	100	.14

Screw holes spaced 1¾ in. on centers.

REFLECTOR SOCKET RECEPTACLES—600 WATTS, 600 VOLTS

Two-piece porcelain receptacles are designed for medium base reflector sockets and hood type fixtures. Nos. 87 and 88 have flat base, and have screws spaced 1¾ inches on centers. Nos. 89 and 109 have rounded base, and screws are spaced 1 3/16 inches.

120594	87	Less lamp grip	100	.40
120595	88	With lamp grip	100	.45
120596	89	Less lamp grip	100	.40
120597	109	With lamp grip	100	.45

CLEAT RECEPTACLES—660 WATTS, 250 VOLTS

Cleat type with Benjamin Lamp Grip, adapted for open work. Screw holes are slotted, and spaced 2 5/16 to 2 7/16 inches on centers.

120598	9401	With lamp grip	100	.25

SIGNAL SOCKETS—660 WATTS, 600 VOLTS

These sockets are in keeping with the requirements of railway electric signal service. Furnished with Benjamin Lamp Grip. Have binding posts, as shown, adopted as standard by the Railway Signal Association. Type C has round head brass machine screw type of binding terminal. Base is 2⅞x1¾ in.; height, 1¾ in.; screw holes spaced 2 5/16 in. on centers.

120599	2073	R. S. A. terminals	50	.90
120600	2074	Type C terminals	50	.60

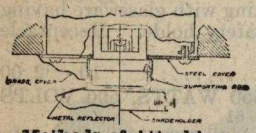
Standard metal finish is brush brass. For bronze finish, add 10 per cent.

BENJAMIN OUTLET BOX FITTINGS

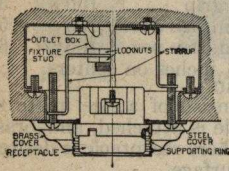
NATIONAL ELECTRICAL CODE STANDARD



No. 1402



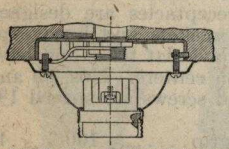
Methods of Attaching



Methods of Attaching



No. 1410



Methods of Attaching

OUTLET BOX FITTINGS

660 Watts, 250 Volts

Outlet box fittings are intended to provide a permanent seal for the outlet and render unnecessary any further disturbance of the wiring.

A threaded supporting means affords a method of attaching any one of the numerous sizes of Type S holders or reflectors, and fixtures with connectors Nos. 1412 and 1416. Interchange of holders, reflectors or fixture types is thus made easy.

These fittings consist of finished brass cover, lamp receptacle interior and attaching parts. The deep box type is usually connected direct to the ears on the box. Where offset box covers are plastered in, this type can be attached direct to the ears, if tapped, or to bottom of box or fixture stud by means of special stirrup listed below. The shallow box type is attached either direct or through a strap intended for central support. Benjamin lamp grip furnished at an advance of 5 cents list. Standard finish is brush brass.

Deep Box Type

Trade No.	Mfrs. No.	Size of Box Inches	Description	Std. Pkg.	Wt. Lbs.	Price Each
120353	1402	3¼	Deep box fitting	50	25	$0.60
120354	1403	3¼	Less brass cover	50	20	.40
120355	1404	3¼	Brass cover only	100	5	.20
120356	1405	4	Deep box fitting	50	27	.65
120357	1406	4	Less brass cover	50	23	.45
120358	1407	4	Brass cover only	50	4	.20
120368	1420		Stirrup for ⅜-in. stud, extra	50	3½	.05
120369	1421		Stirrup for ½-in. stud, extra	50	3¼	.07

Shallow Box Type

120359	1410	4	Shallow box fitting	50	16	.90
120360	1411	4	Less strap	50	15	.85

Diameter of Nos. 1402–1404, 3¾ inches; Nos. 1405–1407, 4½ inches; Nos. 1410 and 1411, 4⅝ inches.

Holes of Nos. 1402–1404 are spaced 2¾ inches on centers; Nos. 1405–1407, 3½ inches; Nos. 1410 and 1411, 3½ inches.



No. 1412

FIXTURE CONNECTORS

660 Watts, 250 Volts

Fixture connectors are flexi-swivel, mechanical and electrical couplings. They adapt a stem or chain fixture for quick attachment to or interchange on any of the outlet box fittings above. Where required, a ⅜x⅜-inch hollow insulating joint can be inserted between connector and stem. Standard finish is brush brass.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt. Lbs.	Price Each
120361	1412	For ⅜-inch stem	50	11	$0.60
120362	1416	For chain fixture	50	18	.80



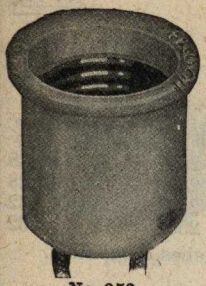
No. 1413

CHAIN SUPPORTING RING

These rings offer a simple method of attaching chain fixtures to the screw threaded portion of Benco sockets and ceiling units, or to outlet box fittings listed above. Standard finish is brush brass.

120363	1413	Supporting ring	100	2	.30

FEDERAL PORCELAIN SOCKETS



No. 353

LARGE BASE WEATHERPROOF SOCKETS

These large base weatherproof porcelain sockets will be found very useful by fixture manufacturers and for general use where large base 400 and 500-watt lamps are used.

The sockets are made of best vitrified porcelain with pure copper lamp shell. The exterior is smooth without projections of any kind.

A small saddle clip (not shown in the illustration) for securing the socket to ordinary gas pipe conduit, may be attached to the back of the socket, by screws inserted from the front. The outside dimensions of the socket are 2 7/16 x 2 7/16 inches. Special length leads can be furnished on these sockets when ordered in 500 lots, at $0.006 list per extra inch. Price includes both wires. In less than 500 lots, an extra 10 per cent of the price of socket with special length leads will be charged.



No. 303



No. 302

Trade No.	Mfrs. No.	Description	Std. Pkg.	Price Each
66719	353	With 4-inch leads, without saddle clip	50	$0.60
66720	....	Cast iron saddle clip, for No. 353 socket, tapped for 3/8-inch pipe, including screws for attaching	50	.10

CLAMP SOCKETS



No. 310



No. 314

Weatherproof Outlet Box Receptacles

023107	304	Edison Socket, screw contact	100	.28
023108	303	W. P. socket, with 4-inch leads	100	.27
023111	303	W. P. socket, with 9-inch leads	100	.30
023110	302	W. P. socket, with 9-inch leads	100	.27

No. 304 is same as No. 303, but with screw contacts instead of leads.

No. 303 attaches to cover by ring on the back, while No. 302 attaches by ring on front of socket.



No. 315

Candelabra Receptacles

088425	310	Screw contacts	100	.16
088426	312	4-inch leads	100	.20

Nos. 310 and 312 fit holes 1 7/16 inches in diameter.

Adapters

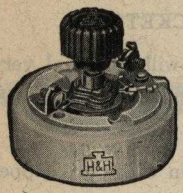
023112	314	Edison to candelabra base	50	.20

Porcelain Candles

36078	315	Edison to candelabra base	50	.35

H & H SURFACE SWITCHES

NATIONAL ELECTRICAL CODE STANDARD



No. 2148

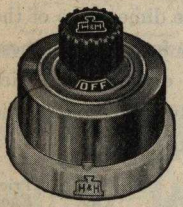
SINGLE-POLE

5 Amperes, 125 Volts; 3 Amperes, 250 Volts

Small Size

Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
020054	2148	Solid	Plain	250	71	$0.28
020055	2161	Slotted	Plain	250	71	.28
020056	2162	Solid	Indicating	250	73	.32
020057	2163	Slotted	Indicating	250	73	.32

Holes for supporting screws are spaced $1\frac{13}{32}$ inches on centers.
Diameter of base, 2 inches.



No. 220

Large Size

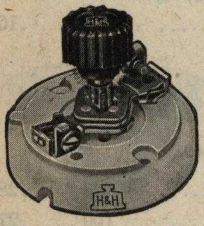
020058	20	Solid	Plain	100	30	.36
020059	120	Slotted	Plain	100	30	.36
020060	220	Solid	Indicating	100	30	.40
020061	320	Slotted	Indicating	100	30	.40

Holes for supporting screws are spaced $1\frac{7}{16}$ inches on centers.
Diameter of base, $2\frac{1}{8}$ inches.

10 Amperes, 125 Volts; 5 Amperes 250 Volts

020062	21	Solid	Plain	100	53	.48
020063	121	Slotted	Plain	100	53	.48
020064	221	Solid	Indicating	100	53	.54
020065	321	Slotted	Indicating	100	53	.54

Holes for supporting screws are spaced $1\frac{3}{4}$ inches on centers.
Diameter of base, $2\frac{15}{32}$ inches.



No. 121

10 Amperes, 250 Volts

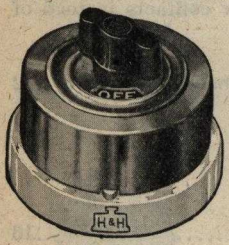
68161	2983	Solid	Plain	100	54	.66
68162	2984	Slotted	Plain	100	54	.66
68163	2985	Solid	Indicating	100	54	.76
68164	2986	Slotted	Indicating	100	54	.76

Holes for supporting screws are spaced $1\frac{3}{4}$ inches on centers.
Diameter of base, $2\frac{15}{32}$ inches.

20 Amperes, 125 Volts

020066	31	Solid	Plain	10	15	.90
020067	131	Slotted	Plain	10	15	.90
020068	231	Solid	Indicating	10	15	1.00
020069	331	Slotted	Indicating	10	15	1.00

Holes for supporting screws are spaced $2\frac{5}{32}$ inches on centers.
Diameter of base, $3\frac{1}{16}$ inches.



No. 240

30 Amperes, 125 Volts

020070	40	Solid	Plain	10	17	1.40
020071	140	Slotted	Plain	10	17	1.40
020072	240	Solid	Indicating	10	17	1.50
020073	340	Slotted	Indicating	10	17	1.50

Holes for supporting screws are spaced $2\frac{7}{16}$ inches on centers.
Diameter of base, $3\frac{1}{2}$ inches.

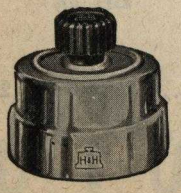
SWITCHES WITH METAL COVERED BASES

5 Amperes, 125 Volts; 3 Amperes, 250 Volts

Especially adapted for mounting on motor-driven devices such as coffee mills, sweepers, presses, etc., when it is desired to protect the porcelain base from mechanical injury.

68165	2684	Solid	Plain	100	28	.36
68166	2654	Solid	Indicating	100	28	.40

Holes for supporting screws are spaced $1\frac{13}{32}$ inches on centers.
Diameter of base, 2 inches.



No. 2684

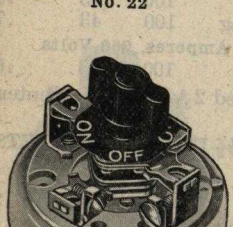
The above switches may be converted into lock switches by the use of the lock attachments.

H & H SURFACE SWITCHES

NATIONAL ELECTRICAL CODE STANDARD



No. 22



No. 432



No. 43



No. 24



No. 2657

DOUBLE-POLE

5 Amperes, 250 Volts

Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
020074	2085	Solid	Plain	100	35	$0.56
020075	2086	Slotted	Plain	100	35	.56
020076	2087	Solid	Indicating	100	35	.64
020077	2088	Slotted	Indicating	100	35	.64

Holes for supporting screws are spaced $1\frac{7}{16}$ in. on centers. Diam. of base, $2\frac{1}{8}$ in.

10 Amperes, 250 Volts

020078	22	Solid	Plain	100	54	.66
020079	122	Slotted	Plain	100	54	.66
020080	222	Solid	Indicating	100	54	.76
020081	322	Slotted	Indicating	100	54	.76

Holes for supporting screws are spaced $1\frac{3}{4}$ in. on centers. Diam. of base, $2\frac{15}{32}$ in.

20 Amperes, 250 Volts

020082	32	Solid	Plain	30	30	1.40
020083	132	Slotted	Plain	30	30	1.40
020084	432	Solid	Indicating	30	30	1.50
020085	532	Slotted	Indicating	30	30	1.50

Holes for supporting screws are spaced $2\frac{3}{32}$ in. on centers. Diam. of base, $3\frac{1}{16}$ in.

30 Amperes, 250 Volts

020086	42	Solid	Plain	30	44	1.70
020087	142	Slotted	Plain	30	44	1.70
020088	442	Solid	Indicating	30	44	1.80
020089	542	Slotted	Indicating	30	44	1.80

Holes for supporting screws are spaced $2\frac{7}{8}$ in. on centers. Diam. of base, $3\frac{1}{2}$ in.

THREE-WAY

3 Amperes, 125 Volts; 1 Ampere, 250 Volts

68177	2152	Solid	Plain	100	34	.48
68178	2153	Slotted	Plain	100	34	.48

Holes for supporting screws are spaced $1\frac{7}{16}$ in. on centers. Diam. of base, $2\frac{1}{8}$ in

5 Amperes, 125 Volts; 3 Amperes, 250 Volts

020090	2089	Solid	Plain	100	35	.56
020091	2090	Slotted	Plain	100	35	.56

Holes for supporting screws are spaced $1\frac{7}{16}$ in. on centers. Diam. of base, $2\frac{1}{8}$ in.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

020092	23	Solid	Plain	50	27	.76
020093	123	Slotted	Plain	50	27	.76

Holes for supporting screws are spaced $1\frac{3}{4}$ in. on centers. Diam. of base, $2\frac{15}{32}$ in.

20 Amperes, 125 Volts

020094	33	Solid	Plain	10	17	1.50
020095	133	Slotted	Plain	10	17	1.50

Holes for supporting screws are spaced $2\frac{3}{32}$ in. on centers. Diam. of base, $3\frac{1}{16}$ in.

30 Amperes, 125 Volts

020096	43	Solid	Plain	10	19	1.80
020097	143	Slotted	Plain	10	19	1.80

Holes for supporting screws are spaced $2\frac{7}{16}$ in. on centers. Diam. of base, $3\frac{1}{2}$ in.

FOUR-WAY

5 Amperes, 125 Volts; 2 Amperes, 250 Volts

020098	24	Solid	Plain	30	17	.86
020099	124	Slotted	Plain	30	17	.86

Holes for supporting screws are spaced $1\frac{3}{4}$ in. on centers. Diam. of base, $2\frac{15}{32}$ in.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

68179	2959	Solid	Plain	10	12	1.90
68180	2960	Slotted	Plain	10	12	1.90

Holes for supporting screws are spaced $2\frac{7}{16}$ in. on centers. Diam. of base, $2\frac{11}{16}$ in.

TRIPLE-POLE

10 Amperes, 125 Volts

020112	26	Solid	Plain	10	11	1.90
020113	126	Slotted	Plain	10	11	1.90
020114	226	Solid	Indicating	10	11	2.00
020115	326	Slotted	Indicating	10	11	2.00

Holes for supporting screws are spaced $2\frac{7}{16}$ in. on centers. Diam. of base, $2\frac{11}{16}$ in.

30 Amperes, 250 Volts

68181	2655	Solid	Plain	10	10	2.90
68182	2656	Slotted	Plain	10	10	2.90
68183	2657	Solid	Indicating	10	10	3.00
68184	2658	Slotted	Indicating	10	10	3.00

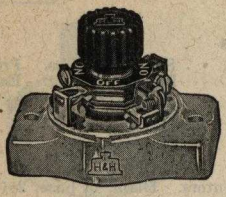
Holes for supporting screws are spaced $3\frac{3}{16}$ in. on centers. Diam. of base, $4\frac{1}{4}$ in.

Above switches can be fitted with a lock by removing the handle and using universal lock attachment.

H & H SURFACE SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

TAPLET AND WOOD MOLDING SWITCHES

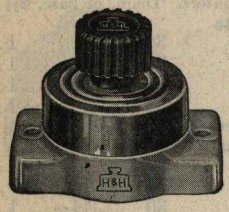


No. 2544

Switches for use with Paiste Pipe Taplets or with wood molding.

Trade No.	Mfrs. No.	Style	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
Single-Pole—5 Amperes, 125 Volts; 3 Amperes, 250 Volts						
68195	2541	.....	Plain	100	41	$0.36
68196	2542	.....	Indicating	100	41	.40
Double-Pole—5 Amperes, 250 Volts						
68197	2543	.....	Plain	100	43	.66
68198	2544	.....	Indicating	100	43	.76
Three-Way—5 Amperes, 125 Volts; 3 Amperes, 250 Volts						
68199	2545	.....	Plain	100	43	.66

Holes for supporting screws are spaced $2\frac{9}{32}$ inches on centers.



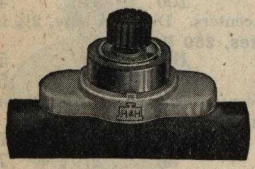
No. 2545

SWITCHES FOR MOUNTING ON ½-INCH CONDULETS

Single-Pole—5 Amperes, 125 Volts; 3 Amperes, 250 Volts						
68200	3003	.....	Plain	100	42	.36
68201	3030	.....	Indicating	100	42	.40

Holes for supporting screws are spaced $1\frac{33}{64}$ inches on centers.

METAL MOLDING SWITCHES



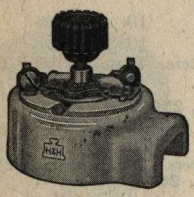
No. 3030

Single-Pole—5 Amperes, 125 Volts; 3 Amperes, 250 Volts						
020116	2291	Single-end	Plain	100	40	.36
020117	2391	Single-end	Indicating	100	40	.40
020118	2292	Double-end	Plain	100	43	.36
020119	2392	Double-end	Indicating	100	43	.40

Holes for supporting screws are spaced $1\frac{13}{32}$ inches on centers.

Single-Pole—10 Amperes, 125 Volts; 5 Amperes, 250 Volts						
064334	2351	Single-end	Plain	100	40	.58
064335	2352	Single-end	Indicating	100	40	.64
064336	2353	Double-end	Plain	100	40	.58
064337	2354	Double-end	Indicating	100	40	.64

Holes for supporting screws are spaced $1\frac{3}{4}$ inches on centers.



No. 2291

Double-Pole—5 Amperes, 250 Volts						
68202	2296	Single-end	Plain	100	43	.66
68203	2396	Single-end	Indicating	100	43	.76
020122	2297	Double-end	Plain	100	45	.66
020123	2397	Double-end	Indicating	100	45	.76

Holes for supporting screws are spaced $1\frac{7}{16}$ inches on centers.

Double-Pole—10 Amperes, 250 Volts						
68204	2355	Single-end	Plain	100	42	.76
68205	2356	Single-end	Indicating	100	42	.86
064338	2357	Double-end	Plain	100	42	.76
064339	2358	Double-end	Indicating	100	42	.86

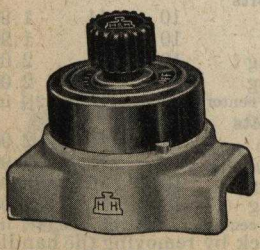
Holes for supporting screws are spaced $1\frac{3}{4}$ inches on centers.

Three-Way—5 Amperes, 125 Volts; 3 Amperes, 250 Volts						
020124	2298	Single-end	Plain	100	43	.66
020125	2299	Double-end	Plain	100	45	.66

Holes for supporting screws are spaced $1\frac{7}{16}$ inches on centers.

Three-Way—10 Amperes, 125 Volts; 5 Amperes, 250 Volts						
064340	2359	Single-end	Plain	100	42	.76
064341	2360	Double-end	Plain	100	42	.76

Holes for supporting screws are spaced $1\frac{3}{4}$ inches on centers.



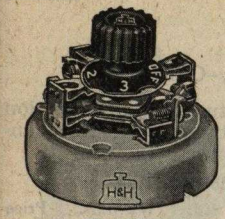
No. 2397

The above switches can be converted into lock switches by the use of the lock attachments.

H & H SURFACE SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

ELECTROLIER SWITCHES



No. 325

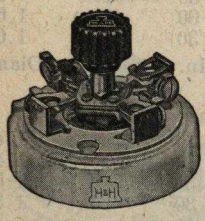
THREE SECTIONS—CONNECTIONS 1, -1 & 2, -1 & 2 & 3, -OFF

These switches operate as follows: First turn connects section one. Second turn connects sections one and two. Third turn connects sections one, two and three. Fourth turn, off.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
020100	25	Solid	Plain	30	17	$0.90
020101	125	Slotted	Plain	30	17	.90
020102	225	Solid	Indicating	30	17	1.00
020103	325	Slotted	Indicating	30	17	1.00

Holes for supporting screws are spaced 1¾ inches on centers. Diameter of base, 2 15/32 inches.

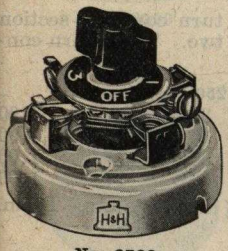


No. 2615

15 Amperes, 125 Volts; 10 Amperes, 250 Volts

68229	2501	Solid	Plain	30	30	1.40
68230	2502	Slotted	Plain	30	30	1.40
68231	2503	Solid	Indicating	30	31	1.50
68232	2504	Slotted	Indicating	30	31	1.50

Holes for supporting screws are spaced 2 5/32 inches on centers. Diameter of base, 3 1/16 inches.



No. 2728

THREE SECTIONS—CONNECTIONS 1, -2, -3, -OFF

These switches operate as follows: First turn connects section one. Second turn connects section two. Third turn connects section three. Fourth turn, off.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

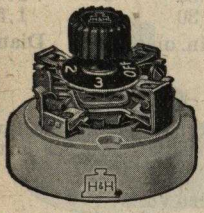
68233	2615	Solid	Plain	30	17	.90
68234	2616	Slotted	Plain	30	17	.90
68235	2617	Solid	Indicating	30	17	1.00
68236	2618	Slotted	Indicating	30	17	1.00

Holes for supporting screws are spaced 1¾ inches on centers. Diameter of base, 2 15/32 inches.

15 Amperes, 125 Volts; 10 Amperes, 250 Volts

68237	2725	Solid	Plain	30	29	1.40
68238	2726	Slotted	Plain	30	29	1.40
68239	2727	Solid	Indicating	30	29	1.50
68240	2728	Slotted	Indicating	30	29	1.50

Holes for supporting screws are spaced 2 5/32 inches on centers. Diameter of base, 3 1/16 inches.



No. 2663

TWO SECTIONS—CONNECTIONS 1, -2, -1 & 2, -OFF

These switches operate as follows: First turn connects section one. Second turn connects section two. Third turn connects sections one and two. Fourth turn, off.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

68241	2661	Solid	Plain	30	17	.76
68242	2662	Slotted	Plain	30	17	.76
68243	2663	Solid	Indicating	30	17	.86
68244	2664	Slotted	Indicating	30	17	.86

Holes for supporting screws are spaced 1¾ inches on centers. Diameter of base, 2 15/32 inches.

15 Amperes, 125 Volts; 10 Amperes, 250 Volts

68245	2669	Solid	Plain	30	30	1.40
68246	2670	Slotted	Plain	30	30	1.40
68247	2671	Solid	Indicating	30	30	1.50
68248	2672	Slotted	Indicating	30	30	1.50

Holes for supporting screws are spaced 2 5/32 inches on centers. Diameter of base, 3 1/16 inches.

The above switches may be converted into lock switches by the use of lock attachments.

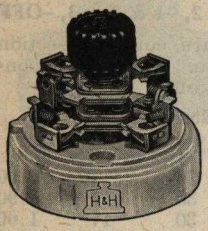


No. 2671

H & H SURFACE SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

TWO-SECTION ELECTROLIER SWITCHES



No. 429

CONNECTIONS 1, -1 & 2, -2, -OFF

These switches operate as follows: First turn connects section one. Second turn connects sections one and two. Third turn connects section two. Fourth turn, off.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

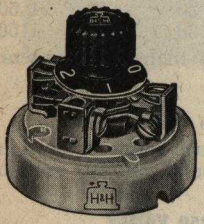
Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
020108	429	Solid	Plain	30	17	$0.90
020109	529	Slotted	Plain	30	17	.90
020110	629	Solid	Indicating	30	17	1.00
020111	729	Slotted	Indicating	30	17	1.00

Holes for supporting screws are spaced 1¾ in. on centers. Diam. of base, 2 15/32 in.

15 Amperes, 125 Volts; 10 Amperes, 250 Volts

68259	2598	Solid	Plain	30	30	1.40
68260	2599	Slotted	Plain	30	30	1.40
68261	2600	Solid	Indicating	30	30	1.50
68262	2591	Slotted	Indicating	30	30	1.50

Holes for supporting screws are spaced 2 5/32 in. on centers. Diam. of base, 3 1/16 in.



No. 329

CONNECTIONS 1, -1 & 2, -1, -OFF

These switches operate as follows: First turn connects section one. Second turn connects sections one and two. Third turn connects section one. Fourth turn, off.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

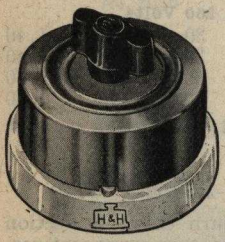
020104	29	Solid	Plain	30	17	.90
020105	129	Slotted	Plain	30	17	.90
020106	229	Solid	Indicating	30	17	1.00
020107	329	Slotted	Indicating	30	17	1.00

Holes for supporting screws are spaced 1¾ in. on centers. Diam. of base, 2 15/32 in.

15 Amperes, 125 Volts; 10 Amperes, 250 Volts

68263	2505	Solid	Plain	30	30	1.40
68264	2506	Slotted	Plain	30	30	1.40
68265	2507	Solid	Indicating	30	30	1.50
68266	2508	Slotted	Indicating	30	30	1.50

Holes for supporting screws are spaced 2 5/32 in. on centers. Diam. of base, 3 1/16 in.



No. 2505

CONNECTIONS 1, -OFF, -2, -OFF

These switches operate as follows: First turn connects section one. Second turn, off. Third turn connects section two. Fourth turn, off.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

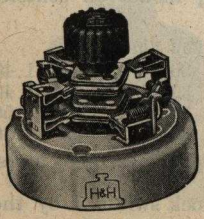
68267	2721	Solid	Plain	30	17	.90
68268	2722	Slotted	Plain	30	17	.90
68269	2723	Solid	Indicating	30	17	1.00
68270	2724	Slotted	Indicating	30	17	1.00

Holes for supporting screws are spaced 1¾ in. on centers. Diam. of base, 2 15/32 in.

15 Amperes, 125 Volts; 10 Amperes, 250 Volts

68271	2594	Solid	Plain	30	30	1.40
68272	2595	Slotted	Plain	30	30	1.40
68273	2596	Solid	Indicating	30	30	1.50
68274	2597	Slotted	Indicating	30	30	1.50

Holes for supporting screws are spaced 2 5/32 in. on centers. Diam. of base, 3 1/16 in.



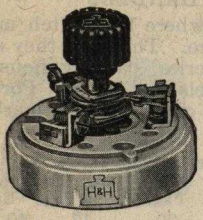
No. 2721

The above switches can be converted into lock switches by the use of lock attachments.

H & H SURFACE SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

TWO-SECTION ELECTROLIER SWITCHES



No. 2611

CONNECTIONS 1, -2, -OFF

These switches operate as follows: First turn connects section one. Second turn connects section two. Third turn, off.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

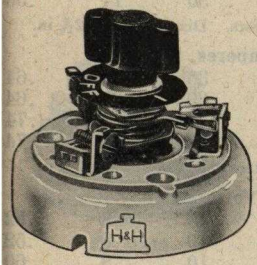
Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
68285	2611	Solid	Plain	30	17	$0.90
68286	2612	Slotted	Plain	30	17	.90
68287	2613	Solid	Indicating	30	17	1.00
68288	2614	Slotted	Indicating	30	17	1.00

There are three holes for supporting screws spaced on a circle $1\frac{3}{4}$ in. in diameter. Diam. of base, $2\frac{15}{32}$ in.

15 Amperes, 125 Volts; 10 Amperes, 250 Volts

68289	2496	Solid	Plain	30	38	1.70
68290	2497	Slotted	Plain	30	38	1.70
68291	2498	Solid	Indicating	30	38	1.80
68292	2499	Slotted	Indicating	30	38	1.80

There are three holes for supporting screws spaced on a circle $2\frac{9}{16}$ in. in diameter. Diam. of base, $3\frac{1}{2}$ in.



No. 2499

CONNECTIONS 1 & 2, -1, -OFF

These switches operate as follows: First turn connects sections one and two. Second turn connects section one. Third turn, off.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

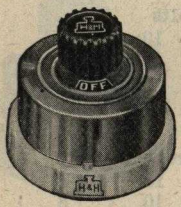
68293	2607	Solid	Plain	30	17	.90
68294	2608	Slotted	Plain	30	17	.90
68295	2609	Solid	Indicating	30	17	1.00
69296	2610	Slotted	Indicating	30	17	1.00

There are three holes for supporting screws spaced on a circle $1\frac{3}{4}$ in. in diameter. Diam. of base, $2\frac{15}{32}$ in.

15 Amperes, 125 Volts; 10 Amperes, 250 Volts

68297	2486	Solid	Plain	30	38	1.70
68298	2487	Slotted	Plain	30	38	1.70
68299	2488	Solid	Indicating	30	39	1.80
68300	2489	Slotted	Indicating	30	39	1.80

There are three holes for supporting screws spaced on a circle $2\frac{9}{16}$ in. in diameter. Diam. of base, $3\frac{1}{2}$ in.



No. 2609

CONNECTIONS 1, -1 & 2, -OFF

These switches operate as follows: First turn connects section one. Second turn connects sections one and two. Third turn, off.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

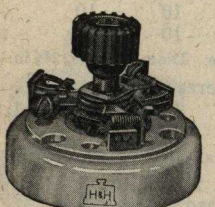
68301	2602	Solid	Plain	30	16	.90
68302	2603	Slotted	Plain	30	16	.90
68303	2604	Solid	Indicating	30	16	1.00
68305	2605	Slotted	Indicating	30	16	1.00

There are three holes for supporting screws spaced on a circle $1\frac{3}{4}$ in. in diameter. Diam. of base, $2\frac{15}{32}$ in.

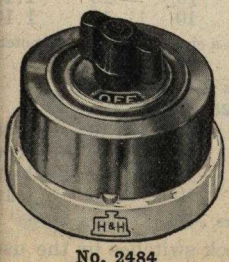
15 Amperes, 125 Volts; 10 Amperes, 250 Volts

68307	2482	Solid	Plain	30	39	1.70
68309	2483	Slotted	Plain	30	39	1.70
68311	2484	Solid	Indicating	30	39	1.80
68313	2485	Slotted	Indicating	30	39	1.80

There are three holes for supporting screws spaced on a circle $2\frac{9}{16}$ in. in diameter. Diam. of base, $3\frac{1}{2}$ in.



No. 2602



No. 2484

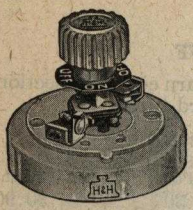
The above switches may be converted into lock switches by the use of lock attachments.

H & H SURFACE SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

WITH PORCELAIN COVERS AND HANDLES

These switches are for installation in places where the switch may be subjected to acid fumes or to excessive moisture. Therefore they are adapted for use in breweries, laboratories, tanneries, packing houses, laundries, paper mills, and in cellars, mines, tunnels and parks. Porcelain switches can be effectively mounted to match glazed tilings, marble panels and walls.

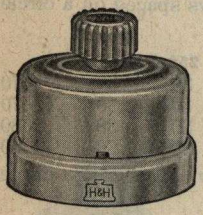


No. 2627

Single-Pole—5 Amperes, 125 Volts; 3 Amperes, 250 Volts

Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
68332	2625	Solid	Plain	30	17	$0.32
68333	2626	Slotted	Plain	30	17	.32
68334	2627	Solid	Indicating	30	17	.36
68335	2628	Slotted	Indicating	30	17	.36

Holes for supporting screws are spaced $1\frac{7}{16}$ in. on centers. Diam. of base, $2\frac{5}{16}$ in.

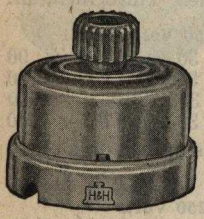


No. 2231

Single-Pole—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

020126	2231	Solid	Plain	30	25	.64
020127	2232	Slotted	Plain	30	25	.64
020128	2205	Solid	Indicating	30	25	.74
020129	2206	Slotted	Indicating	30	25	.74

Holes for supporting screws are spaced $1\frac{3}{4}$ in. on centers. Diam. of base, $2\frac{5}{8}$ in.



No. 2632

Double-Pole—5 Amperes, 250 Volts

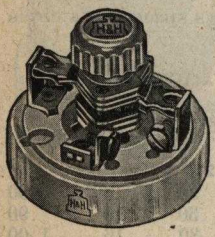
68336	2629	Solid	Plain	10	8	.52
68337	2630	Slotted	Plain	10	8	.52
68338	2631	Solid	Indicating	10	8	.60
68339	2632	Slotted	Indicating	10	8	.60

Holes for supporting screws are spaced $1\frac{7}{16}$ in. on centers. Diam. of base, $2\frac{5}{16}$ in.

Double-Pole—10 Amperes, 250 Volts

020130	2244	Solid	Plain	10	9	.82
020131	2245	Slotted	Plain	10	9	.82
020132	2207	Solid	Indicating	10	10	.92
020133	2208	Slotted	Indicating	10	10	.92

Holes for supporting screws are spaced $1\frac{3}{4}$ in. on centers. Diam. of base, $2\frac{5}{8}$ in.



No 2244

Three-Way—5 Amperes, 125 Volts; 3 Amperes, 250 Volts

68340	2633	Solid	Plain	10	8	.52
68341	2634	Slotted	Plain	10	8	.52

Holes for supporting screws are spaced $1\frac{7}{16}$ in. on centers. Diam. of base, $2\frac{5}{16}$ in.

Three-Way—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

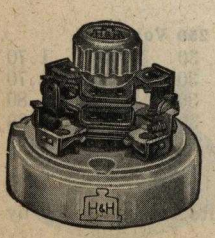
020134	2209	Solid	Plain	10	10	.92
020135	2210	Slotted	Plain	10	10	.92

Holes for supporting screws are spaced $1\frac{3}{4}$ in. on centers. Diam. of base, $2\frac{5}{8}$ in.

Four-Way—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

020136	2234	Solid	Plain	10	9	1.02
020137	2235	Slotted	Plain	10	9	1.02

Holes for supporting screws are spaced $1\frac{3}{4}$ in. on centers. Diam. of base, $2\frac{5}{8}$ in.



No. 2240

Three-section Electrolier—Connections, 1, 2, 3, -Off
10 Amperes, 125 Volts; 5 Amperes, 250 Volts

68342	2747	Solid	Plain	10	10	1.06
68343	2748	Slotted	Plain	10	10	1.06
68344	2749	Solid	Indicating	10	10	1.16
68345	2750	Slotted	Indicating	10	10	1.16

There are three holes for supporting screws, spaced on a circle $1\frac{3}{4}$ in. in diameter. Diam. of base, $2\frac{5}{8}$ in.

Three-section Electrolier—Connections 1,-1 & 2, -1 & 2 & 3, -Off
10 Amperes, 125 Volts; 5 Amperes, 250 Volts

020138	2240	Solid	Plain	10	9	1.06
020139	2241	Slotted	Plain	10	9	1.06
020140	2242	Solid	Indicating	10	9	1.16
020141	2243	Slotted	Indicating	10	9	1.16

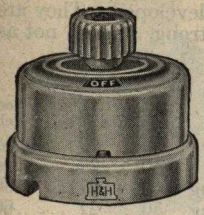
Holes for supporting screws are spaced $1\frac{3}{4}$ in. on centers. Diam. of base, $2\frac{5}{8}$ in.

The above switches may be converted into lock switches by the use of lock attachments.

H & H SURFACE SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

ELECTROLIER TYPE SWITCHES WITH PORCELAIN COVERS AND HANDLES



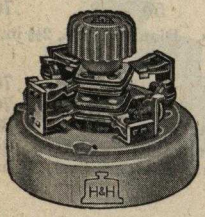
No. 2676

Two Sections—Connections 1, -2, -1 & 2, -Off

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
68356	2673	Solid	Plain	10	10	$0.96
68357	2674	Slotted	Plain	10	10	.96
68358	2675	Solid	Indicating	10	10	1.06
68359	2676	Slotted	Indicating	10	10	1.06

Holes for supporting screws are spaced 1¾ in. on centers. Diam. of base, 2⅝ in.



No. 2246

Two Sections—Connections 1, -1 & 2, -1, -Off

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

020142	2236	Solid	Plain	10	9	.96
020143	2237	Slotted	Plain	10	9	.96
020144	2238	Solid	Indicating	10	9	1.06
020145	2239	Slotted	Indicating	10	9	1.06

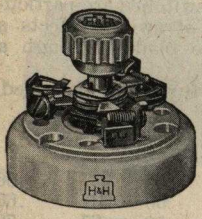
Holes for supporting screws are spaced 1¾ in. on centers. Diam. of base, 2⅝ in.

Two Sections—Connections 1, -1 & 2, -2, -Off

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

020020	2246	Solid	Plain	10	9	.96
020021	2247	Slotted	Plain	10	9	.96
020022	2248	Solid	Indicating	10	9	1.06
020023	2249	Slotted	Indicating	10	9	1.06

Holes for supporting screws are spaced 1¾ in. on centers. Diam. of base, 2⅝ in.



No. 2731

Two Sections—Connections 1, -2, -Off

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

68360	2739	Solid	Plain	10	10	.96
68361	2740	Slotted	Plain	10	10	.96
68362	2741	Solid	Indicating	10	10	1.06
68363	2742	Slotted	Indicating	10	10	1.06

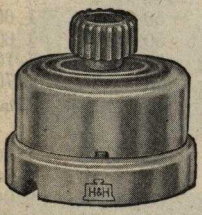
There are three holes for supporting screws spaced on a circle 1¾ in. in diameter. Diam. of base, 2⅝ in.

Two Sections—Connections 1, -1 & 2, -Off

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

68364	2731	Solid	Plain	10	10	.96
68365	2732	Slotted	Plain	10	10	.96
68366	2733	Solid	Indicating	10	10	1.06
68367	2734	Slotted	Indicating	10	10	1.06

There are three holes for supporting screws spaced on a circle 1¾ in. in diameter. Diam. of base, 2⅝ in.



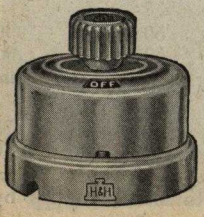
No. 2736

Two Sections—Connections 1 & 2, -1, -Off

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

68368	2735	Solid	Plain	10	10	.96
68369	2736	Slotted	Plain	10	10	.96
68370	2737	Solid	Indicating	10	10	1.06
68371	2738	Slotted	Indicating	10	10	1.06

There are three holes for supporting screws spaced on a circle 1¾ in. in diameter. Diam. of base, 2⅝ in.



No. 2746

Two Sections—Connections 1, -Off, 2, -Off

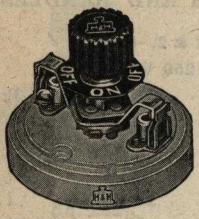
10 Amperes, 125 Volts; 5 Amperes, 250 Volts

68416	2743	Solid	Plain	10	10	.96
68417	2744	Slotted	Plain	10	10	.96
68418	2745	Solid	Indicating	10	10	1.06
68419	2746	Slotted	Indicating	10	10	1.06

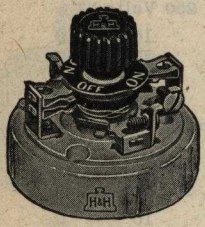
There are three holes for supporting screws spaced on a circle 1¾ in. in diameter. Diam. of base, 2⅝ in.

The above switches may be converted into lock switches by the use of lock attachments.

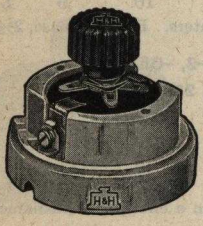
H & H 600-VOLT SURFACE SWITCHES



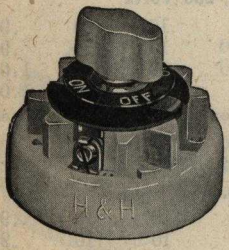
No. 220½



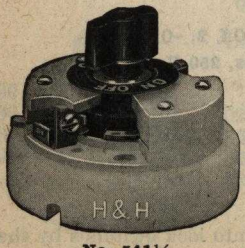
No. 227



No. 150½



No. 2166



No. 541½

SWITCHES WITHOUT BARRIERS

The switches listed below are the 600-volt switches that were marketed before the barrier switches were developed. They are conservatively rated and are mechanically strong, though not as efficient as the barrier switches.

Single-pole—3 Amperes

Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
038523	20½	Solid	Plain	50	27	$0.54
038524	120½	Slotted	Plain	50	27	.54
038525	220½	Solid	Indicating	50	27	.60
038526	320½	Slotted	Indicating	50	27	.60

Holes for supporting screws are spaced 1¾ in. on centers. Diam. of base, 2⅛ in.

Three-way—1 Ampere

038531	23½	Solid	Plain	50	25	.70
038532	123½	Slotted	Plain	50	25	.70

Holes for supporting screws are spaced 1¾ in. on centers. Diam. of base, 2⅛ in.

Two-circuit—3 Amperes

038533	27	Solid	Plain	50	27	.76
038534	127	Slotted	Plain	50	27	.76
038535	227	Solid	Indicating	50	27	.86
038536	327	Slotted	Indicating	50	27	.86

Holes for supporting screws are spaced 1¾ in. on centers. Diam. of base, 2⅛ in.

BARRIER TYPE

Made especially for use on electric railway cars, to control the air brake, headlight, heater and incandescent circuits.

All H & H Barrier 600-volt Switches will carry overloads in excess of their rated capacity. The barrier switches are particularly efficient under heavy loads. This type of switch affects a blow-out of the arc, by swiftly rotating the blades through a narrow slot in the porcelain barrier.

Special 600-volt switches not listed can be furnished, if desired.

SINGLE-POLE

5 Amperes

020031	501½	Solid	Plain	50	37	.66
020032	1501½	Slotted	Plain	50	37	.66
020033	2501½	Solid	Indicating	50	37	.76
020034	3501½	Slotted	Indicating	50	37	.76

Holes for supporting screws are spaced 1⅝ in. on centers. Diam. of base, 2⅛ in.

10 Amperes

020035	2164	Solid	Plain	50	74	1.60
020036	2165	Slotted	Plain	50	74	1.60
020037	2166	Solid	Indicating	50	74	1.70
020038	2167	Slotted	Indicating	50	74	1.70

Holes for supporting screws are spaced 2 7/16 in. on centers. Diam. of base, 3 3/16 in.

20 Amperes

020039	2411½	Solid	Plain	50	76	1.90
020040	3411½	Slotted	Plain	50	76	1.90
020041	4411½	Solid	Indicating	50	76	2.00
020042	5411½	Slotted	Indicating	50	76	2.00

Holes for supporting screws are spaced 2 7/16 in. on centers. Diam. of base, 3½ in.

THREE-WAY

5 Amperes

020047	531½	Solid	Plain	50	37	.90
020048	1531½	Slotted	Plain	50	37	.90

Holes for supporting screws are spaced 1⅝ in. on centers. Diam. of base, 2⅛ in.

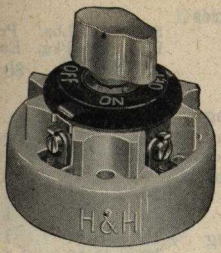
10 Amperes

020049	2172	Solid	Plain	50	74	1.70
020050	2173	Slotted	Plain	50	74	1.70

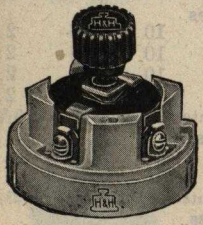
Holes for supporting screws are spaced 2 7/16 in. on centers. Diam. of base, 3 3/16 in.

The above switches can be converted into lock switches by the use of lock attachments.

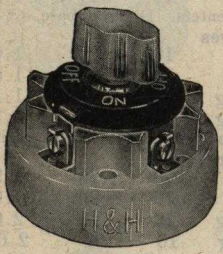
H & H 600-VOLT SURFACE BARRIER SWITCHES



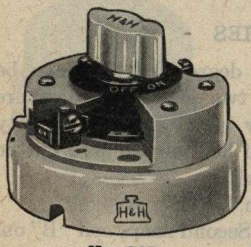
No. 2170



No. 57



No. 2176



No. 347



No. 2338

DOUBLE-POLE SWITCHES

5 Amperes

Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
68479	3015	Solid	Plain	50	36	$0.90
68480	3016	Slotted	Plain	50	36	.90
68481	3017	Solid	Indicating	50	36	1.00
68482	3018	Slotted	Indicating	50	36	1.00

Holes for supporting screws are spaced $1\frac{25}{32}$ inches on centers. Diameter of base, $2\frac{15}{32}$ inches.

10 Amperes

020043	2168	Solid	Plain	50	74	1.80
020044	2169	Slotted	Plain	50	74	1.80
020045	2170	Solid	Indicating	50	74	1.90
020046	2171	Slotted	Indicating	50	74	1.90

Holes for supporting screws are spaced $2\frac{7}{16}$ inches on centers. Diameter of base, $3\frac{3}{16}$ inches.

TWO-CIRCUIT SWITCHES

Used to control combination arc-incandescent headlights and operate as follows: First snap, arc. Second snap, off. Third snap, incandescent. Fourth snap, off.

Also used to alternately throw the front and rear incandescent headlights and tail lights into circuit and for similar combinations of lights.

5 Amperes

038501	57	Solid	Plain	50	37	.90
038502	157	Slotted	Plain	50	37	.90
038503	257	Solid	Indicating	50	37	1.00
038504	357	Slotted	Indicating	50	37	1.00

Holes for supporting screws are spaced $1\frac{25}{32}$ inches on centers. Diameter of base, $2\frac{15}{32}$ inches.

10 Amperes

038505	2174	Solid	Plain	50	74	1.70
038506	2175	Slotted	Plain	50	74	1.70
038507	2176	Solid	Indicating	50	74	1.80
038508	2177	Slotted	Indicating	50	74	1.80

Holes for supporting screws are spaced $2\frac{7}{16}$ inches on centers. Diameter of base, $3\frac{3}{16}$ inches.

20 Amperes

038509	47	Solid	Plain	50	76	1.90
038510	147	Slotted	Plain	50	76	1.90
038511	247	Solid	Indicating	50	76	2.00
038512	347	Slotted	Indicating	50	76	2.00

Holes for supporting screws are spaced $2\frac{7}{16}$ inches on centers. Diameter of base, $3\frac{1}{2}$ inches.

The center spindle of the above 20-ampere switches is not insulated from the current-carrying parts. As the handle used is of porcelain, it effectively insulates the spindle from the user. The lock attachment, however, being of metal, cannot be used on this one style of switch.

FUSED SWITCHES

These switches are protected by a 5-ampere, 600-volt fuse. The cover and base are of chocolate color glazed porcelain.

5 Amperes

045995	2335	Single-pole	Indicating	25	55	1.50
045996	2336	Three-way	Plain	25	55	1.50
045997	2338	Two-circuit	Indicating	25	55	1.50
045998	2319	Encl. Fuses, 5 amps. 600 volts		100	1	.40

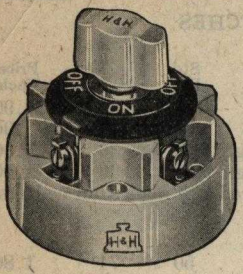
Holes for supporting screws are spaced $3\frac{1}{4}$ inches on centers.

Above prices are for switches without fuses. Fuses will not be shipped unless specified.

All the above switches, except Nos. 47, 147, 247 and 347, may be converted into lock switches by the use of lock attachments.

H & H 600-VOLT SURFACE SWITCHES

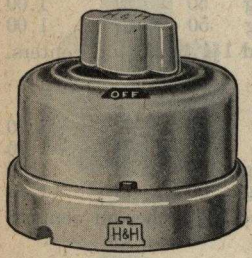
BARRIER SWITCHES, WITH PORCELAIN COVERS AND HANDLES



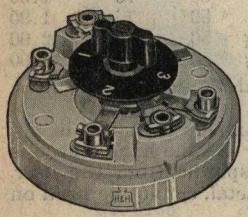
No. 2519



No. 2515



No. 2524



No. 800



No. 162

Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
Single-Pole—5 Amperes						
064345	2421	Solid	Plain	10	11	$0.82
064346	2422	Slotted	Plain	10	11	.82
064347	2423	Solid	Indicating	10	11	.92
064348	2424	Slotted	Indicating	10	11	.92
Holes for supporting screws are spaced 1 23/32 in. on centers. Diam. of base, 2 5/8 in.						
Single-Pole—10 Amperes						
68507	2511	Solid	Plain	10	17	1.85
68508	2512	Slotted	Plain	10	17	1.85
68509	2513	Solid	Indicating	10	17	1.95
68510	2514	Slotted	Indicating	10	17	1.95
Holes for supporting screws are spaced 2 7/16 in. on centers. Diam. of base, 3 5/16 in.						
Double-Pole—10 Amperes						
68511	2517	Solid	Plain	10	18	2.05
68512	2518	Slotted	Plain	10	18	2.05
68513	2519	Solid	Indicating	10	18	2.15
68514	2520	Slotted	Indicating	10	18	2.15
Holes for supporting screws are spaced 2 7/16 in. on centers. Diam. of base, 3 5/16 in.						
Three-Way—5 Amperes						
064349	2425	Solid	Plain	10	10	1.06
064350	2426	Slotted	Plain	10	10	1.06
Holes for supporting screws are spaced 1 23/32 in. on centers. Diam. of base, 2 5/8 in.						
Three-Way—10 Amperes						
68515	2515	Solid	Plain	10	17	1.95
68516	2516	Slotted	Plain	10	17	1.95
Holes for supporting screws are spaced 2 7/16 in. on centers. Diam. of base, 3 5/16 in.						
Two-Circuit—5 Amperes						
064351	2427	Solid	Plain	10	10	1.00
064352	2428	Slotted	Plain	10	10	1.00
064353	2429	Solid	Indicating	10	10	1.10
064354	2430	Slotted	Indicating	10	10	1.10
Holes for supporting screws are spaced 1 23/32 in. on centers. Diam. of base, 2 5/8 in.						
Two-Circuit—10 Amperes						
68517	2521	Solid	Plain	10	20	1.95
68518	2522	Slotted	Plain	10	20	1.95
68519	2523	Solid	Indicating	10	20	2.05
68520	2524	Slotted	Indicating	10	20	2.05
Holes for supporting screws are spaced 2 7/16 in. on centers. Diam. of base, 3 5/16 in						

HEATER SWITCHES

By the use of these switches three degrees of heat can be secured from one point of control when two electric heaters are used on a circuit. Thus, one heater may be of greater capacity than the other and the three intensities of heat are secured by the following successive connections of the switch:

Dial reads: "Low," "Medium," "High," "Off."

Operation: First snap, coil "A" on. Second snap, coil "B" on. Third snap, coil "A" and "B" on. Fourth snap, all off.

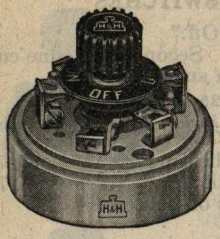
10 Amperes						
68493	2193	Solid	Plain	50	75	1.70
68494	2194	Slotted	Plain	50	75	1.70
68495	2195	Solid	Indicating	50	75	1.80
68496	2196	Slotted	Indicating	50	75	1.80
Holes for supporting screws are spaced 2 7/16 in. on centers. Diam. of base, 3 3/8 in.						
15 Amperes—(Not a Barrier Switch)						
038521	799	Solid	Plain	10	35	3.00
038522	800	Solid	Indicating	10	35	3.10
Holes for supporting screws are spaced 3 1/2 in. on centers. Diam. of base, 4 5/8 in.						
35 Amperes, 600 Volts—Reciprocating						
Can be snapped backward so that it is not necessary to go through all the heats to open the circuit.						
68497	162	Solid	Indicating	10	85	10.00
Holes for supporting screws are spaced 4 1/2 in. on centers. Diam. of base, 5 5/8 in.						

The above switches can be converted into lock switches by the use of lock attachments except No. 162.

H & H SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

DOUBLE-POLE, DOUBLE-THROW SWITCHES



No. 2623

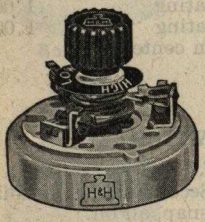
These switches give the same control of circuits as a double-pole, double-throw knife switch.

10 Amperes, 250 Volts, D. P. D. T.

These switches give the following connections: First snap, circuit No. 1. Second snap, off. Third snap, circuit No. 2. Fourth snap, off.

Trade No.	Mfrs. No.	Style Base	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
68430	2621	Solid	Plain	10	12	$2.40
68431	2622	Slotted	Plain	10	12	2.40
68432	2623	Solid	Indicating	10	12	2.50
68433	2624	Slotted	Indicating	10	12	2.50

Holes for supporting screws are spaced 2 1/16 in. on centers. Diam. of base, 2 11/16 in.



No. 3019

10 Amperes, 250 Volts, D. P. D. T.

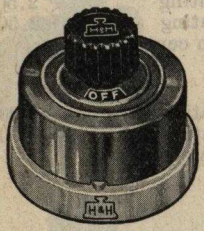
These switches have only three snaps, the blade rotating through 120 degrees at each snap and give the following connections: First snap, circuit No. 1. Second snap, circuit No. 2. Third snap, off.

68434	3025	Solid	Plain	10	12	2.40
68435	3026	Slotted	Plain	10	12	2.40
68436	3027	Solid	Indicating	10	12	2.50
68437	3028	Slotted	Indicating	10	12	2.50

Holes for supporting screws are spaced 2 1/16 in. on centers. Diam. of base, 2 11/16 in.

HEATER SWITCHES

SINGLE-POLE SERIES SWITCHES



No. 2813

Indicator reads "Low," "High," "Off."

Operation: First snap, both coils in series. Second snap, one coil cut out. Third snap, all off.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

68438	3019	Solid	Indicating	..	..	1.10
68439	3020	Slotted	Indicating	..	..	1.10

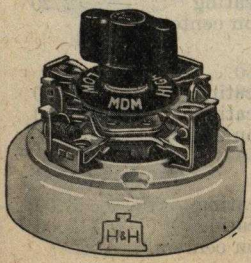
There are three supporting screw holes spaced on a circle 1 3/4 in. in diameter. Diam. of base, 2 15/32 in.

10 Amperes, 250 Volts

68440	2813	Solid	Indicating	..	..	1.50
68441	2814	Slotted	Indicating	..	..	1.50

Holes for supporting screws are spaced 2 1/16 in. on centers. Diam. of base, 2 11/16 in.

SINGLE-POLE MULTIPLE SWITCHES



No. 2199

Indicator reads "Low," "Medium," "High," "Off."

Operation: First snap, coil "A" on. Second snap, coil "B" on. Third snap, coils "A" and "B" on. Fourth snap, all off.

20 Amperes, 250 Volts

68442	2199	Solid	Indicating	..	..	2.00
68443	2200	Slotted	Indicating	..	..	2.00

Holes for supporting screws are spaced 2 7/16 in. on centers. Diam. of base, 3 3/16 in.

This style can be furnished with porcelain covers and handles. Mica insulation is used on all of the above heater switches.

H & H HEATER SWITCHES

NATIONAL ELECTRICAL CODE STANDARD



No. 2720

SINGLE-POLE SERIES PARALLEL SWITCHES

Indicator reads "High," "Medium," "Low," "Off."
Operation: First snap, two coils in multiple. Second snap, one coil cut out. Third snap, two coils in series. Fourth snap, all off.

2 Amperes, 250 Volts; 5 Amperes, 125 Volts

Trade No.	Mfrs. No.	Style Base	Style Cover	Price Each
68451	2720	Solid	Indicating	$0.72
68452	2305	Slotted	Indicating	.72

Supporting screw holes are spaced 1 7/16 inches on centers.
Diameter of base, 2 1/8 inches.

5 Amperes, 250 Volts; 10 Amperes, 125 Volts

68453	2592	Solid	Indicating	.86
68454	2578	Slotted	Indicating	.86

Supporting screw holes are spaced 1 3/4 inches on centers.
Diameter of base, 2 15/32 inches.

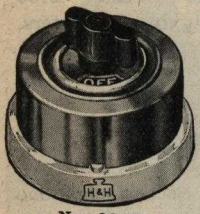
10 Amperes, 250 Volts

68455	2981	Solid	Indicating	1.00
68456	2982	Slotted	Indicating	1.00

Supporting screw holes are spaced 2 1/16 inches on centers.
Diameter of base, 2 11/16 inches.

DOUBLE-POLE SERIES PARALLEL SWITCHES

Indicator reads "High," "Medium," "Low," "Off."
Operation: First snap, two coils in multiple. Second snap, one coil cut out. Third snap, both coils in series. Fourth snap, all off.



No. 2860

10 Amperes, 250 Volts

68457	2860	Solid	Indicating	2.20
68458	2861	Slotted	Indicating	2.20

Supporting screw holes are spaced 2 3/16 inches on centers.
Diameter of base, 3 1/16 inches.

20 Amperes, 250 Volts

68459	2762	Solid	Indicating	2.50
68460	2763	Slotted	Indicating	2.50

Supporting screw holes are spaced 2 7/32 inches on centers.
Diameter of base, 3 1/8 inches.

35 Amperes, 250 Volts

68461	2764	Solid	Indicating	3.00
68462	2765	Slotted	Indicating	3.00

Supporting screw holes are spaced 2 23/32 inches on centers.
Diameter of base, 3 27/32 inches.

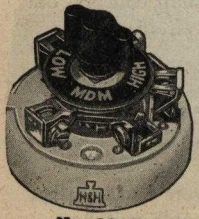
DOUBLE-POLE SERIES PARALLEL SWITCHES

Indicator reads "Low," "Medium," "High," "Off."
Operation: First snap, both coils in series. Second snap, one coil cut out. Third snap, two coils in multiple. Fourth snap, all off.

10 Amperes, 250 Volts

68463	2160	Solid	Indicating	2.20
68464	2857	Slotted	Indicating	2.20

Supporting screw holes are spaced 2 3/16 inches on centers.
Diameter of base, 3 1/8 inches.



No. 2160

20 Amperes, 250 Volts

68465	160	Solid	Indicating	2.50
68466	2761	Slotted	Indicating	2.50

Supporting screw holes are spaced 2 7/32 inches on centers
Diameter of base, 3 1/8 inches.

35 Amperes, 250 Volts

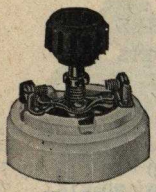
68467	2582	Solid	Indicating	3.00
68468	2587	Slotted	Indicating	3.00

Supporting screw holes are spaced 2 23/32 inches on centers.
Diameter of base, 3 27/32 inches.
Mica insulation is used on all of the above heater switches.

PERKINS SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



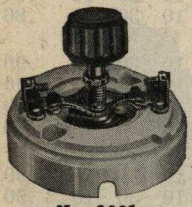
No. 2000

SINGLE-POLE SWITCHES

SMALL SIZE

5 Amperes, 125 Volts—3 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Outside Diam. of Base Inches	Sup. Screws Centered Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
038810	2000	Slotted	2	1 3/8	10	250	75	$0.28
038811	*2220	Solid	2	1 3/8	10	250	75	.28
038812	2047	Slotted, indicating	2	1 3/8	10	250	75	.32
038813	*2035	Solid, indicating	2	1 3/8	10	250	75	.32



No. 2001

LARGE SIZE

5 Amperes, 125 Volts—3 Amperes, 250 Volts

038814	2170	Solid	2 1/4	1 1/2	10	100	30	.36
038815	2002	Slotted	2 1/4	1 1/2	10	100	30	.36
038816	2254	Solid, indicating	2 1/4	1 1/2	10	100	30	.40
038817	2255	Slotted, indicating	2 1/4	1 1/2	10	100	30	.40



No 2455

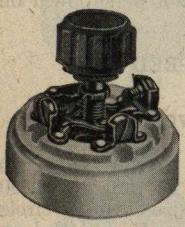
10 Amperes, 125 Volts—5 Amperes, 250 Volts

038818	2001	Slotted	2 7/16	1 23/32	10	100	45	.48
038819	†2221	Solid	2 7/16	1 23/32	10	100	45	.48
038820	2048	Slotted, indicating	2 7/16	1 23/32	10	100	45	.54
038821	†2036	Solid, indicating	2 7/16	1 23/32	10	100	45	.54

THREE-POINT SWITCHES

3 Amperes, 125 Volts—1 Ampere, 250 Volts

044052	*2455	Solid	2	1 3/8	10	100	25	.48
044053	2456	Slotted	2	1 3/8	10	100	25	.48



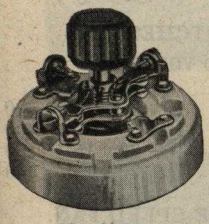
No. 2175

5 Amperes, 125 Volts—3 Amperes, 250 Volts

038822	2175	Solid	2 1/4	1 1/2	10	100	25	.56
038823	2027	Slotted	2 1/4	1 1/2	10	100	25	.56

10 Amperes, 125 Volts—5 Amperes, 250 Volts

038932	†2176	Solid	2 7/16	1 23/32	10	50	25	.76
038933	2030	Slotted	2 7/16	1 23/32	10	50	25	.76



No. 2176

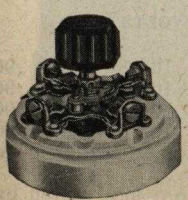
FOUR-POINT SWITCHES

Four-point switches are used in connection with two three-point switches where current is to be controlled from any one of more than two points. A four-point switch is installed between the three-point switches at each additional point.

Four-point switches can also be used individually as pole-changing switches.

5 Amperes, 125 Volts—2 Amperes, 250 Volts

038824	†2183	Solid	2 7/16	1 23/32	10	30	15	.86
038825	2033	Slotted	2 7/16	1 23/32	10	30	15	.86



No. 2183

*These switches can also be furnished on a base measuring 1¾ inches in diameter, which is likewise the diameter of the cover.

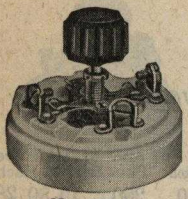
†These switches can also be furnished on a base measuring 2¼ inches in diameter, which is likewise the diameter of the cover.

Any of the above switches can be converted into a lock switch by removing the handle and substituting No. 2384 lock attachment.

PERKINS SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



No. 2216

TWO-CIRCUIT ELECTROLIER SWITCHES

10 AMPERES, 125 VOLTS—5 AMPERES, 250 VOLTS

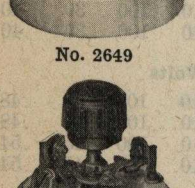
Operating 1-2-1 & 2-Off

Trade No.	Mfrs. No.	Style	Outside Diam. of Base Inches	Sup. Screws Cent. Inches	Carton	Std. Pkg.	Wt., Lbs. Std.Pkg.	Price Each
037161	*2216	Solid	2 7/16	1 23/32	10	30	15	$0.76
037162	2215	Slotted	2 7/16	1 23/32	10	30	15	.76
037163	*2188	Solid, indicating	2 7/16	1 23/32	10	30	15	.86
037164	2074	Slotted, indicating	2 7/16	1 23/32	10	30	15	.86
		Operating 1-1 & 2-1-Off						
121238	*2649	Solid	2 7/16	1 23/32	10	30	15	.90
121239	2650	Slotted	2 7/16	1 23/32	10	30	15	.90
121240	*2651	Solid, indicating	2 7/16	1 23/32	10	30	15	1.00
121241	2652	Slotted, indicating	2 7/16	1 23/32	10	30	15	1.00
		Operating 1-Off-2-Off						
121242	*2653	Solid	2 7/16	1 23/32	10	30	15	.90
121243	2654	Slotted	2 7/16	1 23/32	10	30	15	.90
121244	*2655	Solid, indicating	2 7/16	1 23/32	10	30	15	1.00
121245	2656	Slotted, indicating	2 7/16	1 23/32	10	30	15	1.00
		Operating 1-Off-1 & 2-Off						
121246	*2657	Solid	2 7/16	1 23/32	10	30	15	.90
121247	2658	Slotted	2 7/16	1 23/32	10	30	15	.90
121248	*2659	Solid, indicating	2 7/16	1 23/32	10	30	15	1.00
121249	2660	Slotted, indicating	2 7/16	1 23/32	10	30	15	1.00
		Operating 1-1 & 2-Off						
121250	†*2661	Solid	2 1/4	*	10	30	15	.90
121251	†2662	Solid, indicating	2 1/4	*	10	30	15	1.00

*There are three supporting screw holes equally spaced on a circle having a diameter of 1¾ inches. †These switches cannot be supplied on slotted bases.



No. 2649



No. 2653

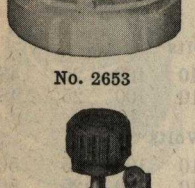
TWO-CIRCUIT ELECTROLIER OR TWO-SPEED FAN MOTOR SWITCHES

10 AMPERES, 125 VOLTS—5 AMPERES, 250 VOLTS

Operating 1-2-Off

121252	2663	Solid	2 1/4	....	10	30	15	.90
121253	2485	Solid, indicating	2 1/4	....	10	30	15	1.00

There are three supporting screw holes equally spaced on a circle having a diameter of 1¾ inches. These switches cannot be supplied on slotted bases.



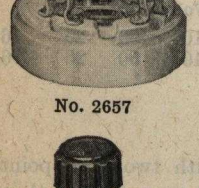
No. 2657

THREE-CIRCUIT ELECTROLIER SWITCHES

10 AMPERES, 125 VOLTS—5 AMPERES, 250 VOLTS

Operating 1-1 & 2-1 & 2 & 3-Off

037165	*2185	Solid	2 7/16	1 23/32	10	30	15	.90
037166	2070	Slotted	2 7/16	1 23/32	10	30	15	.90
037167	*2187	Solid, indicating	2 7/16	1 23/32	10	30	15	1.00
037168	2072	Slotted, indicating	2 7/16	1 23/32	10	30	15	1.00



No. 2663

THREE-CIRCUIT ELECTROLIER OR THREE-SPEED FAN MOTOR SWITCHES

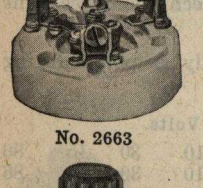
10 AMPERES, 125 VOLTS—5 AMPERES, 250 VOLTS

Operating 1-2-3-Off

121254	*2664	Solid	2 7/16	1 23/32	10	30	15	.90
121255	2665	Slotted	2 7/16	1 23/32	10	30	15	.90
121256	*2666	Solid, indicating	2 7/16	1 23/32	10	30	15	1.00
121257	2667	Slotted, indicating	2 7/16	1 23/32	10	30	15	1.00

*These switches can also be furnished on a base measuring 2¼ inches in diameter which is likewise the diameter of the cover.

Any of the above switches can be converted into a lock switch by removing the handle and substituting No. 2384 lock attachment.



No. 2185

PERKINS SWITCHES

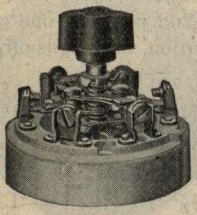
NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE H



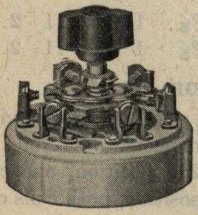
No. 2009



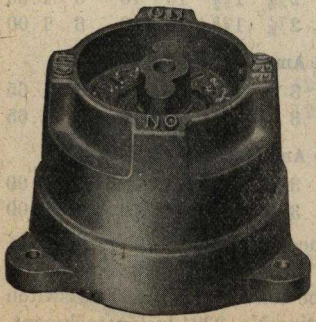
No. 2011



No. 2611



No. 2025



No. 2597

DOUBLE-POLE SWITCHES

5 Amperes, 250 Volts

Trade No.	Mfrs. No.	Style	Outside Diam. Base Inches	Sup. Screws Centered Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
037169	†2391	Solid	2	1⅜	10	100	30	$0.56
037170	2392	Slotted	2	1⅜	10	100	30	.56
037171	†2393	Solid, indicating	2	1⅜	10	100	30	.64
037172	2394	Slotted, indicating	2	1⅜	10	100	30	.64

10 Amperes, 250 Volts

037173	*2009	Solid	2 7/16	1 23/32	10	100	45	.66
037174	2017	Slotted	2 7/16	1 23/32	10	100	45	.66
037175	*2038	Solid, indicating	2 7/16	1 23/32	10	100	45	.76
037176	2050	Slotted, indicating	2 7/16	1 23/32	10	100	45	.76

20 Amperes, 250 Volts

037177	2011	Solid	3	2 3/16	10	30	25	1.40
037178	2019	Slotted	3	2 3/16	10	30	25	1.40
037179	2040	Solid, indicating	3	2 3/16	10	30	25	1.50
037180	2052	Slotted, indicating	3	2 3/16	10	30	25	1.50

30 Amperes, 250 Volts

037181	2013	Solid	3 9/16	2 9/16	1	30	30	1.70
037182	2021	Slotted	3 9/16	2 9/16	1	30	30	1.70
037183	2042	Solid, indicating	3 9/16	2 9/16	1	30	30	1.80
037184	2054	Slotted, indicating	3 9/16	2 9/16	1	30	30	1.80

50 Amperes, 250 Volts

037185	2015	Solid	4½	3 11/32	1	10	15	3.00
037186	2023	Slotted	4½	3 11/32	1	10	15	3.00
037187	2044	Solid, indicating	4½	3 11/32	1	10	15	3.10
037188	2056	Slotted, indicating	4½	3 11/32	1	10	15	3.10

DOUBLE-POLE, DOUBLE-THROW SWITCHES

10 Amperes, 250 Volts

105251	2611	Solid	2 11/16	2 1/16	10	10	7	2.40
105252	2612	Slotted	2 11/16	2 1/16	10	10	7	2.40
105253	2613	Solid, indicating	2 11/16	2 1/16	10	10	7	2.50
105254	2614	Slotted, indicating	2 11/16	2 1/16	10	10	7	2.50

TRIPLE-POLE SWITCHES

10 Amperes, 250 Volts

037189	2025	Solid	2 11/16	2 1/16	10	10	12	1.90
92495	2633	Slotted	2 11/16	2 1/16	10	10	12	1.90
037190	2046	Solid, indicating	2 11/16	2 1/16	10	10	12	2.00
92494	2634	Slotted, indicating	2 11/16	2 1/16	10	10	12	2.00

WITH CAST IRON COVER

20 Amperes, 250 Volts

These switches are particularly designed for use in controlling three-phase alternating current motors up to and including 2 horse power. The cast iron cover, which forms a part of the switch, is designed to be attached to Types PG and ZG condulets. The handle points to the words "On" and "Off," which are cast in the cover, thus making it an indicating switch. The switch is absolutely dust-tight, making it particularly suitable for use in textile mills.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Price Each
105255	2597	With cast iron cover	1	10	$4.00

†These switches can also be furnished on a base measuring 1¾ inches in diameter, which is likewise the diameter of the cover.

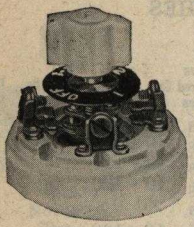
*These switches can also be furnished on a base measuring 2¼ inches in diameter, which is likewise the diameter of the cover.

All the above switches can be converted into lock switches by removing the handle and substituting No. 2384 lock attachment.

PERKINS SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



No. 2668

MULTIPLE HEATER SWITCHES, MICA INSULATED

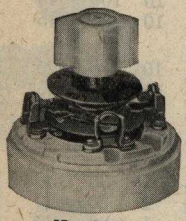
Single-pole

OPERATING LOW, MEDIUM, HIGH, OFF

These switches are used in connection with a heater having two coils, one of which generates more heat than the other. The switch connects these coils as follows: 1st position, small coil; 2nd position, large coil; 3rd position, both coils in parallel; 4th position, both coils off.

15 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Outside Diam. Base Inches	Sup. Screws Centered Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
121269	*2668	Solid, indicating...	2 7/16	1 23/32	10	10	5	$1.00
121270	2532	Slotted, indicating.	2 7/16	1 23/32	10	10	5	1.00



No. 2669

SERIES PARALLEL HEATER SWITCHES, MICA INSULATED

Single-pole

OPERATING HIGH, MEDIUM, LOW, OFF

These switches are for use in connection with a heater having two coils of equal capacity. The switch connects these coils as follows: 1st position, both coils in multiple; 2nd position, one coil only; 3rd position, two coils in series; 4th position, both coils off.

15 Amperes, 125 Volts—10 Amperes, 250 Volts

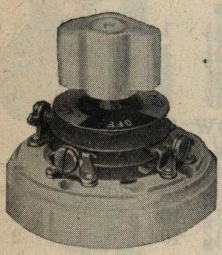
121271	*2669	Solid, indicating...	2 7/16	1 23/32	10	10	6	1.00
121272	2670	Slotted, indicating.	2 7/16	1 23/32	10	10	6	1.00

20 Amperes, 125 Volts—15 Amperes, 250 Volts

121273	2672	Solid, indicating...	3	2 3/16	10	10	8	1.65
121274	2673	Slotted, indicating.	3	2 3/16	10	10	7	1.65

30 Amperes, 125 Volts—20 Amperes, 250 Volts

121275	2675	Solid, indicating...	3 9/16	2 9/16	1	10	11	2.00
121276	2676	Slotted, indicating.	3 9/16	2 9/16	1	10	11	2.00



No. 2672

OPERATING LOW, MEDIUM, HIGH, OFF

These switches are for use in connection with a heater having two coils of equal capacity. The switch connects these coils as follows: 1st position, both coils in series; 2nd position, one coil only; 3rd position, two coils in multiple; 4th position, both coils off.

15 Amperes, 125 Volts—10 Amperes, 250 Volts

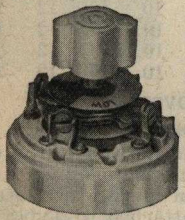
121277	*2570	Solid, indicating...	2 7/16	1 23/32	10	10	6	1.00
121278	2671	Slotted, indicating.	2 7/16	1 23/32	10	10	6	1.00

20 Amperes, 125 Volts—15 Amperes, 250 Volts

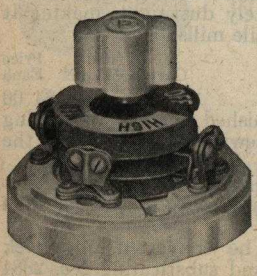
121279	2591	Solid, indicating...	3	2 3/16	10	10	8	1.65
121280	2674	Slotted, indicating.	3	2 3/16	10	10	8	1.65

30 Amperes, 125 Volts—20 Amperes, 250 Volts

121281	2571	Solid, indicating...	3 9/16	2 9/16	1	10	12	2.00
121282	2677	Slotted, indicating.	3 9/16	2 9/16	1	10	12	2.00



No. 2570



No. 2571

*This switch can also be furnished on a base measuring 2¼ inches in diameter, which is likewise the diameter of the cover.

Any of the above switches can be converted into a lock switch by removing the handle and substituting No. 2384 lock attachment.

PERKINS SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



No. 2619

The advantage of this construction is that the switch can be placed in locations from which the dial of the ordinary switch would not be visible.

ANGLE DIAL HEATER SWITCHES, MICA INSULATED

SINGLE-POLE

10 Amperes, 125 Volts—5 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Outside Diam. of Base Inches	Sup. Screws Centered Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
123934	*2637	Solid	2 7/16	1 23/32	10	100	45	$0.80
123935	2638	Slotted	2 7/16	1 23/32	10	100	45	.80

SERIES PARALLEL, SINGLE-POLE

OPERATING HIGH, MEDIUM, LOW, OFF

15 Amperes, 125 Volts—10 Amperes, 250 Volts



No. 2621

92496	*2619	Solid	2 7/16	1 23/32	10	100	45	1.00
92497	*2620	Slotted	2 7/16	1 23/32	10	100	45	1.00

20 Amperes, 125 Volts—15 Amperes, 250 Volts

123936	2679	Solid	3	2 3/16	10	50	75	1.65
123937	2680	Slotted	3	2 3/16	10	50	75	1.65

30 Amperes, 125 Volts—20 Amperes, 250 Volts

92498	2621	Solid	3 9/16	2 9/16	1	50	75	2.00
92499	2622	Slotted	3 9/16	2 9/16	1	50	75	2.00

INDICATING HANDLE HEATER SWITCHES, MICA INSULATED

In these switches the indication is obtained by means of a pointed handle which points to markings on the switch cover. Inasmuch as the pointed end of the handle can be distinguished at a greater distance than ordinary indications can be read and the distance which the handle moves with each change in the position of the switch is 90°, the operator very promptly is able to know the position of the switch at a glance.

SINGLE-POLE

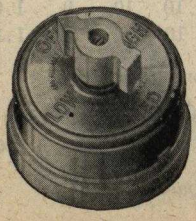
10 Amperes, 125 Volts—5 Amperes, 250 Volts

123938	2695	Solid	2 7/16	1 23/32	10	100	..	.80
123939	2696	Slotted	2 7/16	1 23/32	10	100	..	.80

SERIES PARALLEL, SINGLE-POLE

OPERATING HIGH, MEDIUM, LOW, OFF

15 Amperes, 125 Volts—10 Amperes, 250 Volts



No. 2635

123940	*2635	Solid	2 7/16	1 23/32	10	100	45	1.00
123941	*2636	Slotted	2 7/16	1 23/32	10	100	45	1.00

*These switches can be supplied on a base measuring 2¼ inches in diameter, which is likewise the diameter of the cover.

PERKINS SWITCHES

NATIONAL ELECTRICAL CODE STANDARD SCHEDULE H



No. 2601

PORCELAIN CAP SWITCHES, SMALL SIZE

Single-pole, 5 Amperes, 125 Volts—3 Amperes, 250 Volts

Trade No.	Mfrs. No.	Style	Outside Diam. of Base Inches	Sup. Screws Centered Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
92364	2601	Solid	2	1 3/8	10	30	12	$0.32
92365	2602	Slotted	2	1 3/8	10	30	12	.32
92366	2603	Solid, indicating	2	1 3/8	10	30	12	.36
92367	2604	Slotted, indicating	2	1 3/8	10	30	12	.36

Double-pole, 5 Amperes, 125 Volts—5 Amperes, 250 Volts

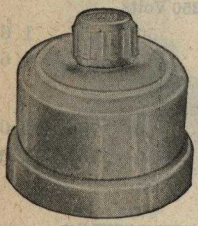
92368	2607	Solid	2	1 3/8	10	10	5	.52
92369	2608	Slotted	2	1 3/8	10	10	5	.52
92370	2609	Solid, indicating	2	1 3/8	10	10	5	.60
92371	2610	Slotted, indicating	2	1 3/8	10	10	5	.60

Three-point, 5 Amperes, 125 Volts—3 Amperes, 250 Volts

92372	2605	Solid	2	1 3/8	10	10	5	.52
92373	2606	Slotted	2	1 3/8	10	10	5	.52

PORCELAIN CAP SWITCHES, LARGE SIZE

These switches can also be supplied to make the same connections as Nos. 2649, 2653, 2657, 2661, 2664, 2668, 2669 and 2570 listed on other pages.



No. 2141

Single-pole, 10 Amperes, 125 Volts—5 Amperes, 250 Volts

037194	2141	Solid	2 1/2	1 23/32	10	30	15	.64
044048	2435	Indicating	2 1/2	1 23/32	10	30	15	.74

Double-pole, 10 Amperes, 250 Volts

037199	2139	Solid	2 1/2	1 23/32	10	10	9	.82
044051	2438	Indicating	2 1/2	1 23/32	10	10	9	.92

Three-point, 10 Amperes, 125 Volts—5 Amperes, 250 Volts

037195	2140	Solid	2 1/2	1 23/32	10	10	9	.92

Four-point, 5 Amperes, 125 Volts—2 Amperes, 250 Volts

037196	2142	Solid	2 1/2	1 23/32	10	10	9	1.02

Two-circuit Electrolier

10 Amperes, 125 Volts—5 Amperes, 250 Volts

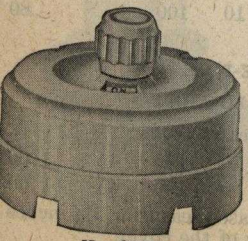
037197	2264	Solid	2 1/2	1 23/32	10	10	9	.96
044049	2436	Indicating	2 1/2	1 23/32	10	10	9	1.06

Three-circuit Electrolier

10 Amperes, 125 Volts—5 Amperes, 250 Volts

037198	2263	Solid	2 1/2	1 23/32	10	10	9	1.06
044050	2437	Indicating	2 1/2	1 23/32	10	10	9	1.16

The above switches cannot be furnished on slotted base.



No. 2076

Double-pole, Fusible, 10 Amperes, 125 Volts—10 Amperes, 250 Volts

037200	2076	*Fusible, indicating	3 1/2	1 15/16	1	10	15	1.60

This switch cannot be furnished on solid base.

*Not National Electrical Code Standard.

PERKINS SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



No. 2430

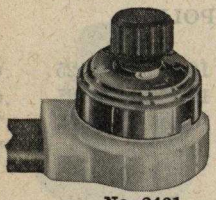
SWITCHES WITH COVERED BASE

Trade No.	Mfrs. No.	Cap., Amps. 125 Volts	Cap., Amps. 250 Volts	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
044054	2429	5	3	Single-pole	10	100	30	$0.36
044055	2430	5	3	Single-pole, ind.	10	100	30	.40
19814	2615	3	1	Three-point	10	100	35	.56
19815	2616	3	1	Four-point	10	50	18	.64
19816	2617	5	5	Double-pole	10	100	35	.64
19817	2618	5	5	Double-pole, ind.	10	100	35	.72

Standard finish is polished nickel or polished brass.

Outside diameter of base is $1\frac{15}{16}$ inches.

Holes for supporting screws are spaced $1\frac{3}{8}$ inches on centers.



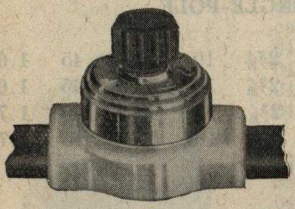
No. 2431

SWITCHES WITH BASES FOR NATIONAL METAL MOLDING

Single Pole

038826	2431	5	3	One-way base	10	100	40	.36
038828	2433	5	3	One-way base, ind.	10	100	40	.40
038827	2432	5	3	Two-way base	10	100	40	.36
038829	2434	5	3	Two-way base, ind.	10	100	40	.40

Holes for supporting screws are spaced $1\frac{11}{32}$ inches on centers.



No. 2432

SWITCHES WITH BASE FOR WOOD MOLDING AND ½ AND ¾-INCH PIPE TAPLETS

19807	2537	5	3	Single-pole	10	100	45	.36
19808	2538	5	3	Single-pole, ind.	10	100	45	.40
19809	2543	5	3	Three-point	10	100	45	.66
19810	2539	5	5	Double-pole	10	100	45	.66
19811	2549	5	5	Double-pole, ind.	10	100	45	.76

Holes for supporting screws are spaced $2\frac{9}{32}$ inches on centers.



No. 2538

SWITCHES WITH BASE FOR ½-INCH OBROUND CONDULETS

19812	2541	5	3	Single-pole	10	100	45	.36
19813	2542	5	3	Single-pole, ind.	10	100	45	.40

Holes for supporting screws are spaced $1\frac{1}{2}$ inches on centers.



No. 2542

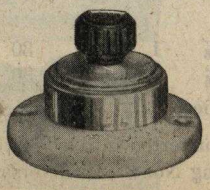
SWITCHES WITH BASE FOR No. 500 ADAPTIBOXES

121295	2690	5	3	Single-pole	10	100	..	.36
121296	2691	5	3	Single-pole, ind.	10	100	..	.40
121297	2692	10	5	Single-pole	10	50	..	.48
121298	2693	10	5	Single-pole, ind.	10	50	..	.54
121299	2694	10	5	Single-pole, pull.	10	20	..	1.00

Outside diameter of base is $2\frac{7}{8}$ inches.

Holes for supporting screws are spaced $2\frac{5}{16}$ inches on centers.

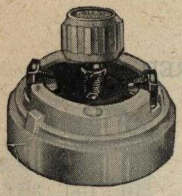
All the above switches can be converted into lock switches by removing the handle and substituting No. 2384 universal lock attachment.



No. 2690

PERKINS 600-VOLT SWITCHES

NATIONAL ELECTRICAL CODE STANDARD SCHEDULE H

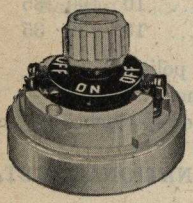


No. 2171

3 AMPERES, SINGLE-POLE

Trade No.	Mfrs. No.	Description	Sup. Screws Centered, In.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043925	2171	Solid	1½	10	50	25	$0.54
043926	2003	Slotted	1½	10	50	25	.54
043927	2226	Solid, indicating	1½	10	50	25	.60
043928	2225	Slotted, indicating	1½	10	50	25	.60

Outside diameter of base is 2¼ inches.

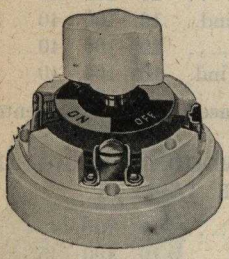


No. 2049

5 AMPERES, SINGLE-POLE

043929	2211	Solid	1 23/32	10	50	25	.66
043930	2212	Slotted	1 23/32	10	50	25	.66
043931	2049	Solid, indicating	1 23/32	10	50	25	.76
043932	2103	Slotted, indicating	1 23/32	10	50	25	.76

Outside diameter of base is 2 7/16 inches.

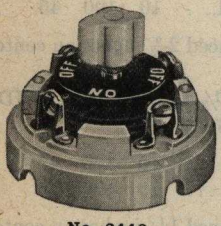


No. 2060

10 AMPERES, SINGLE-POLE

043933	2227	Solid	2 3/16	10	50	45	1.60
043934	2228	Slotted	2 3/16	10	50	45	1.60
043935	2060	Solid, indicating	2 3/16	10	50	45	1.70
043936	2066	Slotted, indicating	2 3/16	10	50	45	1.70

Outside diameter of base is 3 inches.



No. 2448

20 AMPERES, SINGLE-POLE

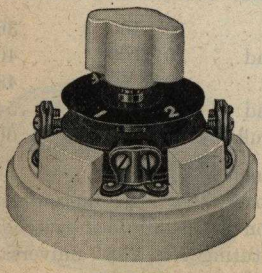
043937	2301	Solid	2 9/16	1	50	70	1.90
043938	2302	Slotted	2 9/16	1	50	70	1.90
043939	2303	Solid, indicating	2 9/16	1	50	70	2.00
043940	2304	Slotted, indicating	2 9/16	1	50	70	2.00

Outside diameter of base is 3 9/16 inches.

10 AMPERES, DOUBLE-POLE

043958	2445	Solid	2 3/16	10	50	45	1.80
043959	2446	Slotted	2 3/16	10	50	45	1.80
043960	2447	Solid, indicating	2 3/16	10	50	45	1.90
043961	2448	Slotted, indicating	2 3/16	10	50	45	1.90

Outside diameter of base is 3 inches.



No. 2079

15 AMPERES, HEAT REGULATING

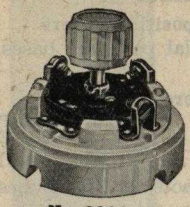
043980	2079	Solid, ind., 3-heat	2 9/16	1	10	30	3.10
043981	2081	Solid, ind., 2-heat	2 9/16	1	10	30	3.10

Outside diameter of base is 3 9/16 inches.

All of the above switches can be converted into lock switches by removing the handle and substituting No. 2384 universal lock attachment.

PERKINS 600-VOLT SWITCHES

NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE H



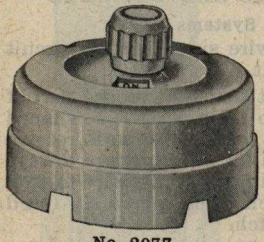
No. 2100



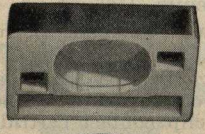
No. 2181



No. 2265



No. 2077





No. 2315

THREE-POINT—3 AMPERES

Trade No.	Mfrs. No.	Description	Out. Diam. Base, In.	Sup. Screws Centered, In.	Std. Pkg.	Wt., Lbs. Std. * Pkg.	Price Each
043962	†2232	Solid	2¼	1½	50	25	$0.70
043963	†2231	Slotted	2¼	1½	50	25	.70

THREE-POINT—5 AMPERES

043964	2179	Solid	2 7/16	1 23/32	50	25	.90
043965	2100	Slotted	2 7/16	1 23/32	50	25	.90
043966	2413	Solid, indicating	2 7/16	1 23/32	50	25	1.00
043967	2414	Slotted, indicating	2 7/16	1 23/32	50	25	1.00

THREE-POINT—10 AMPERES

043968	2397	Solid	3	2 3/16	50	45	1.70
043969	2398	Slotted	3	2 3/16	50	45	1.70
043970	2415	Solid, indicating	3	2 3/16	50	45	1.80
043971	2416	Slotted, indicating	3	2 3/16	50	45	1.80

FOUR-POINT—5 AMPERES

41856	2719	Solid	2 7/16	1¾	20	..	1.00
41857	2720	Slotted	2 7/16	1¾	20	..	1.00

FOUR-POINT—10 AMPERES

41858	2721	Solid	3	2 3/16	20	..	1.80
41859	2722	Slotted	3	2 3/16	20	..	1.80

TWO-CIRCUIT—3 AMPERES

These switches will break the circuit without the use of an additional switch, and are especially adapted for use on street cars as headlight switches, and to control the interior lights.

043972	2181	Solid	2 7/16	1 23/32	50	25	.76
043973	2028	Slotted	2 7/16	1 23/32	50	25	.76
043974	2062	Solid, indicating	2 7/16	1 23/32	50	25	.86
043975	2068	Slotted, indicating	2 7/16	1 23/32	50	25	.86

TWO-CIRCUIT—10 AMPERES

043976	2409	Solid	3	2 3/16	50	45	1.70
043977	2410	Slotted	3	2 3/16	50	45	1.70
043978	2411	Solid, indicating	3	2 3/16	50	45	1.80
043979	2412	Slotted, indicating	3	2 3/16	50	45	1.80

Above switches can be converted into lock switches by removing handle and substituting No. 2384 lock attachment.

PORCELAIN CAP SWITCHES

Not Indicating

043941	2265	3 amp., single-pole	2½	1 23/32	10	9	.72
043942	2267	5 amp., single-pole	2½	1 23/32	10	9	.82
043943	2268	3 amp., three-point	2½	1 23/32	10	9	.82
043944	2272	5 amp., three-point	2½	1 23/32	10	9	1.06
043945	2273	3 amp., two-circuit	2½	1 23/32	10	9	.92

Indicating

043982	2449	3 amp., single-pole	2½	1 23/32	10	9	.82
043983	2450	5 amp., single-pole	2½	1 23/32	10	9	.92
043984	2451	3 amp., three-point	2½	1 23/32	10	9	.92
043985	2452	5 amp., three-point	2½	1 23/32	10	9	1.16
043986	2453	3 amp., two-circuit	2½	1 23/32	10	9	1.02

Fusible

043987	†2077	3 amp., S. P., indicating	...	1 15/16	10	15	1.60
043988	†2277	3 amp., S. P., indicating, brown porcelain	...	1 15/16	10	15	1.60
043989	†2078	3 amp., 2-circuit	...	1 15/16	10	15	1.60
043990	†2278	3 amp., 2-circuit, brown porcelain	...	1 15/16	10	15	1.60

Brown Porcelain Cap and Base Connections for Enclosed Fuse

043991	2315	3 amp., single, indicating	...	...	25	18	1.50
043992	2404	3 amp., 3-point, ind.	...	...	25	18	1.50
043993	2405	3 amp., 2-circuit, ind.	...	...	25	18	1.50
043994	2316	3-amp. enclosed fuse for above Schedule E	...	...	100	7	.30

One No. 2316 fuse is furnished with each switch, but is not included in price.

*Carton quantity on all the above switches is 10, except fusible porcelain cap switches and switches with brown porcelain cap, on which the carton quantity is 1, and No. 2316, which is 25.

†Not National Electrical Code Standard.

H & H PANEL SWITCHES



No. 3048



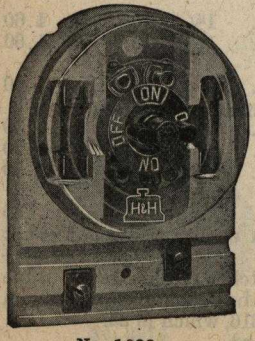
No. 3065



No. 2272



No. 2958



No. 1022

PANEL BOARD SWITCHES

Rotary and Push Switches with Composition Covers

These double-pole switches have special porcelain bases designed to fit upon any style of buss-bars.

Panel Board Push Switches—10 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
68584	3048	Double-Pole.....	50	35	$1.15

The distance between buss-bar contacts is $2\frac{1}{4}$ inches in length and $1\frac{9}{64}$ inches in width.

Outside dimensions of cover are: Length, $2\frac{7}{8}$ inches; width, $1\frac{15}{16}$ inches; height, $1\frac{23}{32}$ inches.

Panel Board Rotary Switches—10 Amperes, 250 Volts

68585	3065	Double-Pole, indicating	50	26	1.00

Distance between buss-bar contacts is $1\frac{3}{16}$ inches. The cover is $2\frac{11}{32}$ inches square and $1\frac{35}{64}$ inches high.

Adapters for Push Switches on Panel Boards

Regular push switches, No. 2082, can be mounted directly on the buss-bars of panel boards by the use of formed brass legs.

038587	2272	Buss-bar connector for push switch	..	..	.04

Metal Cap Rotary Panel Board Switches—10 Amperes, 250 Volts

These are double-pole rotary surface switches with specially formed bases to fit the buss-bars of different makes of panel boards. The supporting screws are inserted through the center of the tubular binding posts and screw into the buss-bars, thus acting as conductors. The standard finish of covers is polished copper and the standard finish of bases is white glazed porcelain. Bases in black glazed or in chocolate glazed porcelain bear an additional charge of 10 cents list.

68586	2955	D. P., ind., square base with square corners.....	100	53	.91
68587	2956	D. P., ind., round base	100	53	.86
68588	2958	D. P., ind., square base with rounded corners	100	53	.91

COMBINATION FUSED SWITCHES AND CUT-OUTS

For Two and Three-Wire Systems

No. 1022 is used to control a two-wire single branch circuit that is tapped off a two-wire main circuit.

No. 1122 is similar to No. 1022, except that the grooved part of the porcelain base that receives the two main wires is so shaped that any two No. 1122's can be fitted together so as to receive three main wires. Therefore the No. 1122 switches are always used in pairs on a three-wire main circuit as a "three-wire to two-wire, double branch cut-out," each branch being separately fused and being separately controlled by a switch.

The bases of the Nos. 1022 and 1122 are equipped with a removable porcelain wedge fitted into the bottom of the porcelain bases and its use permits the switches to be used on either concealed or exposed or molding branch circuits.

The branch circuit passes through two 10-ampere, 250-volt fuses before it reaches the switch.

The fuses are separated from the switch by a porcelain barrier and are enclosed under the cover of the switch. When specified, two 10-ampere, 250-volt spring clip contact cartridge fuses, $1\frac{1}{2}$ inches long, will be furnished with each switch.

Double-Pole—10-Amperes, 250-Volts

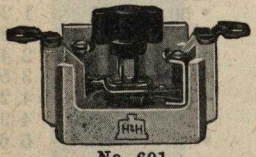
68589	1022	For two wires, indicating	10	25	1.60
68590	1122	For three wires, indicating	10	25	1.60
68591	1023	10-amp. fuse for above switches	20	1	.25

Holes for supporting screws are spaced $3\frac{3}{4}$ in. on centers. Diam. of base, $3\frac{9}{16}$ in.

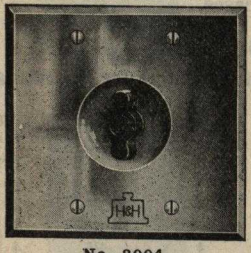
H & H ROTARY FLUSH SWITCHES



No. 600



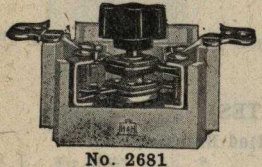
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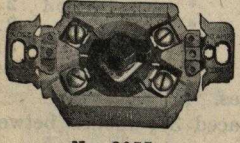
No. 3004



No. 2886



No. 2681



No. 3055



Round Handle

NATIONAL ELECTRICAL CODE STANDARD

Single-pole—5 Amperes, 125 Volts; 3 Amperes, 250 Volts

Trade No.	Mfrs. No.	Style Cover	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
038537	600	Plain	100	55	$0.62

Single-pole—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

038538	601	Plain	50	30	.71
68531	2881	Indicating	50	30	.81

Double-pole—10 Amperes, 125 Volts; 10 Amperes, 250 Volts

038539	602	Plain	50	30	1.05
68532	2882	Indicating	50	30	1.15

Three-way—5 Amperes, 125 Volts; 3 Amperes, 250 Volts

038540	2263	Plain	50	30	.82

Three-way—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

038541	603	Plain	50	30	1.05

Four-way—5 Amperes, 125 Volts; 2 Amperes, 250 Volts

038542	604	Plain	10	8	1.05

Depth of switches without plates: 5-ampere size, single-pole, $1\frac{5}{16}$ inches; 5-ampere size, three-way and four-way, $1\frac{3}{8}$ inches; 10-ampere size, all styles, $1\frac{17}{32}$ inches.

Single-pole—30 Amperes, 250 Volts

68533	3061	Plain	10	25	1.90
68543	3108	Indicating	10	25	2.00

Double-pole—30 Amperes, 250 Volts

68534	3004	Plain	10	25	1.90
68544	3107	Indicating	10	25	2.00

Single Plate, $4\frac{1}{2}$x$4\frac{9}{16}$

68535	3054	Plain	10	12	1.50
68545	3254	Indicating	10	12	1.50

The above 30-ampere switches can be furnished in three-way, four-way and electrolier connections. They require a two-gang wall case, No. 902.

ELECTROLIER SWITCHES

5 AMPERES, 125 VOLTS; 2 AMPERES, 250 VOLTS

Two Sections—Connections 1, -1 & 2, -1, -Off

038544	609	Plain	10	8	1.05
68536	2886	Indicating	10	8	1.15

Two Sections—Connections 1, -1 & 2, -2, -Off

038545	619	Plain	10	8	1.05
68537	2887	Indicating	10	8	1.15

Two Sections—Connections 1, -2, -1 & 2, -Off

68538	2681	Plain	10	8	1.05
68539	2888	Indicating	10	8	1.15

Three Sections—Connections 1, -1 & 2, -1 & 2 & 3, -Off

038543	605	Plain	10	8	1.05
68540	2885	Indicating	10	8	1.15

Three Sections—Connections 1, -2, -3, -Off

68541	3055	Plain	10	8	1.05
68542	2980	Indicating	10	8	1.15

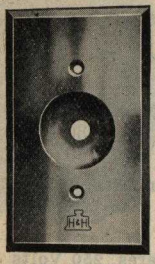
Depth of the above electrolier type switches, without plates, $1\frac{17}{32}$ inches.

Supporting screw holes for above switches are spaced $3\frac{9}{32}$ inches on centers, outside; $2\frac{23}{16}$ inches on centers, inside.

All of the above switches may be converted into lock switches by the use of lock attachments.

When specified, round handles will be furnished on the above switches in 3, 5 and 10-ampere sizes without extra charge.

PLATES FOR H & H ROTARY FLUSH SWITCHES



No. 4067

STRUCK-UP PLATES

Trade No.	Mfrs. No.	No. of Switches	Dimensions of Plate, In.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
038546	4067	1	4½x 2¾	*100	23	$0.40

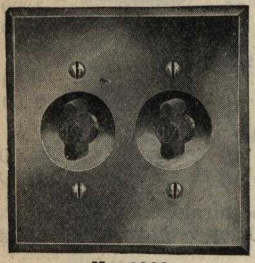
No. 4067 plate is stamped from .040-inch rolled brass, and has re-enforced edges to make it strong. The screw holes are deeply countersunk so that the plate will not dip in under pressure of the screws.

STANDARD SIZE SOLID PLAIN PLATES

Made from ⅛-inch Hard Rolled Brass

038548	4031	1	4½x 2¾	*100	40	.60
038549	4032	2	4½x 4 9/16	* 50	35	1.20
038550	4033	3	4½x 6⅜	*	35	1.80
038551	4034	4	4½x 8 3/16	*	35	2.40
038552	4035	5	4½x10	*	35	3.50
038553	4036	6	4½x11 13/16	*	35	4.20
038554	4037	7	4½x13 5/8	*	35	4.90
038555	4038	8	4½x15 7/16	*	35	5.60

The above plates fit standard wall cases.



No. 4032

STANDARD SIZE SOLID INDICATING PLATES

Made from ⅛-inch Hard Rolled Brass, with Opening for Indicating Dial

68551	2891	1	4½x 2¾	*100	40	.60
68552	2892	2	4½x 4 9/16	* 50	35	1.20
68553	2893	3	4½x 6⅜	*	35	1.80
68554	2894	4	4½x 8 3/16	*	35	2.40
68555	2895	5	4½x10	*	35	3.50
68556	2896	6	4½x11 13/16	*	35	4.20
68557	2897	7	4½x13 5/8	*	35	4.90
68558	2898	8	4½x15 7/16	*	35	5.60

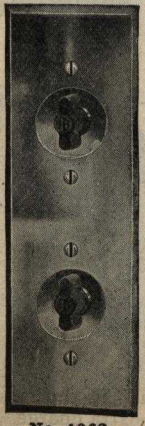
SMALL SIZE SOLID PLATES

Made from ⅛-inch Rolled Brass

038556	4021	1	4 x 2¼	*	30	.60
038557	4022	2	4 x 4⅛	*	28	1.20
038558	4023	3	4 x 5 5/16	*	28	1.80
038559	4024	4	4 x 7¾	*	28	2.40
038560	4025	5	4 x 9 9/16	*	28	3.50
038561	4026	6	4 x11⅜	*	28	4.20
038562	4027	7	4 x13 3/16	*	28	4.90
038563	4028	8	4 x15	*	28	5.60

These small plates fit standard wall cases only when the ears are reversed.

On horizontal gang plates, switches in gangs are spaced 1 13/16 inches between centers.



No. 4062

TANDEM PLATES

Made from ⅛-inch Rolled Brass

038564	4062	2	8⅛x 2¾	*	35	1.40
038565	4063	3	11¾x 2¾	*	35	2.10
038566	4064	4	15⅜x 2¾	*	35	2.80
038567	4065	5	19 x 2¾	*	35	3.50
038568	4066	6	22⅝x 2¾	*	35	4.20

Tandem plates fit standard wall cases.

On tandem plates, switches are spaced 3⅝ inches between centers.

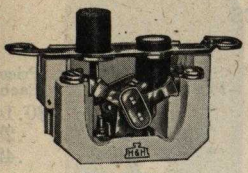
PLATES FOR 30-AMPERE, 250-VOLT SWITCHES

68535	3054	1	4½x 4 9/16	10	12	1.50

*100 single plates, or the equivalent in gangs is a standard package.

H & H PUSH BUTTON FLUSH SWITCHES WITHOUT PLATES

NATIONAL ELECTRICAL CODE STANDARD



No. 4401

NUTMEG SWITCHES

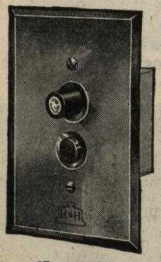
These switches have been designed to supply the demand for a lower priced H & H Switch for use in installations where price is a prime factor. Although lower priced, they are good switches which will give long service.

Single-pole—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

Trade No.	Mfrs. No.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
68576	4401	100	43	$0.31

Three-way—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

68577	4403	50	28	.42



No. 2081

GENUINE H & H SWITCHES

H & H Standard Type

Single-pole—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

038569	2081	100	52	.45

Double-pole—10 Amperes, 125 Volts; 10 Amperes, 250 Volts

038570	2082	50	29	.70

Three-way—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

038571	2083	50	29	.70

Four-way—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

038572	2084	10	9	2.00

H & H Lock Type

Single-pole—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

038577	2081L	100	52	1.06

Double-pole—10 Amperes, 125 Volts; 10 Amperes, 250 Volts

038578	2082L	50	29	1.30

Three-way—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

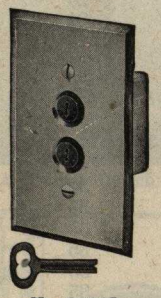
038579	2083L	50	29	1.30

Four-way—10 Amperes, 125 Volts; 5 Amperes, 250 Volts

038580	2084L	10	8	2.50

Key for Lock Push Button Switch

038581	5003	100	2	.15



No. 2083L

H & H ELECTROLIER SWITCHES

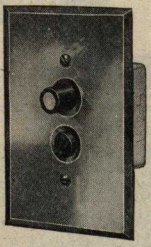
10 Amperes, 125 Volts; 5 Amperes, 250 Volts

These switches are used with standard switch plates so that uniformity is secured throughout the installation as well as convenience and economy in furnishing the plates.

The indicating types have a pearl button to indicate "on." This feature is very desirable for the most satisfactory use of electrolier switches. Plain types have both buttons black.

Operation: One, off. One and two, off. One and two and three, off.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
68569	2967	Indicating	10	8	$1.15
68578	3511	Plain	10	8	1.05
Operation: One, off. One and two, off.					
68571	2968	Indicating	10	8	1.15
68579	3512	Plain	10	8	1.05
Operation: One, off. Two, off. One and two, off.					
68574	3264	Indicating	10	8	1.15
68580	3513	Plain	10	8	1.05



No. 2967 with No. 4077 Plate

MOMENTARY CONTACT SWITCHES

For Use with Remote Control Switches

A quick make and break are made by pressing and releasing the buttons. Each button of the two circuit type controls a circuit and both buttons cannot be pushed at the same time.

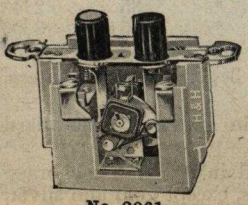
47086	2179	One circuit	10	15	2.25
038588	2061	Two circuit	10	15	3.10

No. 2363 is a smaller switch that does not have the same quickness of snap or length of break as the No. 2061. It can be used on battery circuits of low potential in the same manner as No. 2061 and also on lighting circuits, provided it only has to make the circuit and not to break it.

68573	2363	10	9	1.50

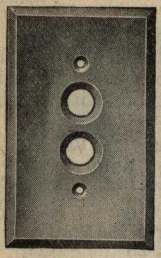
Outside supporting screw holes on all the above switches are spaced $3\frac{9}{32}$ inches on centers; inside holes, $2\frac{13}{16}$ inches.

Depth of all above switches, without plates, $1\frac{33}{64}$ inches, except No. 2061, which is $2\frac{3}{16}$ inches, and No. 2363, which is $1\frac{1}{2}$ inches.



No. 2061

PLATES FOR H & H PUSH BUTTON FLUSH SWITCHES



No. 4077

STRUCK UP PLATES

Brass Switch Plates

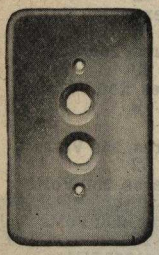
Trade No.	Mfrs. No.	No. of Switches	Dimensions Inches	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
038589	4077	1	4½x 2¾	*	23	$0.14
038590	4078	2	4½x 4 9/16	*	20	.28
038591	4079	3	4½x 6⅜	*	19	.42

Brass Switch Plates, Round Corners and Edges

064342	4081	1	4½x 2¾	*	23	.14
064343	4082	2	4½x 4 9/16	*	20	.28
064344	4083	3	4½x 6⅜	*	19	.42

Extra Heavy Brass Switch Plates

038592	2301	1	4½x 2¾	*	32	.35
038593	2302	2	4½x 4 9/16	*	25	.70



No. 4081

Above plates have re-enforced beveled edges to make them strong. The screw holes are deeply countersunk to rest upon the frame of the switch so the plate will not dip under the pressure of the screws.

Brass Plates Bushed for Telephone Wires

56750	3144	1 hole	4½x 2¾	*	24	.23
56751	3244	2 holes	4½x 2¾	*	23	.24

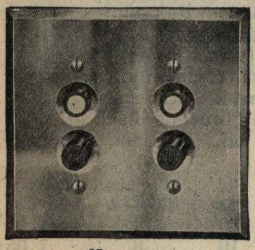
Blank Brass Plates

56752	4068	1	4½x 2¾	*	24	.22
56753	4084	2	4½x 2 9/16	*	21	.44
56754	4085	3	4½x 6⅜	*	20	.66

SOLID PLATES

Made of Hard Rolled Brass ⅛ Inch Thick

038594	4051	1	4½x 2¾	*	40	.50
038595	4052	2	4½x 4 9/16	*	35	1.00
038596	4053	3	4½x 6⅜	*	35	1.50
038597	4054	4	4½x 8 3/16	*	35	2.00
038598	4055	5	4½x10	*	35	3.00
038599	4056	6	4½x11 13/16	*	35	3.60
038600	4057	7	4½x13 5/8	*	35	4.20
038601	4058	8	4½x15 7/16	*	35	4.80

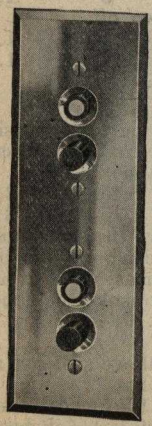


No. 4052

Small Plates

038602	4041	1	4 x 2¼	*	30	.50
038603	4042	2	4 x 4⅛	*	28	1.00
038604	4043	3	4 x 5 5/16	*	28	1.50
038605	4044	4	4 x 7¾	*	28	2.00
038606	4045	5	4 x 9 9/16	*	28	3.00
038607	4046	6	4 x11⅜	*	28	3.60
038608	4047	7	4 x13 3/16	*	28	4.20
038609	4048	8	4 x15	*	28	4.80

Small plates can be used with wall cases only when ears are reversed. Also adapted for use with iron conduit boxes and iron frames.



No. 4072

Tandem Plates

038610	4072	2	8¼x 2¾	*	35	1.20
038611	4073	3	11¾x 2¾	*	35	1.80
038612	4074	4	15⅜x 2¾	*	35	2.40
038613	4075	5	19 x 2¾	*	35	3.00
038614	4076	6	22⅝x 2¾	*	35	3.60

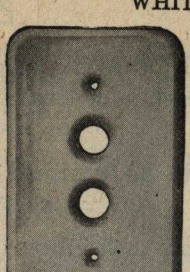
On tandem plates, switches are spaced 3⅝ inches on centers. Tandem plates fit standard wall cases.

*100 single plates or the equivalent in gangs is a standard package.

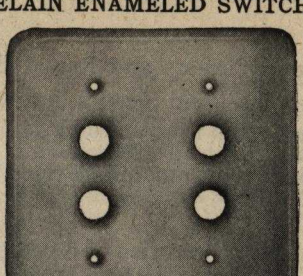
These prices apply only to plates finished in old or brush brass. All other finishes take an extra list of 10 cents, except gold and silver, which are special.

SWITCH PLATES AND LUMINOUS BULBS

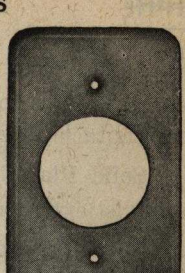
WHITE PORCELAIN ENAMELED SWITCH PLATES



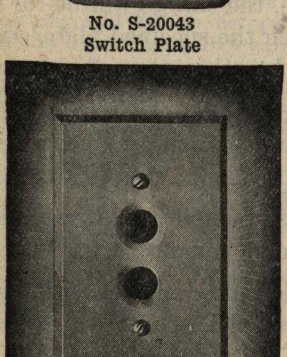
No. S-20043
Switch Plate



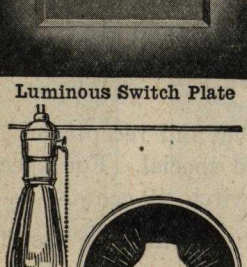
No. S-20044
Switch Plate



No. S-20046
Switch Plate



Luminous Switch Plate



Luminous Bulb



Two Color Display Card
Holding 12 Bulbs

WHITE PORCELAIN ENAMELED BRASCO PLATES

These switch plates are practical, sanitary, and permanent. Designed for hospitals, hotels, homes, stores, office buildings, etc. They will outlast the building in which they are installed. Packed in individual cartons, including nickel-plated screws.

Trade No.	Type	Gang	Std. Pkg.	Price Each
127077	S-20043	1	25	$0.30
127078	S-20044	2	25	.60
127079	S-20045	3	25	.90
127080	S-20046	1	25	.30

Also furnished in pale pink, pale blue, brown and old ivory colors at 10 cents list per plate, additional.

ERADIUM LUMINOUS SWITCH PLATES

These plates will remain luminous all night if exposed to light during the day. They are made up in standard 1, 2, and 3-gang sizes.

They can be used for replacing old plates or for new installations. Walls are kept from being soiled by the hands when feeling for the switch in the dark.

Every plate is put up in an individual carton, complete with nickel-plated screws, ready for attaching to the wall.

Trade No.	Description	Price Each
127081	One-gang	$0.35
127082	Two-gang	.60
127083	Three-gang	.85

ERADIUM LUMINOUS BULBS

These luminous bulbs can be attached to any electric or gas light pull chain or key. They are ornamental as well as useful. The bulb is permanently luminous. It can be seen plainly all night if left hanging during the day where it can get light. Artificial light will also cause the bulb to shine. When first put in the dark, it gives out a blue light which gradually changes to an intense white.

The use of these bulbs does away with feeling around in the dark to find the chain. Used wherever you have lights.

Trade No.	Description	Price Each
127084	Mounted on display cards	$0.25

PLATES FOR H & H FLUSH SWITCHES

Solid Plates with Round Corners and Round Edges will be furnished at 15 cents list extra for a single plate, and 5 cents list extra for each additional switch or receptacle in gang plates.

Solid Plates with Round Corners and Beveled Edges will be furnished at 15 cents list extra per plate.

Special Sized Plates bear a list price of 6 cents per square inch in lots of less than 100 and 4 cents per square inch in lots of 100 or more separate plates of one size and type. When plates are not rectangular in shape, the charge will be for a plate the size of the smallest rectangular piece from which the specified plate can be cut. In no case shall any special plate sell at a price less than that of the corresponding standard plate.

Always send a clear sketch giving all dimensions and detailed specifications. Very quick deliveries are made on all special plates.

Small Sized Plates. Both rotary flush plates and push button plates are made in two sizes, standard size and small size (except in tandem gangs)

Blank Plates. These are plates used to cover an unused outlet. Unless otherwise specified, they will be furnished with two screw holes, spaced $3\frac{17}{64}$ inches between centers, to fit standard outlet boxes.

Engraving. The lettering is deeply etched in block design and can be made to any desired height. For engraving on plates, the charge is 6 cents list, per letter.

Finishes. Flush plates for rotary, push button switches and receptacles are furnished in old or brush brass. All other finishes are special. For special finishes, except gold and silver, add to the list price per switch, 10 cents.

Regular and special finishes of one manufacturer's number may be assorted to make up quantity.

Special Finishes for Surface Switches

For surface switches in special finishes, add to list price $0.10

Polished nickel is the standard finish. All other finishes are special.

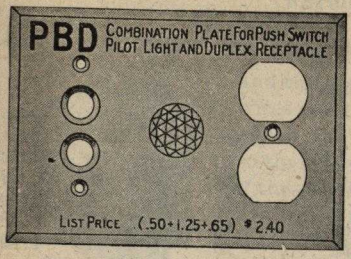
Surface Switch Covers

	Std. Pkg.	Price Each
Any 10-amp., 250-volt, double-pole cover, and any other cover not larger	50	$0.08
For 20 to 35-ampere cover	50	.20

Allowances

Rotary switches, without handles, deduct from list	.02
Any 10-amp., 250-volt, double-pole switch, and any switch ordinarily not requiring larger cover if furnished without cover, deduct from list	.03
Any switch requiring 20 or 35-ampere cover, if furnished without cover deduct from list	.08

H & H COMBINATION FLUSH PLATES



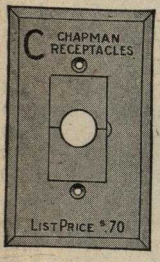
HOW TO ORDER

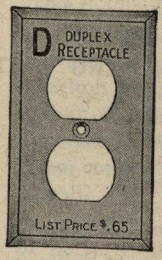
To order a combination plate, give the letters in order of arrangement. For a push switch, pilot light and duplex receptacle arranged as in sample plate, order PBD. If arranged vertically, order

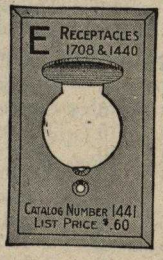
P
B
D

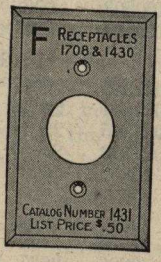


The price is the sum of the prices of the plates; for tandem arrangement or in more than one row, add 20% to list prices given. The schedule of all combination plates is H. The standard package is 10 separate plates (not gangs).



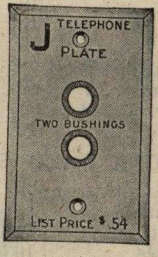




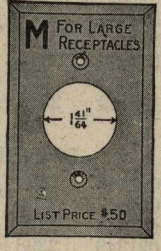


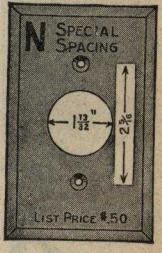


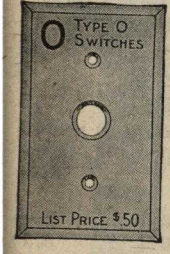


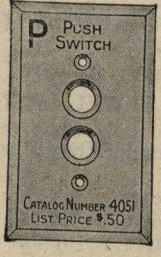


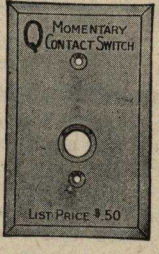




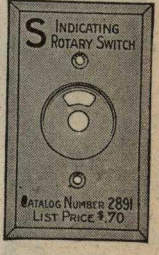


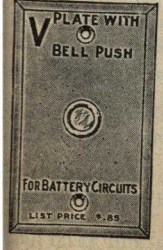


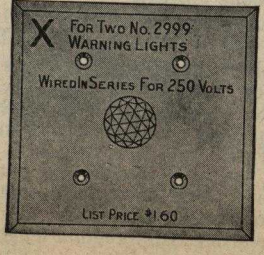


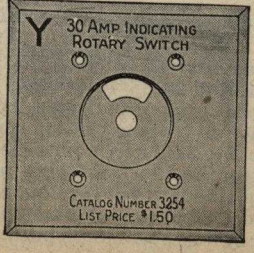


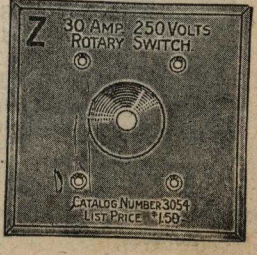






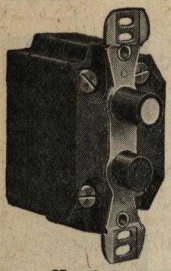




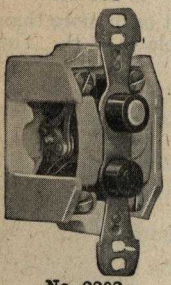


BRYANT-PERKINS FLUSH SWITCHES

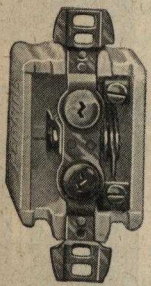
National Electrical Code Standard



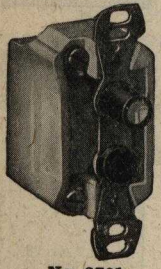
No. 602



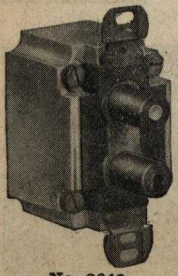
No. 2202



No. 2295



No. 2701



No. 2642

SCHEDULE H

BRYANT PUSH BUTTON SWITCHES

Switches are dirt-proof, indestructible and are encased in molded insulation.

Trade No.	Mfrs. No.	Capacity, Amperes 125 Volts	250 Volts	Style	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
				Gang Switches				
100495	601†	10	5	Single-pole	10	50*	30	$0.72
100496	603†	10	5	Three-point	10	20*	15	.88
100497	604†	10	5	Four-point	10	10*	7	2.00
100498	602†	10	10	Double-pole	10	10*	7	.88
100499	609†	20	20	Double-pole	10	10*	7	1.40
				Lock Gang Switches				
100500	605	10	5	Single-pole	10	50*	30	1.17
100501	607	10	5	Three-point	10	20*	15	1.33
100502	608	10	5	Four-point	10	10*	7	2.45
100503	606	10	10	Double-pole	10	10*	7	1.33
100504	610	20	20	Double-pole	10	10*	7	1.85

PERKINS PUSH BUTTON GANG SWITCHES

021342	2201†	10	5	Single-pole	10	100*	60	.45
021344	2203†	10	5	Three-point	10	50*	30	.70
021345	2204†	10	5	Four-point	10	10*	7	2.00
021343	2202†	10	10	Double-pole	10	50*	30	.70
19802	2623†	20	20	Double-pole	10	20*	11	1.00
				Electrolier				
19804	2625	5	2	1–2–1&2–off	10	10	7	1.05
19805	2626	5	2	1–1&2–1off	10	10	7	1.05
19806	2627	5	2	1–1&2–1&2&3–off	10	10	7	1.05
100505	2628	5	2	1–off–2–off	10	10	7	1.05
100506	2629	5	2	1–off–1&2–off	10	10	7	1.05
100507	2630	5	2	1–1&2–off	10	10	7	1.05
100508	2631	5	2	1–2–off or 2-speed fan motor	10	10	7	1.05
100509	2632	5	2	1–2–3–off or 3-speed fan motor	10	10	7	1.05

PERKINS PUSH BUTTON LOCK GANG SWITCHES

021346	2295	10	5	Single-pole	10	100*	60	1.06
021347	2296	10	5	Three-point	10	50*	30	1.30
021348	2297	10	5	Four-point	10	10*	7	2.50
021349	2298	10	10	Double-pole	10	50*	30	1.30
19803	2624	20	20	Double-pole	10	20*	30	1.50

YANKEE PUSH BUTTON GANG SWITCHES

121025	2901†	10	5	Single-pole	10	100	64	.31
121026	2903†	10	5	Three-point	10	50	35	.42

MOMENTARY CONTACT FLUSH SWITCHES

In these switches, the circuit is closed only while the button is held in. Switches Nos. 2642 and 2644 are so constructed that it is impossible to close both circuits at once.

				Gang Switches				
100512	2641	10	5	Single circuit	10	10	..	2.25
100513	2642	10	5	Two-circuit	10	10	..	3.10
				Lock Gang Switches				
121023	2643	10	5	Single circuit	10	10	..	2.75
121024	2644	10	5	Two-circuit	10	10	..	3.60

When ordering combination plates, specify "Q" sections to accommodate Nos. 2641 and 2643; "P" sections for Nos. 2642 and 2644.

Outside supporting screw holes on all the above switches are spaced $3\frac{9}{32}$ inches on centers. Inside supporting screw holes, $2\frac{13}{16}$ inches on centers.

One No. 2299 key is furnished with each lock switch.

*Button and lock switches of the same description may be assorted to make up standard package quantity. For instance, Nos. 601 and 605; Nos. 2203 and 2296, etc. No other assortment permissible.

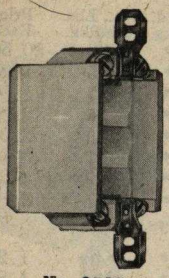
†For switches with both buttons white ivory, regular length, add $1.00 list.

PERKINS FLUSH SWITCHES AND RECEPTACLES

WITH REMOVABLE MECHANISM

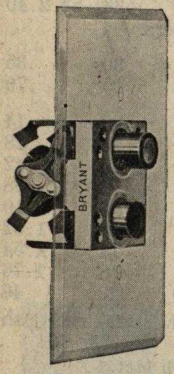
NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



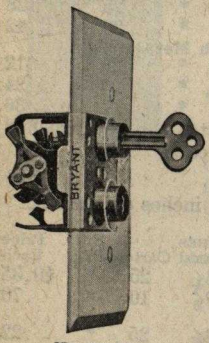
No. 2520

The advantage of this construction is that the cup may be installed and the wires connected to the proper binding posts at the time that the wires are drawn into the conduits. The cup is closed by a fiber shield which it is not necessary to remove to gain access to the binding screws, so that the cup is thoroughly protected from dirt, plaster, etc.; but even if the shield is removed, the cup can be thoroughly cleaned with a screwdriver or a sharp stick. When all other work in the building is finished, the mechanism is installed and the plate attached, so that there is no possibility for any grit to collect in the mechanism to shorten its life and interfere with satisfactory operation.



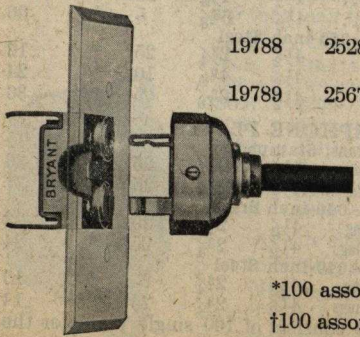
No. 2523

Attention is called to the fact that the cups for the receptacle and for the double-pole switch are identical, so that if a double-pole switch is originally installed and later it is desired to tap off current at this point, it may be accomplished by substituting a receptacle mechanism for the switch mechanism. The contacts on the receptacle mechanism are such that, when it replaces a double-pole switch mechanism, it completes the circuit through the cup. The load which the displaced switch mechanism controlled may be controlled locally or from some outlet nearer the load.



No. 2526

Trade No.	Mfrs. No.	Description	Amperes 125 Volts	Amperes 250 Volts	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
19779	2519	Cup for single-pole switch	10	5	10	100*	44	$0.25
19780	2521	Cup for three-point switch	10	5	10	50*	25	.40
19781	2520	Cup for receptacle or double-pole switch	10	10	10	50*	25	.40
19782	2522	Single-pole switch mechanism	10	5	10	100†	14	.59
19783	2524	Three-point switch mechanism	10	5	10	50†	14	.80
19784	2523	Double-pole switch mechanism	10	10	10	50†	14	.80
19785	2525	Single-pole lock switch mechanism	10	5	10	100†	25	1.09
19786	2527	Three-point lock switch mechanism	10	5	10	50†	14	1.30
19787	2526	Double-pole lock switch mechanism	10	10	10	50†	14	1.30
19788	2528	Receptacle mechanism	10	10	10	50	14	.30
19789	2567	Receptacle plug	10	10	10	50	12	.30



Nos. 2528 and 2567

Outside supporting screw holes, $3\frac{9}{32}$ inches on centers.

Inside supporting screw holes, $2\frac{13}{16}$ inches on centers.

One No. 2299 key is furnished with each lock switch.

The above switches and receptacles use push button plates.

*100 assorted cups also constitute a standard package.

†100 assorted switch mechanisms also constitute a standard package.

When ordering combination plates, specify "P" sections for above.

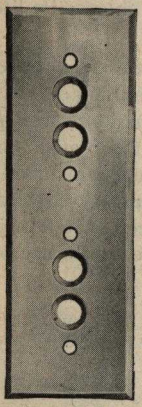
PLATES FOR BRYANT-PERKINS FLUSH SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

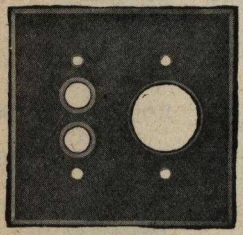
SCHEDULE H



Nos. 3166, 3640 and 3666



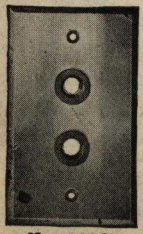
No. 3369



No. 3650



No. 3546



No. 3618

SOLID PLATES FOR PUSH BUTTON SWITCHES

In One Horizontal Row

Trade No.	Mfrs. No.	No. of Switches	Dimens., Inches Height	Length	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
92459	3639	1	4½	2¾	25	*	30	$0.50
92460	3640	2	4½	4 9/16	10	*	55	1.00
021366	3167	3	4½	6⅜	5	*	37	1.50
021367	3168	4	4½	8 3/16	5	*	35	2.00
021368	3169	5	4½	10	5	*	33	3.00
021369	3170	6	4½	11 13/16	1	*	31	3.60
021370	3171	7	4½	13 5/8	1	*	29	4.20
021371	3172	8	4½	15 7/16	1	*	27	4.80

Switches in gangs spaced 1 13/16 inches on centers.

Tandem, in One Vertical Row

021372	3369	2	8⅛	2¾	1	*	40	1.20
021373	3370	3	11¾	2¾	1	*	38	1.80
021374	3371	4	15⅜	2¾	1	*	36	2.40

Switches in tandem spaced 3⅝ inches on centers.

.060-inch Metal, Stamped

021364	3165	1	4½	2¾	25	*	30	.35
021365	3166	2	4½	4 9/16	10	*	25	.70

Struck Up—.040-inch Metal

037191	3665	1	4½	2¾	25	*	20	.14
037192	3666	2	4½	4 9/16	10	*	23	.28
037193	3667	3	4½	6⅜	5	*	20	.42
92461	3634	4	4½	8 3/16	5	*	18	.88
92462	3635	5	4½	10	5	*	16	1.10
92463	3636	6	4½	11 13/16	1	*	15	1.32
92464	3637	7	4½	13 5/8	1	*	14	1.54
92465	3638	8	4½	15 7/16	1	*	13	1.76
123906	3650	..	4½	4 9/16	10	50	23	.40

No. 3650 is a 2-gang combination plate for standard push button switch and No. 120 Spartan receptacle.

With Round Corners and Edges—.040-inch Metal

043913	3631	1	4½	2¾	25	*	20	.14
043914	3632	2	4½	4 9/16	10	*	25	.28
043915	3633	3	4½	6⅜	5	*	20	.42

Steel Plates, Brass-plated—.040-inch Metal

16726	3621	1	4½	2¾	25	*	28	.12
16727	3622	2	4½	4 9/16	10	*	20	.24
16728	3623	3	4½	6⅜	5	*	17	.36

The only special finish in which steel plates can be furnished is genuine Bauer-barff, for which add 36 cents each.

BLANK PLATES

Holes for supporting screws are spaced 3 3/32 inches on centers.

Trade No.	Mfrs. No.	Description	Dimens., Inches Vertical	Horizontal	Carton	Std. Pkg.	Price Each
		1/16-inch Brass, Stamped					
92445	3546	Single	4½	2¾	25	*	$0.35
92446	3628	Two-gang	4½	4 9/16	10	*	.70
		Struck Up—.040-inch Brass					
92449	3551	Single	4½	2¾	25	*	.22
92450	3624	Two-gang	4½	4 9/16	10	*	.44
92451	3625	Three-gang	4½	6⅜	5	*	.66
		Struck Up—.040-inch Steel					
92454	3556	Single	4½	2¾	25	*	.12
92455	3626	Two-gang	4½	4 9/16	10	*	.24
92456	3627	Three-gang	4½	6⅜	5	*	.36

SINGLE TELEPHONE PLATES

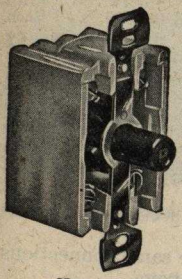
		1/16-inch Brass, Stamped					
92447	3606	With one ⅜-inch bushing.	4½	2¾	25	*	.36
92448	3618	With two ⅜-inch bushings	4½	2¾	25	*	.37
		Struck Up—.040-inch Brass					
92452	3616	With one ⅜-inch bushing.	4½	2¾	25	*	.23
92453	3619	With two ⅜-inch bushings	4½	2¾	25	*	.24
		Struck Up—.040-inch Steel					
92457	3617	With one ⅜-inch bushing.	4½	2¾	25	*	.13
92458	3620	With two ⅜-inch bushings	4½	2¾	25	*	.14

*Standard package of plates consists of 100 single plates or the equivalent in gangs.

PERKINS FLUSH SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



No. 2460

TYPE O PUSH BUTTON GANG SWITCHES

Trade No.	Mfrs. No.	Capacity Amperes 125 Volts	Capacity Amperes 250 Volts	Style	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
044001	2457	10	5	Single-pole	10	50	30	$1.00
044002	2458	10	5	Three-point	10	50	30	1.05
044003	2459	5	2	Four-point	10	10	7	1.05
044004	2460	5	2	Electrolier, 1–2–1 & 2–off	10	10	7	1.05
044005	2461	5	2	Electrolier, 1–1 & 2–1 & 2 & 3–off	10	10	7	1.05
044006	2462	10	10	Double-pole	10	50	30	1.05
				With Indicating Dial in End of Button				
044007	2491	10	5	Single-pole	10	50	30	1.10
044008	2492	5	2	Electrolier, 1–2–1 & 2–off	10	10	7	1.15
044009	2493	5	2	Electrolier, 1–1 & 2–1 & 2 & 3–off	10	10	7	1.15
044010	2494	10	10	Double-pole	10	50	30	1.15

Outside supporting screw holes, $3\frac{9}{32}$ inches on centers.

Inside supporting screw holes, $2\frac{13}{16}$ inches on centers.

Switches will be furnished with black buttons, unless otherwise specified, but buttons can be finished to match plates without extra charge.

These switches can also be supplied to make the same connections as Nos. 2626, 2628, 2629 and 2632 listed on a previous page.

When ordering combination plates, specify "O" sections to accommodate Type O switches.



No. 3641

PLATES FOR TYPE O SWITCHES

In One Horizontal Row

Stamped, $\frac{1}{16}$ Inch

Trade No.	Mfrs. No.	No. of Switches	Dimens., Inches Height	Dimens., Inches Length	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043916	3641	1	$4\frac{1}{2}$	$2\frac{3}{4}$	25	*	30	$0.35
043917	3642	2	$4\frac{1}{2}$	$4\frac{9}{16}$	10	*	32	.70
				Solid				
043918	3643	3	$4\frac{1}{2}$	$6\frac{3}{8}$	5	*	31	1.50
043919	3644	4	$4\frac{1}{2}$	$8\frac{3}{16}$	5	*	32	2.00
043920	3645	5	$4\frac{1}{2}$	10	5	*	29	3.00

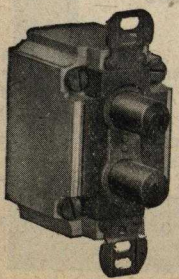
Switches in gangs spaced $1\frac{13}{16}$ inches on centers.

TYPE O DUPLEX SWITCHES

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

This device consists of two Type O switches mounted in a porcelain cup that may be inserted in any shallow single switch box.

They take standard two-button plates listed on another page.



No. 2640

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
70091	2709	Two single-pole, separate feeds	10	10	10	$2.00
70089	2639	Two single-pole, common feed	10	10	10	1.80
70092	2710	One single-pole and one three point, common feed	10	10	10	2.00
70093	2639	Two-circuit electrolier	10	10	10	1.80
70090	2640	Three-circuit electrolier	10	10	10	2.00

Outside supporting screw holes, $3\frac{9}{32}$ inches on centers.

Inside supporting screw holes, $2\frac{13}{16}$ inches on centers.

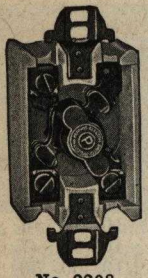
When ordering combination plates, specify "P" sections to accommodate Type O Duplex Switches.

*Standard package consists of a sufficient number of plates to accommodate 100 switches.

PERKINS FLUSH SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



No. 2208

ROTARY GANG SWITCHES

Trade No.	Mfrs. No.	Cap., Amps. 125 V.	250 V.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
021350	2205	5	3	Single-pole	10	100	60	$0.62
021351	2206	10	5	Single-pole	10	50	30	.71
021352	2325	5	3	Three-point	10	50	30	.82
021353	2208	10	5	Three-point	10	50	30	1.05
021354	2209	5	2	Four-point	10	10	7	1.05
021355	2224	5	2	Electrolier, 2-cir	10	10	7	1.05
021356	2210	5	2	Electrolier, 3-cir	10	10	7	1.05
021357	2207	10	10	Double-pole	10	50	30	1.05

When ordering combination plates, specify "R" sections to accommodate these switches.

These switches can also be supplied to make the same connections as Nos. 2649, 2653, 2657 and 2664 listed on another page.

With Indicating Dial in Plate

021358	2340	5	3	Single-pole	10	100	60	.72
021359	2341	10	5	Single-pole	10	50	30	.81
021360	2342	5	2	Electrolier, 2-cir	10	10	60	1.15
021361	2343	5	2	Electrolier, 3-cir	10	10	60	1.15
021362	2344	10	10	Double-pole	10	50	30	1.15
021363	2345	Single plate for above $4\frac{1}{2}$x$2\frac{3}{4}$ in.			25	*	40	.60

When ordering combination plates, specify "S" sections to accommodate these switches.

These switches can also be supplied to make the same connections as Nos. 2669 and 2570 listed on another page.

Outside supporting screw holes, $3\frac{9}{32}$ inches on centers.

Inside supporting screw holes, $2\frac{13}{16}$ inches on centers.

Rotary flush switches can be converted into lock switches by removing the handle and substituting No. 2384 lock attachment. Special plates are not required.



No. 3182

PLATES FOR ROTARY SWITCHES

In One Horizontal Row

Trade No.	Mfrs. No.	No. of Switches	Dimens., Inches Height	Length	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
105267	†3629	1	$4\frac{1}{2}$	$2\frac{3}{4}$	*	25	$0.40
105268	‡3630	1	$4\frac{1}{2}$	$2\frac{3}{4}$	*	30	.53
021375	3181	1	$4\frac{1}{2}$	$2\frac{3}{4}$	*	45	.60
021376	3182	2	$4\frac{1}{2}$	$4\frac{9}{16}$	*	36	1.20
021377	3183	3	$4\frac{1}{2}$	$6\frac{3}{8}$	*	35	1.80
021378	3184	4	$4\frac{1}{2}$	$8\frac{3}{16}$	*	34	2.40
021379	3185	5	$4\frac{1}{2}$	10	*	33	3.50
021380	3186	6	$4\frac{1}{2}$	$11\frac{13}{16}$	*	32	4.20
021381	3187	7	$4\frac{1}{2}$	$13\frac{5}{8}$	*	31	4.90
021382	3188	8	$4\frac{1}{2}$	$15\frac{7}{16}$	*	30	5.60
			Tandem, in One Vertical Row				
021383	3372	2	$8\frac{1}{8}$	$2\frac{3}{4}$	*	34	1.40
021384	3373	3	$11\frac{3}{4}$	$2\frac{3}{4}$	*	40	2.10
021385	3374	4	$15\frac{3}{8}$	$2\frac{3}{4}$	*	38	2.80

Switches in gangs spaced $1\frac{13}{16}$ inches on centers.

Switches in tandem spaced $3\frac{5}{8}$ inches on centers.

Gange plates for indicating switches will be made only on special order.

HIGH CAPACITY FLUSH SWITCHES

30 Amperes, 250 Volts

This switch requires a two-gang box.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std.Pkg.	Price Each
105269	2568	Indicating gang switch	1	10	18	$2.00
105270	2569	Single plate for above, $4\frac{1}{2}$x$4\frac{9}{16}$ in.	1	10	9	1.50



Nos. 2568 and 2569

There are holes for four supporting screws spaced $3\frac{9}{32}$ inches on centers vertically and $1\frac{13}{16}$ inches on centers horizontally.

When ordering combination plates, specify "Y" sections to accommodate No. 2568 receptacles.

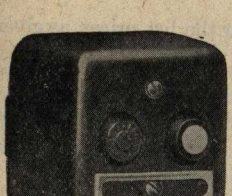
*A standard package of plates for rotary switches consists of a sufficient number to accommodate 100 switches.

†Struck up out of .040-inch brass.

‡Stamped out of $\frac{1}{16}$-inch brass.

PERKINS SWITCHES

NATIONAL ELECTRICAL CODE STANDARD SCHEDULE H



No. 2646

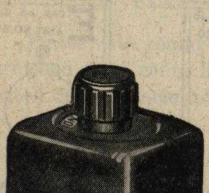
PUSH BUTTON PANEL BOARD SWITCHES

250 Volts

These switches are designed to be mounted directly on the bus bars of standard panel boards. Machine screws pass through the flexible self-adjusting contacts of the switch into tapped holes in the bus bars. These same screws carry the current. Each switch is fitted with a card holder designed to receive a card bearing the name of the circuit controlled.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Price Each
87536	2645	10-ampere, double-pole switch.....	10	50	$1.15
87537	2646	20-ampere, double-pole switch.....	10	50	1.65
87538	2647	10-ampere, double-pole lock switch..	10	50	1.65
87539	2648	20-ampere, double-pole lock switch..	10	50	2.15

One No. 2299 key is furnished with each lock switch.



No. 2596

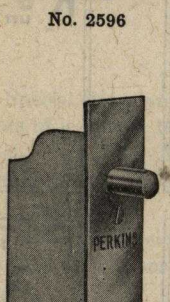
ROTARY PANEL BOARD SWITCHES

10 Amperes, 250 Volts

This switch is mounted in the same manner as described above.

19818 2596 Double-pole indicating switch..... 10 50 1.00

This switch can be converted into a lock switch by removing the handle and substituting No. 2384 lock attachment.



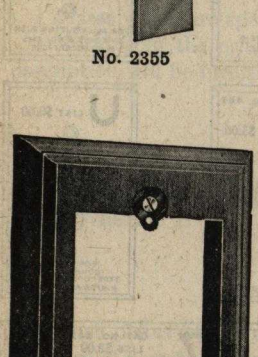
No. 2355

PERKINS AUTOMATIC DOOR SWITCHES

Single-pole—6 Amperes, 125 Volts; 3 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Wt., Lbs. Pkg.	Std. Pkg.	Price Each
044011	2355	Circuit closed when door is open	1	25	15	$2.25
044012	2356	Circuit closed when door is closed	1	10	6	2.25

Plate measures 4⅝x1¼ inches and the holes for supporting screws are spaced 3¾ inches on centers. The porcelain body is 3⅜ inches long by 1 inch wide.



No. 2361

COMBINATION WOOD MATS

For push button and rectangular cup flush switches and flush receptacles. May be used with or without outlet boxes.

Quartered Oak, Varnished and Rubbed

Trade No.	Mfrs. No.	No. of Switches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
037219	2361	1	10	*	30	$0.30
037220	2362	2	5	*	35	.50
037221	2363	3	5	*	40	.70
037222	2364	4	1	*	50	.90
037223	2365	5	1	*	60	1.10
037224	2366	6	1	*	70	1.30
037225	2367	7	1	*	80	1.50
037226	2368	8	1	*	90	1.70

Whitewood, Unfinished

037227	2371	1	10	*	30	.30
037228	2372	2	5	*	35	.50
037229	2373	3	5	*	40	.70
037230	2374	4	1	*	50	.90
037231	2375	5	1	*	60	1.10
037232	2376	6	1	*	70	1.30
037233	2377	7	1	*	80	1.50
037234	2378	8	1	*	90	1.70

*A standard package quantity of wood mats consists of a sufficient number, assorted from all those listed, to accommodate 100 switches.

PERKINS COMBINATION PLATES

On this page are shown in outline the different plates for flush devices of our manufacture, each identified by characteristic letter.

The list price of a combination plate is obtained by adding together the list prices, as given in the outline drawings, of the individual plates which are combined.

All combination plates will be billed in Schedule H.

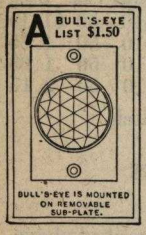
The standard package quantity of combination plates is ten plates (not gangs).

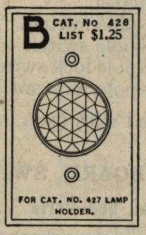
We give below some examples of the manner in which orders for combination plates should read, together with the list prices of the plates specified:

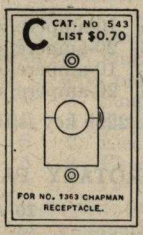
1 Combination plate PB, list price, $1.75.

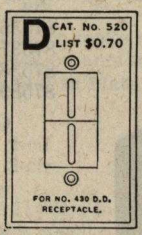
2 Combination plates { O / E / E } list price, $1.70.

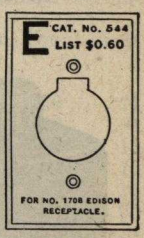
1 Combination plate R F C C C C, list price, $3.90.

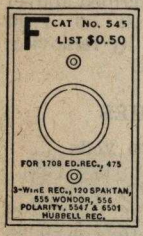






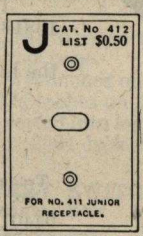


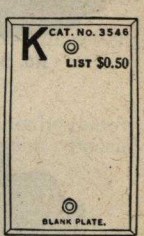


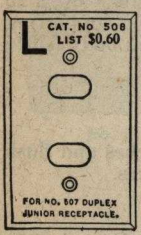


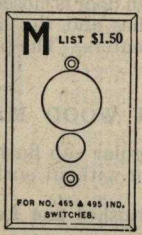


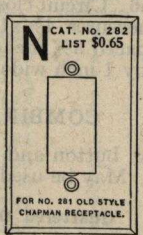


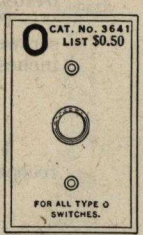


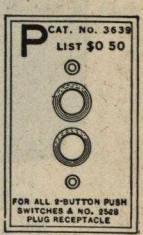


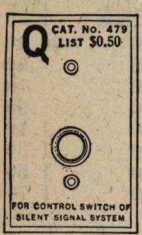


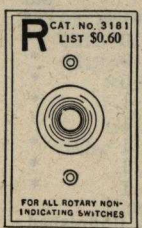


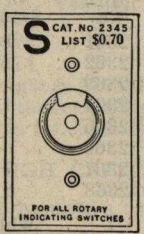




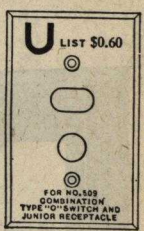


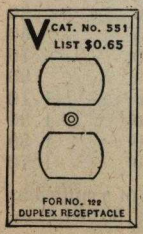


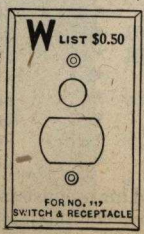


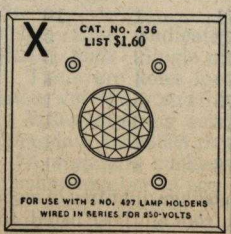


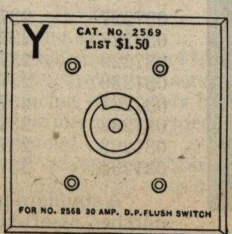














PERKINS SWITCH PLATES

SPECIAL FINISHES ON FLUSH PLATES

The standard finish on all flush plates, unless otherwise noted, is brush brass, which will be supplied on all orders where no other finish is specified.

For all other finishes, except those requiring gold and silver, add 10 cents per switch or receptacle to the price of the plate in standard finish. Prices on plates in gold and silver finishes will be quoted on application.

The only special finish which can be applied to steel plates is genuine Bauer-barff, for which add 36 cents list per switch.

PLATES WITH ROUND CORNERS AND ROUND EDGES

Plates with round corners and round edges, other than those listed on another page, will be furnished at 15 cents list, extra, for single plates and 5 cents list, extra, for each additional switch or receptacle in gang plates over the price of solid plates.

PLATES WITH ROUND CORNERS AND BEVELED EDGES

Plates with round corners and beveled edges will be furnished at 15 cents list, extra, per plate over the price of solid plates.

SPECIAL SIZE PLATES—SOLID ONLY

Special size plates for standard devices will be sold at a list price of 6 cents per square inch in lots of less than 100, and 4 cents per square inch in lots of 100 or more plates (not gangs) of one size and type. When plates are other than rectangular in shape, the area by which the list is determined will be the size of the smallest rectangular piece from which the specified plate, can be cut.

Orders for special size plates should always be accompanied by a plainly marked sketch, giving all dimensions.

SPECIAL PLATES

Plates which are special in ways not covered above will be quoted upon application.

Nothing in the prices listed above shall be understood to mean that special plates of any description will be furnished at a less price than the corresponding standard plate.

FACEPLATE SCREWS

Faceplate screws when bought separately will list at 75 cents per 100; standard package 100 in Schedule H.

ENGRAVING

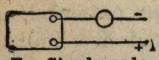
Flush plates will be engraved with words or numbers to indicate the circuits controlled at a list price of 6 cents per letter or numeral.

ADJUSTING FRAMES FOR FLUSH SWITCHES

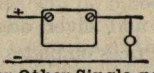
Perkins Adjusting Frames make it a simple matter to line up flush switches so that the plate will fit. These frames are made for both push button and rotary switches, and are supplied gratis to users of Perkins Switches.

BRYANT WIRING DIAGRAMS

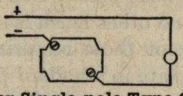
WIRING DIAGRAMS FOR FLUSH SWITCHES



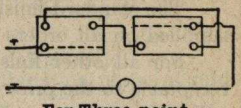
For Single-pole Capax Switches



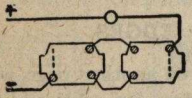
For Other Single-pole Push Button Switches



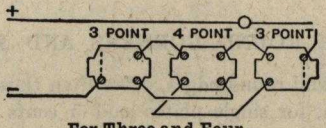
For Single-pole Type O and Rotary Switches



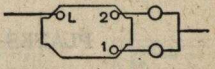
For Three-point Capax Switches



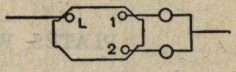
For Other Three-point Switches



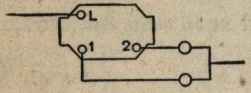
For Three and Four-point Switches



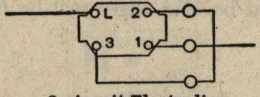
2-circuit Electrolier Connections 1, 2, 1 & 2, Off



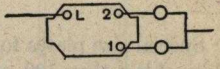
2-circuit Electrolier Connections: 1, Off, 2, Off



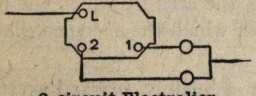
2-circuit Electrolier Connections: 1, 1 & 2, 1, Off



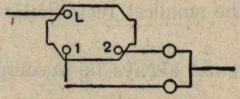
3-circuit Electrolier Connections: 1, 1 & 2, 1 & 2 & 3, Off



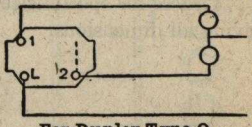
2-speed Fan Motor Connections: 1, 2, Off



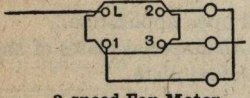
2-circuit Electrolier Connections: 1, Off, 1 & 2, Off



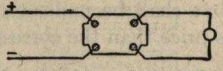
2-circuit Electrolier Connections: 1, 1 & 2, Off



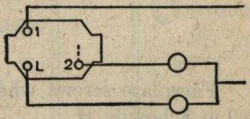
For Duplex Type O No. 2639 Switches



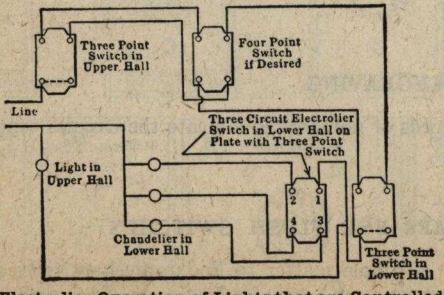
3-speed Fan Motor Connections: 1, 2, 3, Off



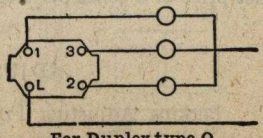
For Double-pole Switches



Duplex Type O Cat. 2639 Connected as Two Single-pole Switches



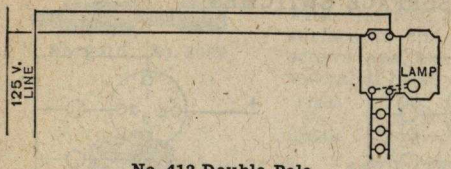
Electrolier Operation of Lights that are Controlled from Two or more Points



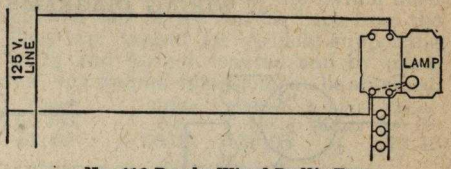
For Duplex type O No. 2640 Switches

BRYANT WIRING DIAGRAMS

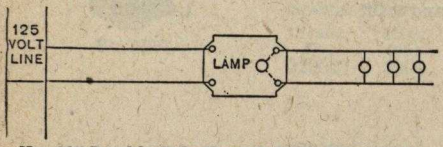
WIRING DIAGRAMS FOR FLUSH SWITCHES



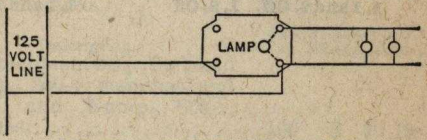
No. 413 Double-Pole
Ready Wired Bull's Eye Combination



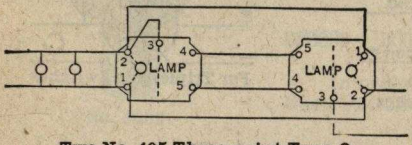
No. 413 Ready Wired Bull's Eye
Combination, Wired Single Pole



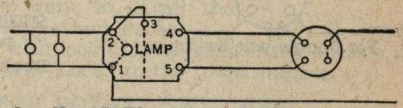
No. 465 Double Pole Type O Push Switch or
No. 469 Double Pole Rotary Flus
Switch, Lock Type



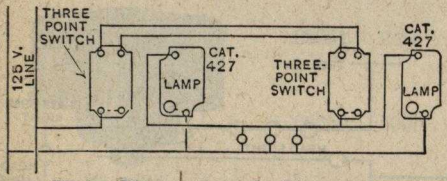
No. 465 or 469, Wired Single Pole



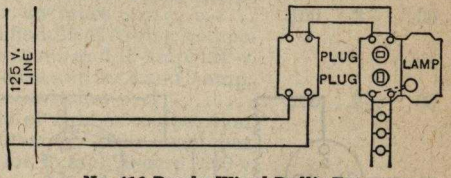
Two No. 495 Three-point Type O
Push Switches



One No. 495 Three-point Type O Push Switch
and One Regular Three-point Switch

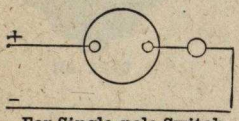


Wiring Diagram to make Three-point
Switches Indicating. The Lamps in Both Bull's
Eye Receptacles are Lighted
Whenever the Circuit is Closed

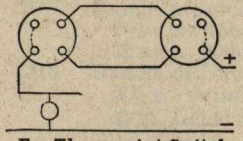


No. 419 Ready Wired Bull's Eye
Combination Controlled by Double-pole Switch

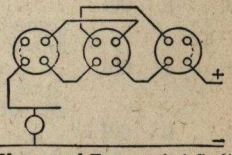
WIRING DIAGRAMS FOR SURFACE SWITCHES



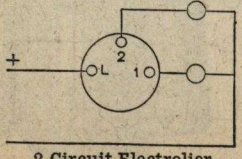
For Single-pole Switch



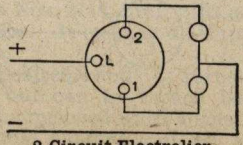
For Three-point Switch



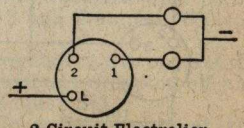
For Three and Four-point Switch



2 Circuit Electrolier
Connections, 1, 2, 1 and 2, Off



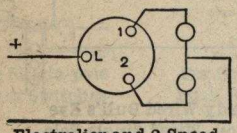
2 Circuit Electrolier
Connections, 1, Off, 2, Off
1, 1 and 2, 1, Off



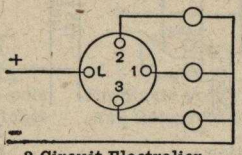
2 Circuit Electrolier
Connections, 1, Off, 1 and 2, Off

BRYANT WIRING DIAGRAMS

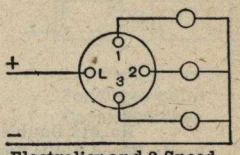
WIRING DIAGRAMS FOR SURFACE SWITCHES



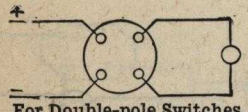
Electrolier and 2 Speed Fan Motor, Connections 1, 1 and 2, Off. 1, 2, Off



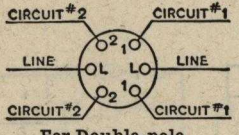
3 Circuit Electrolier Connections 1, 1 and 2. 1 and 2 and 3, Off



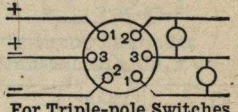
Electrolier and 3 Speed Fan Motor, Connections 1, 2, 3, Off



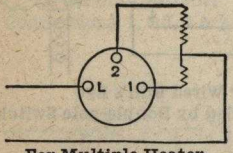
For Double-pole Switches



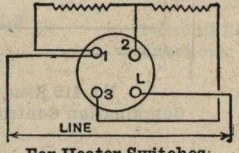
For Double-pole Double-throw Switches



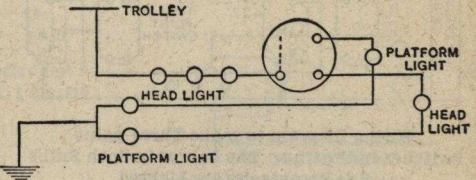
For Triple-pole Switches



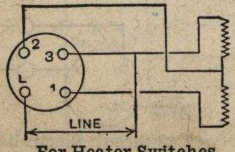
For Multiple Heater Switches. Operates Low, Medium, High, Off



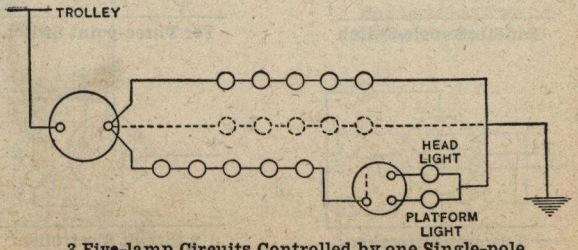
For Heater Switches Operates High, Medium, Low, Off



2 Circuit 600 Volt Switch



For Heater Switches Operates Low, Medium, High, Off



3 Five-lamp Circuits Controlled by one Single-pole 600 Volt Switch with Transfer Switch in One Circuit

H & H SWITCH SPECIALTIES



No. 3010 No. 3009

WALL CASE SCREW EXTENSIONS

These are hollow studs used to bring up the switch flush with the wall where the wall case is set too far back from the surface of the wall. They are tapped for $\frac{6}{32}$-inch supporting screws and are made in ¼ and ¾-inch lengths and by using several of these on a screw, any desired extension can be obtained.

Trade No.	Mfrs. No.	Length Inches	Price per 100	Trade No.	Mfrs. No.	Length Inches	Price per 100
68648	3009	¼	$1.60	68649	3010	¾	$2.10



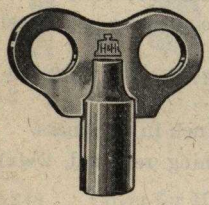
No. 5001

LOCK ATTACHMENTS FOR ROTARY SWITCHES

Any rotary switch, either surface or a flush, can be made a lock switch by removing handle and screwing on lock attachment. Special plate or cover not required.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Pkg.	Price Each
020027	5001	Lock attachment only, for 5 and 10-amp., 250-v. switches, and for 3 and 5-amp., 600-v. switches	100	3	$0.16
020028	5010	Lock attachment only, for 20-amp., 250-v. switches, and for 15 and 20-amp., 600-v. switches	100	3	.16
020029	5009	Lock attachment only, for 30-amp., 250-v. switches, and for 10-amp., 600-v. switches	100	3	.16
020030	5002	Lock key only, to fit all the above lock attachments	100	3	.06

In ordering switches with lock attachments, either surface or flush switches, add the word "Lock" to the trade number.



No. 5002

HANDLES FOR ROTARY SWITCHES

68650	5004	Handle of rubber composition, for 5 and 10-amp., 250-v. switches, and for 3 and 5-amp., 600-v. switches	100	2	.06
68651	2910	Round handle of rubber composition, for 5 and 10-amp., 250-v. switches, and for 3 and 5-amp., 600-v. switches	100	2¼	.06
68652	5005	Handle of rubber composition, for 20-amp., 250-v. switches, and for 15 and 20-amp., 600-v. switches	100	3½	.06
68653	4242	Handle of rubber composition, for 30-amp., 250-v. switches, and for 10-amp., 600-v. switches	100	4	.06
68654	2156	Handle of porcelain, for 5 and 10-amp., 250-v. switches, and for 3 and 5-amp., 600-v. switches	100	3	.06
68655	2157	Handle of porcelain, for 20-amp., 250-v. switches, and for 15 and 20-amp., 600-v. switches	100	5	.06
68656	2218	Handle of porcelain, for 30-amp., 250-v. switches, and for 10-amp., 600-v. switches	100	5	.06



No. 5004

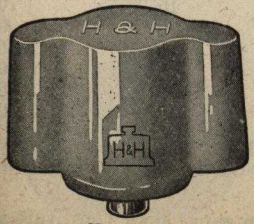
No. 2910

UNREMOVABLE HANDLES

A handle called a clutch handle can be supplied on 5 and 10-ampere, 250-volt switches, except on the small 5-ampere switches Nos. 2148, 2161, 2162 and 2163, and switches with porcelain covers. It can also be supplied on 3 and 5-ampere, 600-volt switches.

The clutch handle is turned in the regular way to operate the switch, but can be turned backward without dropping off and cannot be removed until a small screw is taken out.

Clutch handles can be attached to switches only at the factory at an extra charge of 15 cents and must be plainly specified on orders.



No. 2157

H & H SWITCHES



No. 2532

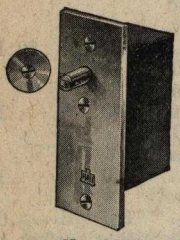
PENDENT SWITCHES

Single-pole—6 Amperes, 125 Volts; 3 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
097012	2532	.....	100	32	$0.50

These switches are provided with a double bushing, the inner one having a hole $\frac{9}{32}$ inch in diameter, suitable for No. 16 gauge lamp cord. This inner bushing can be removed when a larger cord is to be used, leaving another bushing with a hole $\frac{13}{32}$ inch, suitable for No. 16 gauge re-enforced portable cord. One button is black and one is red.

Standard finish is brush brass. No extra charge for polished brass finish. For other finishes, except gold and silver, add 10 cents to list price.



No. 2022

AUTOMATIC DOOR SWITCHES

Single-pole—6 Amperes, 125 Volts; 3 Amperes, 250 Volts

For automatically operating a light upon the opening and closing of a door.

038615	2022	Light on when door is open	30	22	2.25
038616	2023	Light on when door is closed...	10	10	2.25

The shell of the switch is of sheet steel .081 inch in thickness.

Dimensions of plate, $3\frac{3}{4}$x$1\frac{1}{4}$ inches. Opening required, $2\frac{5}{8}$x$1\frac{1}{16}$ inches. Depth, $1\frac{3}{4}$ inches.



No. 2990

H & H PORCELAIN SUB-BASES

For 5-ampere Switches

097013	2987	For cleat work	100	32	.05
097014	2988	For concealed work	100	30	.05
097015	2989	For molding work	100	28	.05
097016	2990	For molding terminal	100	30	.05



No. 2991

For 10-ampere Switches

097017	2991	For cleat work	100	46	.06
097018	2992	For concealed work	100	42	.06
097019	2993	For molding work	100	42	.06
097020	2994	For molding terminal	100	46	.06

Combination Style of Sub-bases

Designed to use on either cleat, concealed or molding circuits. It is necessary to carry only this one style in stock to meet all these conditions.

020024	1554	For 5-ampere switches	100	25	.05
020025	1556	For 5 and 10-ampere switches ..	100	30	.06
020026	1558	For 20 and 30-ampere switches .	30	30	.15



No. 1556

H & H WOOD MATS

For Flush, Rotary and Push Button Switches and Receptacles

Trade No.	Mfrs. No.	No. of Switches	Std. Pkg.	Wt., Lbs. Std., Pkg.	Price Each
036652	2281	1	*	18	$0.30
036653	2282	2	*	15	.50
036654	2283	3	*	15	.70
036655	2284	4	*	15	.90
036656	2285	5	*	15	1.10
036657	2286	6	*	15	1.30
036658	2287	7	*	15	1.50
036659	2288	8	*	15	1.70



No. 2281

The above prices are for pine or oak mats. Mahogany or cherry mats can be furnished in the above sizes for 10 cents each in addition to the above prices.

*100 single wood mats or their equivalent in gangs shall constitute a standard package.

SWITCH ACCESSORIES

SCHEDULE H

SWITCH HANDLES

Trade No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
121346	Rotary switch handle, composition or porcelain	100	100	....	$0.06
121347	Rotary switch handle, metal	100	100	....	.12

An allowance of 2 cents is made when switches are furnished without handles. For switches with metal handles add 6 cents.

Non-removable Handles

Rotary switches can be furnished with handles that cannot be removed at an additional list price of 5 cents.

LOCK ATTACHMENT



No. 2126



No. 2384

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
037213	2126	Key for rotary lock switches	100	100	2	$0.06
037215	2299	Key for push button lock switches	100	100	2	.15
037216	2384	Universal lock attachment	100	100	4	.16

By substituting this lock attachment for the regular handle on any Bryant or Perkins Rotary Switch, either surface or flush, lock switches may be obtained. By using this lock attachment, special plates are no longer required for lock flush switches.

SWITCH COVERS

Trade No.	Description	Std. Pkg.	Price Each
121348	Cover for 10-ampere, 250-volt D. P. switches or smaller	50	$0.08
	When switches are furnished without such covers an allowance of 3 cents is made.		
121349	Cover for switches larger than 10 amperes, 250 volts	50	.20
	When switches are furnished without such covers an allowance of 8 cents is made.		

SPECIAL FINISHES ON SURFACE SWITCHES

The standard finish on all surface switches, unless otherwise noted, is polished nickel, which will be supplied on all orders where no finish is specified. For switches in any other finish add 10 cents to the list price.

DUSTPROOF INDICATING SWITCHES

Indicating snap switches can be supplied with a mica disc in the indicator opening to exclude dust at an additional list of 10 cents.

SPECIAL SWITCHES

The design of the Perkins Switch lends itself admirably to the construction of switches of special types. The manufacture of switches for gas engines, fan motors, portable lamps, electric heaters, portable drills, as well as special lighting switches for effecting combinations of lamps different from the switches listed herein, has been most successful.

PORCELAIN SWITCH BLOCKS



No. 2357



No. 2358

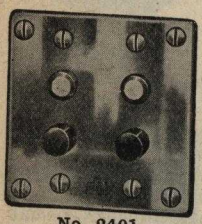
For Wall Sockets, Receptacle and 5-ampere 250-volt Switches

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
037202	2381	For surface work	10	100	30	$0.05
037203	2382	For concealed work	10	100	28	.05
037204	2383	For molding work	10	100	25	.05
037205	2439	For molding terminal	10	100	30	.05
		For 10-ampere 250-volt and 5-ampere 600-volt Switches				
037206	2357	For surface work	10	100	45	.06
037207	2252	For concealed work	10	100	40	.06
037208	2222	For molding work	10	100	40	.06
037212	2358	For molding terminal	10	100	45	.06
		For 20 and 30-ampere 250-volt Switches and 10 and 20-ampere 600-volt Switches				
037209	2379	For surface work	5	25	22	.15
037210	2380	For concealed work	5	25	24	.15
037211	2262	For molding work	5	25	24	.15

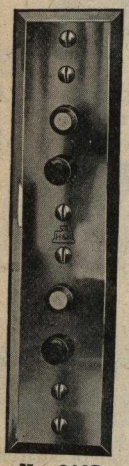
H & H MINIATURE PUSH BUTTON SWITCHES



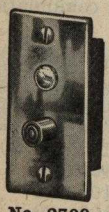
No. 2322



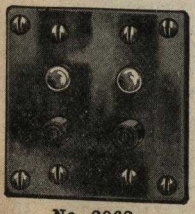
No. 2401



No. 2407



No. 2709



No. 2962

BATTERY SWITCHES, WITH PLATES

Designed for use on battery circuits of low potential with a current of about 6 amperes. Largely used to control the lights on automobiles and on motor boats. They will break a current of 3 amperes at 110 volts. The base enclosing the mechanism is of brass instead of porcelain as with the larger switches.

Plates are carried in stock in polished brass, polished nickel and in old brass finishes. They can be furnished to match any hardware finish and can be engraved to order.

These switches require a mortise of only $1\frac{3}{8}$x$\frac{3}{4}$x$1\frac{1}{32}$ inches.

Horizontal Style

Trade No.	Mfrs. No.	No. of Gangs of Plate	No. of Switches	No. of Pole of Switches	Dimensions Inches	Std. Pkg.	Wt., Lbs Std. Pkg.	Price Each
044174	2322	1	1	1	$2\frac{1}{16}$x1	*100	17	$0.90
044175	2401	2	2	1	$2\frac{1}{16}$x$2\frac{3}{16}$	*50	17	1.80
044176	2402	3	3	1	$2\frac{1}{16}$x$2\frac{59}{64}$	*34	17	2.70
044177	2403	4	4	1	$2\frac{1}{16}$x$3\frac{21}{32}$	*25	13	3.60
044178	2404	5	5	1	$2\frac{1}{16}$x$4\frac{25}{64}$	*20	13	4.50
044179	2405	6	6	1	$2\frac{1}{16}$x$5\frac{1}{8}$	*17	13	5.40

Tandem Style

044180	2407	2	2	1	$4\frac{5}{8}$x$1\frac{1}{8}$	*50	19	1.80
044181	2408	3	3	1	$6\frac{1}{2}$x$1\frac{1}{8}$	*34	18	2.70
044182	2409	4	4	1	$8\frac{3}{8}$x$1\frac{1}{8}$	*25	18	3.60

Three-Way Switches

These switches are to be used in pairs to control the dome light or tonneau light of a car or motor boat from either of two points.

68627	2398	1	1	Three-way	$2\frac{1}{16}$x1	*100	17	1.20

BATTERY PUSH SWITCHES WITH METAL BUTTONS

These switches do not have the regular flush switch mechanism like those above and therefore sell at a lower price. The blade has a quick snap and has only two positions, "on" and "off," so it is impossible for blade to hang just off the contacts and thus cause an arc.

The contacts are heavy and strong, the plates are removable, and the dimensions and appearance are the same as the above type except that these switches are $1\frac{3}{16}$ inches in depth.

One button is of white nickel finish and the other is of black nickel finish.

Horizontal Style

68628	2709	1	1	1	$2\frac{1}{16}$x1	*100	23	.50
68629	2962	2	2	1	$2\frac{1}{16}$x$2\frac{3}{16}$	*50	23	1.00
68630	2963	3	3	1	$2\frac{1}{16}$x$2\frac{59}{64}$	*34	23	1.50
68631	2964	4	4	1	$2\frac{1}{16}$x$3\frac{21}{32}$	*25	17	2.00
68632	2965	5	5	1	$2\frac{1}{16}$x$4\frac{25}{64}$	*20	17	2.50
68633	2966	6	6	1	$2\frac{1}{16}$x$5\frac{1}{8}$	*17	17	3.00

Tandem Style

68634	2972	2	2	1	$4\frac{5}{8}$x$1\frac{1}{8}$	*50	25	1.00
68635	2973	3	3	1	$6\frac{1}{2}$x$1\frac{1}{8}$	*34	24	1.50
68636	2974	4	4	1	$8\frac{3}{8}$x$1\frac{1}{8}$	*25	24	2.00

Three-Way Switches

68637	2710	1	1	Three-way	$2\frac{1}{16}$x1	*100	23	.75

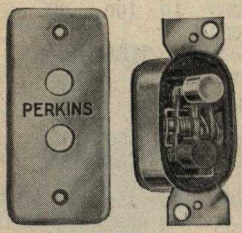
*100 battery switches, assorted, shall also constitute a standard package quantity. In assorting, a two-gang switch can be counted as two switches, a three-gang switch as three switches, etc.

PERKINS SWITCHES

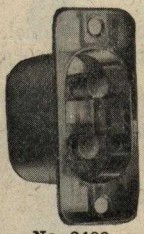
SCHEDULE H



No. 2441



No. 2551


No. 2488

PUSH BUTTON SWITCHES FOR AUTOMOBILES AND BATTERY CIRCUITS

Style A with Flush Plate, Single-pole

Trade No.	Mfrs. No.	Style	Size Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
121311	2441	Single	$2\frac{3}{16}$x $\frac{15}{16}$	10	100*	20	$0.50
121312	2442	2-gang	$2\frac{3}{16}$x$1\frac{3}{4}$	5	50*	20	1.00
121313	2443	3-gang	$2\frac{3}{16}$x$2\frac{1}{2}$	1	30*	15	1.50
121314	2444	4-gang	$2\frac{3}{16}$x$3\frac{1}{4}$	1	25*	20	2.00

Style B with Flush Plate, Single-pole

121315	2551	Single	$2\frac{1}{8}$x1	10	100†	20	.65
121316	2552	2-gang	$2\frac{1}{8}$x$1\frac{61}{64}$	5	50†	20	1.30
121317	2553	3-gang	$2\frac{1}{8}$x$2\frac{3}{4}$	1	30†	15	1.95
121318	2554	4-gang	$2\frac{1}{8}$x$3\frac{35}{64}$	1	25†	20	2.60

Style B with Flush Plate, Three-point

121319	2575	Single	$2\frac{1}{8}$x1	10	100†	20	.75
121320	2576	2-gang	$2\frac{1}{8}$x$1\frac{61}{64}$	5	50†	20	1.50
121321	2577	3-gang	$2\frac{1}{8}$x$2\frac{3}{4}$	1	30†	15	2.25
121322	2578	4-gang	$2\frac{1}{8}$x$3\frac{35}{64}$	1	25†	20	3.00

With Sunken Plate and Flush Buttons, Single-pole

121323	2488	Single	$2\frac{1}{8}$x1	10	100†	20	.75
121324	2516	2-gang	$2\frac{1}{8}$x$1\frac{61}{64}$	5	50†	20	1.50
121325	2517	3-gang	$2\frac{1}{8}$x$2\frac{3}{4}$	1	30†	15	2.25
121326	2518	4-gang	$2\frac{1}{8}$x$3\frac{35}{64}$	1	25†	20	3.00

With Sunken Plate and Flush Buttons, Three-point

121327	2583	Single	$2\frac{1}{8}$x1	10	100†	20	.85
121328	2584	2-gang	$2\frac{1}{8}$x$1\frac{61}{64}$	5	50†	20	1.70
121329	2585	3-gang	$2\frac{1}{8}$x$2\frac{3}{4}$	1	30†	15	2.55
121330	2586	4-gang	$2\frac{1}{8}$x$3\frac{35}{64}$	1	25†	20	3.40

When mounted in gangs, switches Nos. 2441–2444 are spaced $\frac{3}{4}$ inch on centers. All others are spaced $\frac{51}{64}$ inch on centers.

Standard finish is polished nickel or polished brass.

ROTARY SURFACE SWITCHES FOR AUTOMOBILES

Trade No.	Mfrs. No.	Description	Outside Diam. Base Inches	Sup. Screws Centered Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
121331	2463	Indicating.....	$1\frac{15}{16}$	$1\frac{3}{8}$	10	100	35	$0.80


No. 2463

This switch operates as follows: First turn, rear and side lights; second turn, rear and head lights; third turn, rear, side and head lights; fourth turn, all off.

Cover entirely conceals porcelain base.

Standard finish is polished nickel or polished brass.

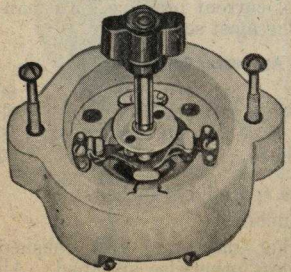
DASHBOARD SWITCHES

121332 2593 Dashboard switch $2\frac{15}{16}$ $2\frac{7}{8}$ 1 10 15 2.00

This switch operates as follows: First turn, side and rear lights; second turn, head and rear lights; third turn, head, side and rear lights; fourth turn, all off.

121333 2594 Dashboard switch $2\frac{15}{16}$ $2\frac{7}{8}$ 1 10 15 2.00

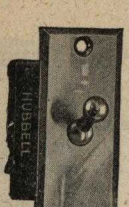
This switch operates as follows: First turn, rear lights; second turn, rear and side lights; third turn, rear, side and head lights; fourth turn, all off.


No. 2593

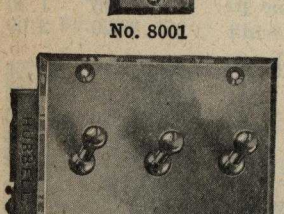
*The equivalent of 200 switches, assorted single and gang, is also a standard package.

†The equivalent of 100 switches, assorted single and gang, is also a standard package.

HUBBELL AUTOMOBILE AND SNAP SWITCHES



No. 8001



Gang of Three Switches



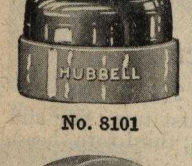
No. 8021



No. 8031



No. 8101



No. 8101
Interior View

AUTOMOBILE SWITCHES

SCHEDULE S

With Flush Plates

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
45972	8001	Single-pole switch.....	10	100	20	$0.80
45973	8003	Three-way switch.....	10	100	20	1.10
45974	8005	Momentary contact switch	10	100	20	.80
45975	8015	Two-toned horn switch..	5	50	15	1.50
45976	8016	Combination battery-magneto switch.....	5	50	15	1.50

With Recessed Plates

45977	8021	Single-pole switch.....	10	100	20	1.20
45978	8023	Three-way switch.....	10	100	20	1.50

AUTOMOBILE LOCK SWITCHES

SCHEDULE S

With Flush Plates

45979	8031	Single-pole switch.....	10	50	15	1.30
45980	8033	Three-way switch.....	10	50	15	1.60

Combinations of any of the above units, except recessed, can be furnished in side-by-side or tandem gangs up to four gangs. Various lighting systems of more or less special character can be arranged by these gang combinations. The price of gangs is the aggregate of the units comprising the gang whether arranged horizontally or in tandem.

Standard finishes, polished nickel, black enamel. Black enameled plates and nickel-plated toggle furnished, unless otherwise specified.

Two keys furnished regularly with all lock switches.

Manufacturers' numbers in unbroken cartons may be assorted to make up standard packages of 100 switches.

TOGGLE SNAP SWITCHES

SCHEDULE F

Surface Type

The toggle surface switch differs from the ordinary surface switch in that manipulation is by the throw of a lever or toggle instead of by the turning of a key or button. Throwing the lever up makes the circuit; throwing it down breaks the circuit. The movement is positive; the make-and-break quick and snappy.

The advantages of the toggle movement in a surface switch, as in a flush switch are three-fold. First, it makes the switch more attractive and stronger than the ordinary switch can be made; second, manipulation is much more convenient by means of the lever than by the turning of a key; third, the switch is self-indicating, the position of the lever showing at a glance whether the current is "on" or "off" without any marker or dial.

Electrically, the Hubbell Toggle Surface Switch conforms with the most rigid requirements of current practice. Mechanically, it is amply strong to resist the most severe duty.

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

45981	8101	Single-pole.....	10	50	20	.60
45982	8111	Single-pole, slotted base....	10	50	20	.60
45983	8103	Three-way.....	10	50	20	.80
45984	8113	Three-way, slotted base....	10	50	20	.80

Holes for supporting screws are spaced 1⅝ inches.

Outside diameter of base 2¼ inches.

Standard finish, polished nickel, old brass and polished brass. Polished nickel shipped unless otherwise specified. All other finishes except gold and silver add to list 10 cents.

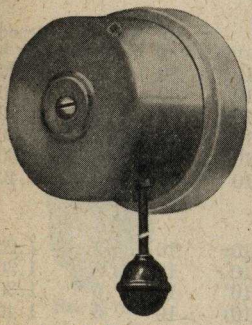
PERKINS PULL SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



No. 2387



No. 2546



No. 2473



No. 2507

PERKINS CEILING PULL SWITCHES

Trade No.	Mfrs. No.	Description	Amperes 125 Volts	Amperes 250 Volts	Carton	Std. Pkg.	Wt., Lbs. Std.Pkg.	Price Each
065497	2387	Single-pole, solid.....	10	5	10	30	20	$1.00
065498	2309	Single-pole, slotted.....	10	5	10	30	20	1.00
065499	2388	Three-point, solid	10	5	10	10	8	1.18
065500	2310	Three-point, slotted....	10	5	10	10	8	1.18
065501	2389	Four-point, solid	5	2	1	5	4	1.18
065502	2311	Four-point, slotted.....	5	2	1	5	4	1.18
065503	*2390	2-cir. electrolier, solid..	10	5	1	5	4	1.18
065504	*2312	2-cir. electrolier, slotted	10	5	1	5	4	1.18
065505	†2395	3-cir. electrolier, solid..	10	5	1	5	4	1.18
065506	†2313	3-cir. electrolier, slotted	10	5	1	5	4	1.18
065507	2396	Double-pole, solid.....	10	10	10	10	8	1.18
065508	2314	Double-pole, slotted ...	10	10	10	10	8	1.18

Outside diameter of base is $2\frac{7}{16}$ inches.

Holes for supporting screws are spaced $1\frac{23}{32}$ inches on centers.

PERKINS WALL PULL SWITCHES

17646	2546	Single-pole, solid.....	10	5	10	30	20	1.00
17647	2547	Single-pole, slotted....	10	5	10	30	20	1.00
17648	2548	Three-point, solid	10	5	10	10	8	1.18
17649	2549	Three-point, slotted...	10	5	10	10	8	1.18
17650	2550	Four-point, solid.....	5	2	1	5	4	1.18
17651	2560	Four-point, slotted....	5	2	1	5	4	1.18
17652	*2561	2-cir. electrolier, solid..	10	5	1	5	4	1.18
17653	*2562	2-cir. electrolier, slotted	10	5	1	5	4	1.18
17654	†2563	3-cir. electrolier, solid..	10	5	1	5	4	1.18
17655	†2564	3-cir. electrolier, slotted	10	5	1	5	4	1.18
17656	2565	Double-pole, solid.....	10	10	10	10	8	1.18
17657	2566	Double-pole, slotted...	10	10	10	10	8	1.18

Outside diameter of base is $2\frac{7}{16}$ inches.

Holes for supporting screws are spaced $1\frac{23}{32}$ inches on centers.

The above switches can also be supplied to make the same connections as Nos. 2649, 2653, 2657 and 2664 listed on other pages.

TYPE O PULL SWITCHES

		With ⅛-inch Cap						
078545	2515	Single-pole	10	5	10	30	12	1.30
		With ⅜-inch Cap						
065509	2473	Single-pole	10	5	10	30	12	1.30
065510	2474	Three-point.....	10	5	10	10	4	1.30
065511	2475	Four-point	5	2	10	10	4	1.30
065512	*2476	2-circuit electrolier.....	5	2	10	10	4	1.30
065513	†2477	3-circuit electrolier.....	5	2	10	10	4	1.30
065514	2478	Double-pole	10	10	10	10	4	1.30
065515	2479	Two-speed fan motor ..	10	5	10	10	4	1.30
065516	2480	Three-speed fan motor .	10	5	10	10	4	1.30
		With Hickey Cap for Fixture Use						
078537	2507	Single-pole.....	10	5	10	30	14	1.30
078538	2508	Three-point	10	5	10	10	5	1.30
078539	2509	Four-point.....	5	2	10	10	5	1.30
078540	*2510	2-circuit electrolier.....	5	2	10	10	5	1.30
078541	†2511	3-circuit electrolier.....	5	2	10	10	5	1.30
078542	2512	Double-pole	10	10	10	10	5	1.30
078543	2513	Two-speed fan motor ..	10	5	10	10	5	1.30
078544	2514	Three-speed fan motor.	10	5	10	10	5	1.30

*The operation of this switch is 1–2–1 & 2–off.

†The operation of this switch is 1–1 & 2–1 & 2 & 3–off.

Type O switches can also be supplied to make the same connections as Nos. 2626, 2628, 2629 and 2630 listed on another page.

The standard finish of Type O switches is brush brass, which will be supplied on all orders where no finish is specified. Switches will be finished in polished brass, when specified, at the same price. For switches in any other finish, add 10 cents to list price.

Each switch supplied with 10 feet of best quality linen cord. Extra cord, 1 cent list per foot.

PERKINS PENDENT SWITCHES

NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE H

TYPE O PENDENT SWITCHES



No. 2440

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
		SINGLE-POLE				
		10 Amperes, 125 Volts—5 Amperes, 250 Volts				
071447	2440	Pendent cap	10	30	15	$1.20
17612	2544	⅛-inch cap	10	30	15	1.20
071449	2464	⅜-inch cap	10	30	15	1.30
071448	2495	Pendent cap, indicating	10	30	15	1.30
17613	2545	⅛-inch cap, indicating	10	30	15	1.30
071450	2501	⅜-inch cap, indicating	10	30	15	1.40
		DOUBLE-POLE				
		10 Amperes, 250 Volts				
071463	2421	Pendent cap	10	10	5	1.20
071464	2498	Pendent cap, indicating	10	10	5	1.30
071465	2469	⅜-inch cap	10	10	5	1.30
071466	2504	⅜-inch cap, indicating	10	10	5	1.40
		THREE-POINT				
		10 Amperes, 125 Volts—5 Amperes, 250 Volts				
071451	2417	Pendent cap	10	10	5	1.20
071452	2465	⅜-inch cap	10	10	5	1.30
		FOUR-POINT				
		5 Amperes, 125 Volts—2 Amperes, 250 Volts				
071453	2418	Pendent cap	10	10	5	1.20
071454	2466	⅜-inch cap	10	10	5	1.30
		ELECTROLIER				
		5 Amperes, 125 Volts—2 Amperes, 250 Volts				
		Two-circuit, Operating 1-2-1 & 2-off				
071455	2419	Pendent cap	10	10	5	1.20
071456	2496	Pendent cap, indicating	10	10	5	1.30
071457	2467	⅜-inch cap	10	10	5	1.30
071458	2502	⅜-inch cap, indicating	10	10	5	1.40
		Three-circuit, Operating 1-1 & 2-1 & 2 & 3-off				
071459	2420	Pendent cap	10	10	5	1.20
071460	2497	Pendent cap, indicating	10	10	5	1.30
071461	2468	⅜-inch cap	10	10	5	1.30
071462	2503	⅜-inch cap, indicating	10	10	5	1.40
		FOR SPEED CONTROL OF FAN MOTORS AND OTHER SMALL MOTORS				
		10 Amperes, 125 Volts—5 Amperes, 250 Volts				
		Two-speed, Operating 1-2-off				
071467	2422	Pendent cap	10	10	5	1.20
071468	2499	Pendent cap, indicating	10	10	5	1.30
071469	2470	⅜-inch cap	10	10	5	1.30
071470	2505	⅜-inch cap, indicating	10	10	5	1.40
		Three-speed, Operating 1-2-3-off				
071471	2423	Pendent cap	10	10	5	1.20
071472	2500	Pendent cap, indicating	10	10	5	1.30
071473	2471	⅜-inch cap	10	10	5	1.30
071474	2506	⅜-inch cap, indicating	10	10	5	1.40

The above switches can also be supplied to make the same connections as Nos. 2649, 2653, 2657, 2661, 2669 and 2570 listed on other pages.

The standard finish of pendent switches is brush brass, which will be supplied on all orders where no finish is specified. Switches will be finished in polished brass at same price. For switches in any other finish, add 10 per cent to list price.

PERKINS PENDENT SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



No. 2572

TYPE T PENDENT SWITCHES

SINGLE-POLE

6 Amperes, 125 Volts—3 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
17609	2572	Pendent cap.....	10	100	30	$0.50
17610	2573	⅛-inch cap.....	10	100	30	.50
17611	2574	⅜-inch cap.....	10	100	30	.60

6 Amperes, 125 Volts—3 Amperes, 250 Volts



No. 2370

071441	2370	Pendent cap.....	10	100	30	.50
071442	2250	⅛-inch cap.....	10	100	30	.50
071443	2270	⅜-inch cap.....	10	100	35	.60

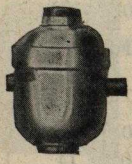
10 Amperes, 125 Volts—5 Amperes, 250 Volts

071444	2359	Pendent cap.....	10	100	45	.80
071445	2353	⅛-inch cap.....	10	100	45	.80
071446	2354	⅜-inch cap.....	10	100	47	.90

STRAIGHT-THROUGH SWITCHES

SINGLE-POLE

6 Amperes, 125 Volts—3 Amperes, 250 Volts



No. 2592

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
17668	2592	Single-pole.....	10	50	13	$0.60

DOUBLE-POLE

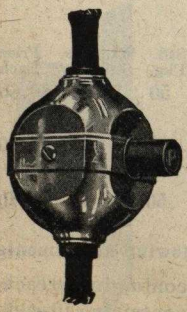
10 Amperes, 250 Volts

071199	2454	Double-pole.....	10	30	10	1.20
071200	2490	Double-pole, indicating	10	30	10	1.30

SERIES MULTIPLE HEAT REGULATING, SINGLE-POLE

Operating High, Medium, Low, Off

5 Amperes, 125 Volts—2 Amperes, 250 Volts



No. 2454

17669	2678	Three-heat switch..	10	10	12	1.30

Straight-through switches can also be supplied to make the same connections as Nos. 2176, 2183, 2216, 2649, 2653, 2657, 2185, 2664 and 2570 listed on other pages.

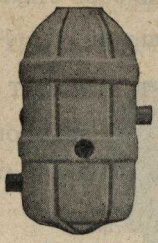
The standard finish on all the above switches is brush brass, which will be supplied on all orders where no finish is specified. Switches will be finished in polished brass, when specified, at the same price. For switches in any other finish, add 10 cents to the list price.

C-H PUSH BUTTON SWITCHES

NATIONAL ELECTRICAL CODE STANDARD


No. 7000

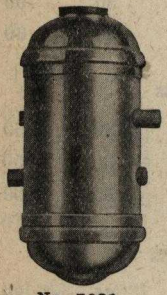

No. 7010


No. 7020


No. 7001


No. 7006


No. 7007


No. 7021

PENDENT SWITCHES

All Porcelain. Standard Finish, Gray, White or Brown when Specified

Trade No.	Mfrs. No.	Description	Cap., Amps. 125V.	250V.	Std.* Pkg.	Wt., Lbs. Std. Pkg.	Price Each
020588	7000	Single-pole.....	6	3	100	30	$0.50
020589	7010	Single-pole.....	10	5	100	40	.70
27509	7020	Two-circuit.....	6	3	50	25	1.00
		Brass Cap, Threaded for ⅛-inch Pipe					
020590	7001	Single-pole.....	6	3	100	34	.55
020591	7004	Three-point	6	3	50	17	.70
		Brass Cap, Threaded for ⅜-inch Pipe					
020592	7002	Single-pole	6	3	100	38	.60
020593	7005	Three-point	6	3	50	20	.75
		Brass Cap, Bushed for Pendent Cord					
020594	7003	Single-pole.....	6	3	100	34	.55
020595	7006	Three-point	6	3	50	17	.70



No. 7040

Standard package may contain assortment of standard colors.


No. 7044

All Brass, Acorn Design

020257	7007	Single-pole.....	6	3	100	15	.50
020596	7021	Two-circuit	6	3	50	14	1.00

Standard finish, brush brass. Polished brass furnished at the same price. For switches in any other finish, add 10 cents to list price.

FEED-THROUGH OR CORD SWITCHES

Brass Shell, Polished Nickel

Trade No.	Mfrs. No.	Description	Cap., Amps. 125V.	250V.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
020602	7040	Single-pole.....	6	3	50	8	$0.60
27508	7044	Three-heat, two-circuit	6	3	50	15	1.00
		Molded Thermoplax					
27510	7050	Single-pole.....	6	3	.50	.8	.40



No. 7050

***Standard Package Discount will be Allowed on the Following Assortments**

100 Nos. 7001, 7002 and 7003, in unbroken cartons containing 10 each.
50 Nos. 7004, 7005 and 7006, in unbroken cartons containing 10 each.

C-H PUSH BUTTON SPECIALTIES



No. 7150



No. 7151



No. 7141



No. 7152



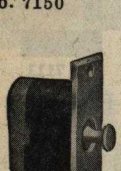
No. 7155

PUSH BUTTON CANDELABRA SWITCHES

½ Ampere, 125 Volts

Trade No.	Mfrs. No.	Description	Carton	Std.* Pkg.	Wt., Lbs. Std. Pkg.	Price Each
058184	7150	Stem for 4-inch candle	20	100	20	$0.90

Extra stems, 6 cents each. Std. pkg., 50. Extra push bars, 10 cents each.



Nos. 7160 and 7161

PUSH-AND-PULL CANOPY SWITCHES

3 AMPERES, 125 VOLTS; 1 AMPERE, 250 VOLTS

Push Button in to Close Circuit

058185	7151	For sheet canopy	20	100	11	.75
41133	7141	Like No. 7151 but with removable button	20	100	11	.75
058186	7152	For cast canopy	20	100	12	.80
41134	7142	Like No. 7152 but with removable button	20	100	12	.80
41135	7153	With 1-in. stem and bushing	20	100	13	.85
41136	7154	With ¾-in. stem and bushing	20	100	13	.84
058251	7155	For bottom shell, with knob threaded ¼ in. x27 to receive standard bottom fixture knob	20	100	12	.80
060022	7156	Steel yoke to mount No. 7155 in bottom shell	50	50	1	.05

Pull Button Out to Close Circuit

41128	7157	For sheet canopy	20	100	11	.75
41129	7158	For cast canopy	20	100	12	.80

Std. finish, pol. brass; brush brass or nickel, no extra charge.



No. 7195

AUTOMOBILE LIGHTING SWITCHES

Switches only, without Plates—10 Amperes, 80 Volts

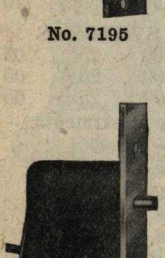
058187	7160	Single switch	20	100	15	.56
058188	7172	Gang of two switches	10	50	15	1.12
058189	7173	Gang of three switches	6	30	14	1.68
058190	7174	Gang of four switches	5	25	15	2.24
41131	7177	Series parallel switch	10	50	20	1.40

Switches only, without Plates—6 Amperes, 40 Volts; 3 Amperes, 80 Volts

41127	7170	Single three-way switch	20	100	15	1.00

Struck Up Plates for Automobile Lighting Switches

058191	7161	For single switch	....	100	...	.12
058192	7162	For gang of two switches	....	50	...	.24
058193	7163	For gang of three switches	....	30	...	.36
058194	7164	For gang of four switches	....	25	...	.48
41132	7178	Special plate for No. 7177	....	50	...	.36



No. 7240

FINISHES: Polished nickel furnished unless otherwise ordered. Black enamel, brush brass, or polished brass furnished without extra charge. Switch buttons are furnished in same finishes. With black enamel plates polished nickel buttons are furnished.

AUTOMOBILE DOOR SWITCHES

With Flush Plate and Strike Plate—5 Amperes, 80 Volts

41121	7195	Single-pole	20	100	.22	1.00
41130	7196	Three-wire	20	100	.22	1.08

STANDARD DOOR SWITCHES

6 AMPERES, 125 VOLTS; 3 AMPERES, 250 VOLTS

With Plate and Approved Box for No. 14 Two-wire Armored Cable

058195	7240	Circuit closed when door is open	5	25	20	2.25
058196	7241	Circuit closed when door is closed	5	25	20	2.25

NOTE.—The box is $1\frac{1}{32}$ inches wide by $2\frac{3}{4}$ inches long. The plate is $4\frac{5}{8}$ inches by $1\frac{1}{4}$ inches and will fit no other box.

Without Box, but with Universal Plate

058197	7245	Circuit closed when door is open	5	25	15	2.00
058198	7246	Circuit closed when door is closed	5	25	15	2.00

NOTE.—The universal plate is $5\frac{3}{8}$ inches by $1\frac{3}{8}$ inches. With this plate and the yoke by which it is attached to the switch, any door switch box may be used, regardless of distance between screw holes.



No. 7245

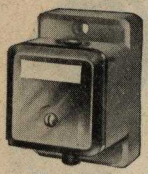
*Standard Package Discount will be Allowed on the Following Assortments:

100 Nos. 7151, 7152, 7153, 7154, 7155 and 7157, 7158 and 7141 and 7142 in unbroken cartons containing 20 each.

25 Nos. 7240, 7241, 7245 and 7246, in unbroken cartons containing 75 each.

C-H PUSH BUTTON SPECIALTIES

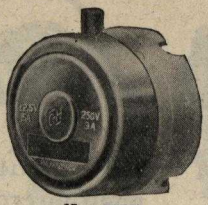
NATIONAL ELECTRICAL CODE STANDARD



No. 7102



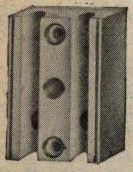
No. 7108



No. 7109



No. 7111



No. 7120



No. 7300



No. 7320



No. 7311

PUSH BUTTON SURFACE SWITCHES, SINGLE-POLE

5 Amperes, 125 Volts; 3 Amperes, 250 Volts

With Concealed Rectangular Base

Trade No.	Mfrs. No.	Description	Unit Pkg.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
020603	7102	With label holder	10	100	32	$0.35
020605	7103	Without label holder	10	100	32	.35
		With Concealed Circular Base				
27506	7107	With label holder	10	100	24	.32
27507	7108	Without label holder	10	100	24	.32
		With Slotted Circular Base				
81195	7109	With label holder	10	100	24	.32
81196	7110	Without label holder	10	100	24	.32
		With Base for National Metal Molding				
81197	7111	With label holder, one-way base	10	100	38	.40
81198	7112	Without label holder, one-way base	10	100	38	.40
81199	7113	With label holder, two-way base	10	100	30	.40
81200	7114	Without label holder, two-way base	10	100	30	.40

SUB-BASES FOR Nos. 7102 AND 7103 SURFACE SWITCHES

020607	7120	For open wiring	20	100	25	.05
020608	7121	For end of molding	20	100	25	.05
81201	7122	For concealed wiring	20	100	25	.05

Standard Package Discounts will be Allowed on the Following Assortments

100 Nos. 7102 and 7103, in unbroken cartons containing 10 each.
100 Nos. 7107 and 7108, in unbroken cartons containing 10 each.
100 Nos. 7109 and 7110, in unbroken cartons containing 10 each.
100 Nos. 7111 and 7112, in unbroken cartons containing 10 each.
100 Nos. 7113 and 7114, in unbroken cartons containing 10 each.
100 Nos. 7120, 7121 and 7122, in unbroken cartons containing 20 each.

PULL SWITCHES

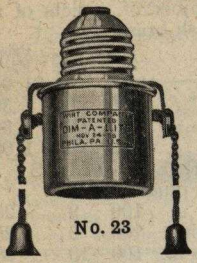
Single-pole—6 Amperes, 125 Volts; 3 Amperes, 250 Volts

C-H 6-ampere Pull Switches, despite their large capacity, are of small and neat design, the shells being interchangeable with C-H Brass Shell Sockets. The pendent types Nos. 7310 and 7311 have an approved cord strain relief which eliminates the need for knotting of the cord.

81203	7300	1/8-inch cap	10	50	12	.60
81204	7302	1/4-inch cap	10	20	5	.69
81205	7304	3/8-inch cap	10	20	5	.66
81206	7310	Pendent cap	10	20	5	.60
81207	7312	1/8-inch male cap	10	20	5	.60
81208	7313	1/4-inch male cap	10	20	5	.69
81209	7314	3/8-inch male cap	10	20	5	.69
		Fixture Pull Switches				
81210	7306	1/8-inch cap	10	50	12	.75
81211	7307	1/4-inch cap	10	20	5	.84
81212	7308	3/8-inch cap	10	20	5	.81
77534	7311	Pendent cap	10	20	5	.75
77535	7315	1/8-inch male cap	10	20	5	.75
77536	7316	1/4-inch male cap	10	20	5	.84
77537	7317	3/8-inch male cap	10	20	5	.84
		Ceiling Pull Switches				
77538	7320	Porcelain base	10	20	10	.71

Outside diameter of porcelain base of No. 7320 is 2 inches. Supporting screw holes spaced 1 inch on centers.

DIM-A-LITES



No. 23


No. 24

A series of devices for dimming or turning down a single incandescent lamp.

Can be used with either carbon or Mazda lamps up to 40 watts.

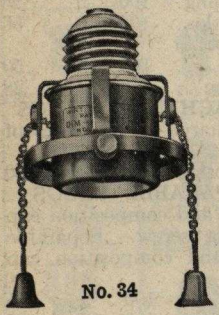
Five changes of light can be obtained, viz.: Full, low, dim, nitelite and out.

Saves current from 30 to 80 per cent, depending upon degree of turn down; U. S. Government test.

Approved by Underwriters.

Suitable for any current, either direct or alternating.

The resistance wire and contact bars are imbedded in a solid fireproof composition called Di-el-ite, which prevents the wire from corroding.


No. 34

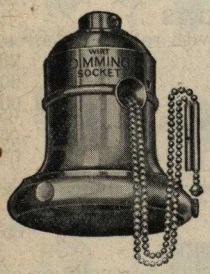
Dim-A-Lite Attachments

No. 23. Pull chain, portable, interchangeable type. Furnished on all orders unless other types are specified. Fits any fixture or chandelier socket and takes any ordinary electric lamp.

No. 24. Portable shade holder type. Operated either by turning shade or pulling cord. Slight turn of shade gives any degree of light desired. Equipped with 2¼-inch shade holder. Preferred when the light is within easy reach.

No. 34. Skeleton shade holder. This attachment is the same as the No. 23, except it is provided with skeleton shade holder which takes standard size shade.

Operated by a simple pull of chain which gives five changes of light, full, low, dim, nitelite and out.



No. 31

Dim-A-Lite Fixture Sockets

No. 31. Standard chain pull Dim-a-lite Fixture Socket. Five changes of light, the same as No. 23 Dim-a-lite. Combines standard pull chain socket, Dim-a-lite and 2¼-inch shade holder. Attaches permanently to fixture by thread and set screw. ⅛-inch cap regularly furnished. Prices on other sizes on request.

No. 32. Standard chain pull Dim-a-lite Fixture Socket. Same as No. 31 except no shade holder is supplied. Slightly larger than the ordinary pull socket and can be used in a great many standard two-piece husks.



No. 32

Dim-A-Lite Portable

No. 44. Dim-a-lite Portable provides a dimming portable fixture which may be attached to bed, crib, chair, bureau, etc. It has a universal holder and an adjustable hinge bracket, allowing for a wide range of adjustment.

Five changes of light. Supplied with cord and attachment plug.

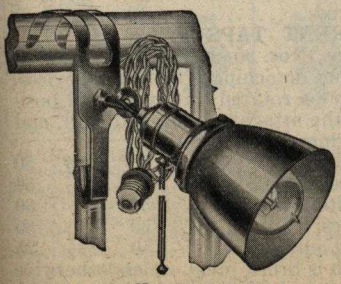
Trade No.	Mfrs. No.	Description	Std. Pkg.	Price Each
102686	23	Dim-a-lite	48	$1.25
102687	24	Dim-a-lite	50	1.25
100897	34	Dim-a-lite shade holder	50	1.35
102685	31	Dim-a-lite socket	50	1.50
100895	32	Dim-a-lite socket	50	1.50
100896	44	Dim-a-lite portable	24	3.75

Standard finish, brush brass.

110 volts furnished unless otherwise ordered. Add 10 cents for 220 volts. Add 10 cents for 32 volts.

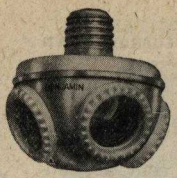
For special finishes on Dim-a-lites and fixture sockets add 25 cents; on Dim-a-lite Portable, add $1.00.

Special voltages to order. Quotations on foreign type Dim-a-lites upon request.


No. 44

BENJAMIN PLUG SOCKET SPECIALTIES


No. 92


No. 94


No. 903


No. 904


No. 903H


No. 907


No. 919


No. 9001


No. 9002


No. 91


No. 98


No. 99


No. 955


No. 95


No. 96

PLUG CLUSTERS

Designed for increasing the number of outlets of a single socket. Standard finish is brush brass.

Trade No.	Mfrs. No.	No. of Lights	Description	Std. Pkg.	Wt. Lbs.	Price Each
020912	*92	2	Multiple	10	4	$1.00
020913	93	3	Multiple	10	6	1.30
020914	94	4	Multiple	10	6	1.60
020915	*92½	2	Series	10	4	1.00

BENJAMIN SWIVEL ATTACHMENT PLUGS

Has rotating sleeve for attaching plug.

047777	*903	..		100	9	.25
27370	*903A	..	With counterbored bushing.	100	9	.25
27371	*903C	..	With insulated set screw tip	100	10	.28
27372	*903E	..	With 9/32-in. bushing.	100	9	.25
27380	903F	..	For armored cable..	100	10	.50
27381	903G	..	With insulated bushing for armored cable	100	10	.50
27373	*904	..	With molded ring	100	10	.28

FLEXI-HANDLE SWIVEL ATTACHMENT PLUGS

Designed for use with lamp guards or reflectors of small diameter.

27382	903H	..	With 5-in. extension	20	3	.80

BENJAMIN SOLID AND SEPARABLE PLUGS

Solid plugs have porcelain base and composition cap held together with central binding screw. Separable plugs have black porcelain body and composition cap which separate at any angle.

27375	*907	..	Solid plug	100	9	.15
27376	919	..	Separable plug	100	10	.25

ROTATING SOCKETS

Rotating sockets are provided with rotating sleeves.

020928	*9001	1	Unbalanced	20	5	.70
020930	*9021	1	Outside balance	20	15	.90
020931	*9002	2		20	5	1.00

SOCKET EXTENSIONS

020934	*91	..	Dipped brass	50	5	.25

REDUCERS

For adapting Mogul screw base to medium screw base lamps.

27374	*98	..		50	3½	.25

TUNGSTEN ADAPTERS

The rotating sleeve permits a complete revolution of the socket, while the hinge joint allows a wide range of angular adjustment.

038890	*99	..	Brush brass	25	5	.70

ADJUSTABLE PLUG CLUSTERS

The sockets may be turned to any position between two points 180° apart and locked by means of a screw. 2 and 4-light clusters and plugs may be wired two in series on 220-volt circuits.

038894	952	2	Wired	10	5	1.25
038895	953	3	Wired	10	6	1.55
038896	954	4	Wired	10	7	1.85
			With Pull Chain			
27377	955	2	Wired	10	5	1.85
27378	956	3	Wired	10	6	2.45
27379	957	4	Wired	10	7	3.05

CURRENT TAPS

The plug current taps, Nos. 95-96½, are designed to facilitate the attaching and detaching of portable devices. The body of the tap may be rotated to any desired position for accommodating the attaching plug and cord, and fixed by means of a rotating sleeve.

020935	*95	..	Multiple	50	9½	.50
020936	*95½	..	Series	50	9½	.50
060355	*96	..	Multiple	50	10	.80
060356	*96½	..	Series	50	10	.80
27383	*97	..	Plug only	50	1½	.25

Standard metal finish is brush brass, unless otherwise specified. *National Electrical Code Standard.

HUBBELL ATTACHMENT PLUGS

ATTACHMENT PLUGS AND CURRENT TAPS

NATIONAL ELECTRICAL CODE STANDARD, 660 WATTS, 250 VOLTS

SCEHDULE H

Listing of combinations of different caps with bases illustrated below are continued on the following page.

National Electrical Code Standard All Screw Base Plugs 660 Watts, 250 Volts All other Plugs, Connectors and Receptacles 6 Amperes, 250 Volts	No. 6918 Composition Cap Polarized 15c-Std. Pk. 50	No. 6919 Brass Covered Composition Polarized 25c-Std. Pk. 50	No. 6921 Composition "Knostrain" Polarized 25c-Std. Pk. 50	No. 6565 Br. Cov. Compo., "Knostrain" Polarized 55c-Std. Pk. 50	No. 5419 Porcelain Cap 15c-Std. Pk. 50	No. 5420 Composition Cap 20c-Std. Pk. 50	No. 5421 Brass Covered Porcelain Cap 25c Std. Pk. 50
No. 6817 Porcelain Base 15c-Std. Pk. 100	No. 6815 25c-Std. Pk. 100	No. 6816 35c-Std. Pk. 100	Cap No. 6921 Base 6817	Cap No. 6565 Base 6817	☆	☆	☆
No. 6917 Composition Base 15c-Std. Pk. 100	No. 6915 25c-Std. Pk. 100	No. 6916 35c-Std. Pk. 100	Cap No. 6921 Base 6917	Cap No. 6565 Base 6917	☆	☆	☆
No. 5607 Porcelain Base 15c-Std. Pk. 250	Cap No. 6918 Base No. 5607	Cap No. 6919 Base No. 5607	Cap No. 6921 Base 5607	Cap No. 6565 Base 5607	No. 5406 30c-Std. Pk. 250	No. 5408 35c-Std. Pk. 250	No. 5410 40c-Std. Pk. 250
No. 5612 Composition Base 20c-Std. Pk. 250	Cap No. 6918 Base No. 5612	Cap No. 6919 Base No. 5612	Cap No. 6921 Base 5612	Cap No. 6565 Base 5612	Cap No. 5419 Base No. 5612	No. 5467 40c-Std. Pk. 250	Cap No. 5421 Base No. 5612
No. 5756 Porcelain Base Cartridge Fuse 60c-Std. Pk. 100	Cap No. 6918 Base No. 5756	Cap No. 6919 Base No. 5756	Cap No. 6921 Base 5756	Cap No. 6565 Base 5756	No. 5729 75c-Std. Pk. 100	Cap No. 5420 Base No. 5756	Cap No. 5421 Base No. 5756
No. 5826 Composition Base Cartridge Fuse 75c-Std. Pk. 100	Cap No. 6918 Base No. 5826	Cap No. 6919 Base No. 5826	Cap No. 6921 Base 5826	Cap No. 6565 Base 5826	Cap No. 5419 Base No. 5826	Cap No. 5420 Base No. 5826	Cap No. 5421 Base No. 5826
No. 6295 ‡Current Tap Multiple 35c-Std. Pk. 50	Cap No. 6918 Base No. 6295	Cap No. 6919 Base No. 6295	Cap No. 6921 Base No. 6295	Cap No. 6565 Base No. 6295	No. 5638 50c-Std. Pk. 50	Cap No. 5420 Base No. 6295	Cap No. 5421 Base No. 6295

Nos. 6815, 6915, 6816 and 1916 packed 25 to a carton; all other devices, 10 to a carton. Charts Patented, March 21, 1916.

Standard finishes for caps, polished brass and brush brass. For special finished brass covered caps, add to list 5 cents. Brush brass shipped unless otherwise specified.

The above cartridge fuse plugs are furnished complete with 6 ampere Type C Baby Fuses. Length over all, 1½ inches; diameter, $\frac{13}{16}$-inch. When furnished without the fuse, deduct 25 cents from list price.

When two catalogue numbers appear with illustration, the base and cap are packed and sold as separate units, the price of the whole being the aggregate of the units. Where only one catalogue number appears the device is packed complete.

*Not a practical combination.

HUBBELL ATTACHMENT PLUGS

ATTACHMENT PLUGS AND CURRENT TAPS

NATIONAL ELECTRICAL CODE STANDARD, 660 WATTS, 250 VOLTS
SCHEDULE H

Bases only for combinations listed below are illustrated on the previous page.

No. 5523 Brass Covered Composition	No. 6336 Elongated Composition	No. 5657 Br. Cov. Compo. "Knostrain"	No. 5700 Br. Cov. Compo. "Knostrain"	No. 6328 Compo. Swivel "Knostrain" Bushing	No. 5625 Porc. Mult. Current Tap	No. 6335 Compo. Mult. Current Tap	No. 5424 Porcelain Lamp Receptacle	No. 5897 Composition Lamp Receptacle
30c-Std. Pk. 50	25c-Std. Pk. 50	45c Std. Pk. 50	55c-Std. Pk. 50	35c-Std. Pk. 50	35c Std. Pk. 50	40c Std. Pk. 50	25c Std. Pk. 50	30c Std. Pk. 50
☆	☆	☆	☆	☆	☆	☆	☆	☆
☆	☆	☆	☆	☆	☆	☆	☆	☆
Cap No. 5523 Base No. 5607	Cap No. 6336 Base 5607	Cap No. 5657 Base 5607	Cap No. 5700 Base 5607	Cap No. 6328 Base No. 5607	Tap No. 5625 Base 5607	Tap No. 6335 Base 5607	☆	☆
No. 5468 50c-Std. Pk. 250	Cap No. 6336 Base 5612	No. 5493 65c Std. Pk. 100	No. 5701 75c Std. Pk. 100	Cap No. 6328 Base No. 5612	Tap No. 5625 Base 5612	Tap No. 6335 Base 5612	☆	☆
Cap No. 5523 Base No. 5756	Cap No. 6336 Base 5756	Cap No. 5657 Base 5756	Cap No. 5700 Base 5756	Cap No. 6328 Base No. 5756	Tap No. 5625 Base 5756	Tap No. 6335 Base 5756	Rec. No. 5424 Base No. 5756	Rec. No. 5897 Base 5756
Cap No. 5523 Base No. 5826	Cap No. 6336 Base 5826	Cap No. 5657 Base 5826	Cap No. 5700 Base 5826	Cap No. 6328 Base 5826	Tap No. 5625 Base 5826	Tap No. 6335 Base 5826	Rec. No. 5424 Base 5826	Rec. No. 5897 Base 5826
Cap No. 5523 Base No. 6295	Cap No. 6336 Base No. 6295	Cap No. 5657 Base No. 6295	Cap No. 5700 Base No. 6295	Cap No. 6328 Base No. 6295	☆	☆	Rec. No. 5424 Base No. 6295	Rec. No. 5897 Base No. 6295

All the above devices are packed 10 to a carton. Charts Patented, March 21, 1916.

Standard finishes for caps, polished brass and brush brass. For special finished brass covered caps, add to list 5 cents. Brush brass shipped unless otherwise specified.

The above cartridge fuse plugs are furnished complete with 6 ampere Type C Baby Fuses. Length over all, 1½ inches; diameter, ⅓ inch. When furnished without the fuse, deduct 25 cents from list price.

When two catalogue numbers appear with illustration, the base and cap are packed and sold as separate units, the price of the whole being the aggregate of the units. Where only one catalogue number appears the device is packed complete.

*Not a practical combination.

HUBBELL ATTACHMENT PLUGS

CURRENT TAPS, FIXTURE RECEPTACLES AND CORD CONNECTORS

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H

All Screw Base Plugs, 660 Watts, 250 Volts
All other Plugs, Connectors and Receptacles, 6 Amperes, 250 Volts

Listing of combinations of different caps with bases are continued on the following page.

National Electrical Code Standard All Screw Base Plugs 660 Watts, 250 Volts All other Plugs, Connectors and Receptacles 6 Amperes, 250 Volts	No. 6918 Composition Cap Polarized	No. 6919 Brass Covered Composition Polarized	No. 6921 Composition "Knostrain" Polarized	No. 6565 Br.Cov.Compo. "Knostrain" Polarized	No. 5419 Porcelain Cap	No. 5420 Composition Cap	No. 5421 Brass Covered Porcelain Cap
	15c-Std. Pk. 50	25c-Std. Pk. 50	25c-Std. Pk. 50	55c-Std. Pk. 50	15c-Std. Pk. 50	20c Std. Pk. 50	25c-Std. Pk. 50
*No. 6297 Current Tap Multiple 35c-Std. Pk. 50	Cap No. 6918 Base No. 6297	Cap No. 6919 Base No. 6297	Cap No. 6921 Base No. 6297	Cap No. 6565 Base No. 6297	No. 5735 50c Std. Pk 50	Cap No. 5420 Base No. 6297	Cap No. 5421 Base No. 6297
*No. 6339 Current Tap Multiple 45c-Std. Pk. 50	Cap No. 6918 Base No. 6339	Cap No. 6919 Base No. 6339	Cap No. 6921 Base No. 6339	Cap No. 6565 Base No. 6339	Cap No. 5419 Base No 6339	No. 6338 65c Std. Pk. 50	Cap No. 5421 Base No. 6339
No. 6250 Fixture Receptacle with Brass Casing 45c-Std. Pk. 20	Cap No. 6918 Base No. 6250	Cap No. 6919 Base No. 6250	Cap No. 6921 Base No. 6250	Cap No. 6565 Base No. 6250	Cap No. 5419 Base No. 6250	Cap No. 5420 Base No. 6250	Cap No. 5421 Base No. 6250
No. 6251 Fixture Receptacle without Casing 30c Std. Pk. 20	Cap No. 6918 Base No. 6251	Cap No. 6919 Base No. 6251	Cap No. 6921 Base No. 6251	Cap No. 6565 Base No. 6251	Cap No. 5419 Base No. 6251	Cap No. 5420 Base No 6251	Cap No. 5421 Base No. 6251
No. 6252 Fixture Receptacle with ⅛-inch Bushing 45c-Std. Pk. 20	Cap No. 6918 Base No. 6252	Cap No. 6919 Base No. 6252	Cap No. 6921 Base No. 6252	Cap No. 6565 Base No. 6252	Cap No. 5419 Base No. 6252	Cap No. 5420 Base No 6252	Cap No. 5421 Base No. 6252
No. 6253 Fixture Receptacle with ⅜-inch Bushing 50c Std. Pk. 20	Cap No. 6918 Base No. 6253	Cap No. 6919 Base No. 6253	Cap No. 6921 Base No. 6253	Cap No. 6565 Base No. 6253	Cap No. 5419 Base No. 6253	Cap No. 5420 Base No. 6253	Cap No. 5421 Base No 6253
No. 6087 Porcelain Cord Connector Body 25c-Std. Pk. 50	Cap No. 6918 Base No. 6087	Cap No. 6919 Base No. 6087	Cap No. 6921 Base No. 6087	Cap No. 6565 Base No. 6087	Cap No. 5419 Base No. 6087	Cap No. 5420 Base No. 6087	Cap No. 5421 Base No. 6087

All the above devices are packed 10 to a carton. Charts Patented, March 21, 1916.

Standard finishes, brush brass and polished brass. For other finishes on fixture receptacles add to list 10 cents. For special finished rims on No. 6251 receptacle add to list 5 cents. For special finished, brass covered caps, add to list 5 cents. Brush brass shipped unless otherwise specified.

When two catalogue numbers appear with illustration, the base and cap are packed and sold as separate units, the price of the whole being the aggregate of the units. Where only one catalogue number appears, the device is packed complete. In cases where base and cap are separately packed but ordered at the same time, the standard package quantity of both will be that applying to the base.

HUBBELL ATTACHMENT PLUGS

CURRENT TAPS, FIXTURE RECEPTACLES AND CORD CONNECTORS

NATIONAL ELECTRICAL CODE STANDARD.

SCHEDULE H

All Screw Base Plugs, 660 Watts, 250 Volts

All other Plugs, Connectors and Receptacles, 6 Amperes, 250 Volts

Bases only for combinations listed below are illustrated on the previous page.

No. 5523 Brass Covered Composition	No. 6336 Elongated Composition	No. 5657 Br.Cov.Compo. "Knostrain"	No. 5700 Br.Cov.Compo. "Knostrain"	No. 6328 Compo. Swivel "Knostrain" Bushing	No. 5625 Porc. Mult. Current Tap	No. 6335 Compo. Mult. Current Tap	No. 5424 Porcelain Lamp Receptacle	No. 5897 Composition Lamp Receptacle
30c–Std. Pk. 50	25c–Std. Pk. 50	45c Std. Pk. 50	55c–Std. Pk. 50	35c–Std. Pk. 50	35c Std. Pk. 50	40c Std. Pk. 50	25c–Std. Pk. 50	30c Std. Pk. 50
Cap No. 5523 Base No. 6297	Cap No. 6336 Base No. 6297	Cap No. 5657 Base No. 6297	Cap No. 5700 Base No. 6297	Cap No. 6328 Base No. 6297	☆	☆	Rec. No. 5424 Base No. 6297	Rec. No. 5897 Base No. 6297
Cap No. 5523 Base No. 6339	Cap No. 6336 Base No. 6339	Cap No. 5657 Base No. 6339	Cap No. 5700 Base No. 6339	Cap No. 6328 Base No. 6339	☆	☆	Rec. No. 5424 Base No. 6339	Rec. No. 5897 Base No. 6339
Cap No. 5523 Base No. 6250	Cap No. 6336 Base No. 6250	Cap No. 5657 Base No. 6250	Cap No. 5700 Base No. 6250	Cap No. 6328 Base No. 6250	Tap No. 5625 Base No. 6250	Tap No. 6335 Base No. 6250	Rec. No. 5424 Base No. 6250	Rec. No. 5897 Base No. 6250
Cap No. 5523 Base No. 6251	Cap No. 6336 Base 6251	Cap No. 5657 Base 6251	Cap No. 5700 Base 6251	Cap No. 6328 Base No. 6251	Tap No. 5625 Base 6251	Tap No. 6335 Base 6251	Rec. No. 5424 Base 6251	Rec. No. 5897 Base 6251
Cap No. 5523 Base No. 6252	Cap No. 6336 Base No. 6252	Cap No. 5657 Base 6252	Cap No. 5700 Base No. 6252	Cap No. 6328 Base No. 6252	Tap No. 5625 Base 6252	Tap No. 6335 Base 6252	Rec. No. 5424 Base No. 6252	Rec. No. 5897 Base No. 6252
Cap No. 5523 Base No. 6253	Cap No. 6336 Base No. 6253	Cap No. 5657 Base 6253	Cap No. 5700 Base No. 6253	Cap No. 6328 Base No. 6253	Tap No. 5625 Base 6253	Tap No. 6335 Base 6253	Rec. No. 5424 Base No. 6253	Rec. No. 5897 Base No. 6253
Cap No. 5523 Base No. 6087	Cap No. 6336 Base 6087	Cap No. 5657 Base 6087	Cap No. 5700 Base 6087	Cap No. 6328 Base No. 6087	Tap No. 5625 Base 6087	Tap No. 6335 Base 6087	Rec. No. 5424 Base No. 6087	Rec. No. 5897 Base 6087

All the above devices are packed 10 to a carton.

Charts Patented, March 21, 1916.

Standard finishes, brush brass and polished brass. For other finishes on fixture receptacles add to list 10 cents For special finished, brass covered caps, add to list 5 cents. For special finished rims on No. 6251 receptacle add to list 5 cents. Brush brass shipped unless otherwise specified.

When two catalogue numbers appear with illustration, the base and cap are packed and sold as separate units, the price of the whole being the aggregate of the units. Where only one catalogue number appears, the device is packed complete. In cases where base and cap are separately packed but ordered at the same time, the standard package quantity of both will be that applying to the base.

*Not a practical combination.

HUBBELL ATTACHMENT PLUGS

CORD CONNECTORS AND WALL RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD, 6 AMPERES, 250 VOLTS

SCHEDULE H

Listing of combinations of different caps with bases illustrated below are continued on the following page.

National Electrical Code Standard All Screw Base Plugs 660 Watts 250-Volts All other Plugs, Connectors and Receptacles 6 Amperes, 250 Volts	No. 6918 Composition Cap Polarized 15c-Std. Pk. 50	No. 6919 Brass Covered Composition Polarized 25c-Std. Pk. 50	No. 6921 Composition "Knostrain" Polarized 25c-Std. Pk. 50	No. 6565 Br. Cov. Compo., "Knostrain" Polarized 55c-Std. Pk. 50	No. 5419 Porcelain Cap 15c-Std. Pk. 50	No. 5420 Composition Cap 20c-Std. Pk. 50	No. 5421 Brass Covered Porcelain Cap 25c-Std. Pk. 50
No. 5574 Connector Body 30c-Std. Pk. 50	Cap No. 6918 Base No. 5574	Cap No. 6919 Base No. 5574	Cap No. 6921 Base No. 5574	Cap No. 6565 Base No. 5574	Cap No. 5419 Base No. 5574	No. 5518 50c-Std. Pk. 50	Cap No. 5421 Base No. 5574
No. 6095 Connector Body "Knostrain" Bushing 80c-Std. Pk. 50	Cap No. 6918 Base No. 6095	Cap No. 6919 Base No. 6095	Cap No. 6921 Base No. 6095	Cap No. 6565 Base No. 6095	Cap No. 5419 Base No. 6095	Cap No. 5420 Base No. 6095	Cap No. 5421 Base No. 6095
No. 5617 Concealed Recept. Screws 1½" Centers 30c-Std. Pk. 50	Cap No. 6918 Base No. 5617	Cap No. 6919 Base No. 5617	Cap No. 6921 Base No. 5617	Cap No. 6565 Base No. 5617	Cap No. 5419 Base No. 5617	Cap No. 5420 Base No. 5617	Cap No. 5421 Base No. 5617
No. 5618 Cleat Recept. Screws 1⅜" Centers 30c-Std. Pk. 50	Cap No. 6918 Base No. 5618	Cap No. 6919 Base No. 5618	Cap No. 6921 Base No. 5618	Cap No. 6565 Base No. 5618	Cap No. 5419 Base No. 5618	Cap No. 5420 Base No. 5618	Cap No. 5421 Base No. 5618
No 5619 Moulding Recept. Screws 1⅜" Centers 30c-Std. Pk. 50	Cap No. 6918 Base No. 5619	Cap No. 6919 Base No. 5619	Cap No. 6921 Base No. 5619	Cap No. 6565 Base No. 5619	Cap No. 5419 Base No. 5619	Cap No. 5420 Base No. 5619	Cap No. 5421 Base No. 5619
No 5939 One-Way Recept. National Moulding 30c-Std. Pk. 50	Cap No 6918 Base No 5939	Cap No 6919 Base No 5939	Cap No. 6921 Base No. 5939	Cap No. 6565 Base No. 5939	Cap No. 5419 Base No. 5939	Cap No. 5420 Base No. 5939	Cap No. 5421 Base No. 5939
No. 6068 Two-Way Recept National Moulding 30c-Std. Pk. 50	Cap No. 6918 Base No 6068	Cap No. 6919 Base No. 6068	Cap No. 6921 Base No. 6068	Cap No. 6565 Base No. 6068	Cap No. 5419 Base No. 6068	Cap No. 5420 Base No. 6068	Cap No. 5421 Base No. 6068

All the above devices are packed 10 to a carton. Charts Patented, March 21, 1916.

Standard finishes for caps, brush brass and polished brass. Brush brass shipped unless otherwise specified. For special finished brass covered caps, add to list 5 cents.

When two catalogue numbers appear with illustration, the base and cap are packed and sold as separate units, the price of the whole being the aggregate of the units. When only one catalogue number appears the device is packed complete.

HUBBELL ATTACHMENT PLUGS

CORD CONNECTORS AND WALL RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD, 6 AMPERES, 250 VOLTS

SCHEDULE H

Bases only for combinations listed below are illustrated on the previous page.

No. 5523 Brass Covered Composition	No. 6336 Elongated Composition	No. 5657 Br Cov Compo. "Knostrain"	No. 5700 Br Cov Compo "Knostrain"	No. 6328 Compo Swivel "Knostrain" Bushing	No. 5625 Porc. Mult. Current Tap	No. 6335 Compo. Mult. Current Tap	No 5424 Porcelain Lamp Receptacle	No. 5897 Composition Lamp Receptacle
 30c-Std. Pk. 50	 25c-Std. Pk. 50	 45c Std. Pk. 50	 55c-Std Pk. 50	 35c-Std Pk. 50	 35c Std. Pk 50	 40c Std. Pk. 50	 25c Std. Pk. 50	 30c Std. Pk 50
Cap No. 5523 Base No. 5574	Cap No. 6336 Base 5574	Cap 5657 Base 5574	Cap No. 5700 Base 5574	Cap No. 6328 Base No. 5574	Tap No. 5625 Base 5574	Tap No. 6335 Base 5574	Rec No. 5424 Base 5574	Rec No 5897 Base 5574
Cap No. 5523 Base No. 6095	Cap No. 6336 Base 6095	Cap No. 5657 Base 6095	No. 5699 $1.35- Sd. Pk. 50	Cap No. 6328 Base No. 6095	Tap No. 5625 Base 6095	Tap No. 6335 Base 6095	Rec No 5424 Base No. 6095	Rec No 5897 Base No. 6095
Cap No. 5523 Base No. 5617	Cap No. 6336 Base No. 5617	Cap No 5657 Base 5617	Cap No. 5700 Base No. 5617	Cap No. 6328 Base No. 5617	Tap No. 5625 Base No. 5617	Tap No. 6335 Base No. 5617	Rec No 5424 Base No 5617	Rec No 5897 Base No. 5617
Cap No. 5523 Base No. 5618	Cap No. 6336 Base No. 5618	Cap No. 5657 Base 5618	Cap No. 5700 Base No. 5618	Cap No 6328 Base No. 5618	Tap No 5625 Base No. 5618	Tap No 6335 Base No. 5618	Rec No 5424 Base No 5618	Rec No. 5897 Base No. 5618
Cap No. 5523 Base No. 5619	Cap No. 6336 Base No. 5619	Cap No. 5657 Base No. 5619	Cap No 5700 Base No 5619	Cap No 6328 Base No. 5619	Tap No 5625 Base No. 5619	Tap No 6335 Base No 5619	Rec No 5424 Base No 5619	Rec No 5897 Base No 5619
Cap No. 5523 Base No. 5939	Cap No. 6336 Base No. 5939	Cap No 5657 Base 5939	Cap No 5700 Base No. 5939	Cap No 6328 Base No. 5939	Tap No 5625 Base No. 5939	Tap No 6335 Base No. 5939	Rec No 5424 Base No 5939	Rec No 5897 Base No 5939
Cap No. 5523 Base No. 6068	Cap No. 6336 Base No. 6068	Cap No. 5657 Base 6068	Cap No. 5700 Base No. 6068	Cap No 6328 Base No. 6068	Tap No 5625 Base 6068	Tap No 6335 Base 6068	Rec No 5424 Base No 6068	Rec No 5897 Base No. 6068

Charts Patented, March 21, 1916.

All the above devices are packed 10 to a carton.

Standard finishes for caps, brush brass and polished brass. Brush brass shipped unless otherwise specified. For special finished brass covered caps, add to list 5 cents.

When two catalogue numbers appear with illustration, the base and cap are packed and sold as separate units, the price of the whole being the aggregate of the units. When only one catalogue number appears the device is packed complete.

HUBBELL ATTACHMENT PLUGS

CONDUIT BOX, WEATHERPROOF AND FLUSH RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD, 6 AMPERES, 250 VOLTS SCHEDULE H

Listing of combinations of different caps with bases illustrated below are continued on the following page.

National Electrical Code Standard All Screw Base Plugs 660 Watts, 250 Volts All other Plugs, Connectors and Receptacles 6 Amperes, 250 Volts	No. 6918 Composition Cap Polarized 15c-Std. Pk. 50	No. 6919 Brass Covered Composition Polarized 25c-Std. Pk. 50	No. 6921 Composition "Knostrain" Polarized 25c-Std. Pk. 50	No. 6565 Br. Cov. Compo. "Knostrain" Polarized 55c-Std. Pk. 50	No. 5419 Porcelain Cap 15c-Std. Pk. 50	No. 5420 Composition Cap 20c-Std. Pk. 50	No. 5421 Brass Covered Porcelain Cap 25c-Std. Pk. 50
No. 5620 Fielding Receptacle, Screws 2⅝6 Centers 35c-Std. Pk. 50	Cap No. 6918 Base No. 5620	Cap No. 6919 Base No. 5620	Cap No. 6921 Base No. 5620	Cap No. 6565 Base No. 5620	Cap No. 5419 Base No. 5620	Cap No. 5420 Base No. 5620	Cap No. 5421 Base No. 5620
No. 5624 Conduit Box Recep. Screws ⅝" Centers 30c-Std. Pk. 50	Cap No. 6918 Base No. 5624	Cap No. 6919 Base No. 5624	Cap No. 6921 Base No. 5624	Cap No. 6565 Base No. 5624	Cap No. 5419 Base No. 5624	Cap No. 5420 Base No. 5624	Cap No. 5421 Base No. 5624
No. 6103 Conduit Box Recep. Cover Suspension 35c-Std. Pk. 50	Cap No. 6918 Base No. 6103	Cap No. 6919 Base No. 6103	Cap No. 6921 Base No. 6103	Cap No. 6565 Base No. 6103	Cap No. 5419 Base No. 6103	Cap No. 5420 Base No. 6103	Cap No. 5421 Base No. 6103
No. 6294 Porcelain Weatherproof Receptacle 50c-Std. Pk. 30	Cap No. 6918 Base No. 6294	Cap No. 6919 Base No. 6294	Cap No. 6921 Base No. 6294	Cap No. 6565 Base No. 6294	Cap No. 5419 Base No. 6294	Cap No. 5420 Base No. 6294	Cap No. 5421 Base No. 6294
No. 6293 Comp. Weatherproof Receptacle 65c-Std Pk. 30	Cap No. 6918 Base No. 6293	Cap No. 6919 Base No. 6293	Cap No. 6921 Base No. 6293	Cap No. 6565 Base No. 6293	Cap No. 5419 Base No. 6293	Cap No. 5420 Base No. 6293	Cap No. 5421 Base No. 6293
No. 6282 Flush Receptacle 2¼" Plate Assembled 85c-Std. Pk. 50	Cap No. 6918 Base No. 6282	Cap No. 6919 Base No. 6282	Cap No. 6921 Base No. 6282	Cap No. 6565 Base No. 6282	Cap No. 5419 Base No. 6282	Cap No. 5420 Base No. 6282	Cap No. 5421 Base No. 6282
No. 6283 Flush Receptacle 3¼" Plate Assembled 95c-Std. Pk. 50	Cap No. 6918 Base No. 6283	Cap No. 6919 Base No. 6283	Cap No. 6921 Base No. 6283	Cap No. 6565 Base No. 6283	Cap No. 5419 Base No. 6283	Cap No. 5420 Base No. 6283	Cap No. 5421 Base No. 6283

Round Plates and Receptacles Charts Patented, March 21, 1916.

Mfrs. No.	Diam. In.		Supporting Screw Holes, Cent., In.	Std. Pkg.	Price Each
5615	2¾	Plate for No. 6282 receptacle	1⅞	50	$0.50
5616	3¼	Plate for No. 6283 receptacle	2 23/32	50	.60
5614		Porcelain receptacle only for No. 6282 or No. 6283		50	.35

All devices listed above, except Nos. 6282 and 6283, are packed 10 to a carton. Nos. 6282 and 6283 are packed 1 to a carton.

For information regarding finishes, method of packing, etc., see following page.

HUBBELL ATTACHMENT PLUGS

CONDUIT BOX, WEATHERPROOF AND FLUSH RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD, 6 AMPERES, 250 VOLTS

SCHEDULE H

Receptacles only for combinations listed below are illustrated on the previous page.

No. 5523 Brass Covered Composition	No. 6336 Elongated Composition	No. 5657 Br.Cov.Compo. "Knostrain"	No. 5700 Br.Cov.Compo. "Knostrain"	No. 6328 Compo. Swivel "Knostrain" Bushing	No. 5625 Porc. Mult. Current Tap	No. 6335 Compo. Mult. Current Tap	No. 5424 Porcelain Lamp Receptacle	No. 5897 Composition Lamp Receptacle
30c–Std. Pk. 50	25c–Std. Pk. 50	45c Std. Pk. 50	55c–Std. Pk. 50	35c–Std. Pk. 50	35c Std. Pk. 50	40c Std. Pk. 50	25c Std. Pk. 50	30c Std. Pk. 50
Cap No. 5523 Base No. 5620	Cap No. 6336 Base 5620	Cap No. 5657 Base 5620	Cap No. 5700 Base 5620	Cap No. 6328 Base No. 5620	Tap No. 5625 Base 5620	Tap No. 6335 Base 5620	Rec. No. 5424 Base No. 5620	Rec. No. 5897 Base 5620
Cap No. 5523 Base No. 5624	Cap No. 6336 Base 5624	Cap No. 5657 Base 5624	Cap No. 5700 Base 5624	Cap No. 6328 Base No. 5624	Tap No. 5625 Base 5624	Tap No. 6335 Base 5624	Rec. No. 5424 Base 5624	Rec No 5897 Base 5624
Cap No. 5523 Base No. 6103	Cap No. 6336 Base No. 6103	Cap No. 5657 Base 6103	Cap No. 5700 Base No. 6103	Cap No. 6328 Base No. 6103	Tap No. 5625 Base 6103	Tap No. 6335 Base 6103	Rec. No. 5424 Base No. 6103	Rec. No. 5897 Base No. 6103
Cap No. 5523 Base No. 6294	Cap No. 6336 Base 6294	Cap No. 5657 Base 6294	Cap No. 5700 Base 6294	☆	Tap No. 5625 Base 6294	Tap No. 6335 Base 6294	Rec. No. 5424 Base 6294	Rec. No 5897 Base 6294
Cap No. 5523 Base No. 6293	Cap No. 6336 Base 6293	Cap No. 5657 Base 6293	Cap No. 5700 Base 6293	☆	Tap No. 5625 Base 6293	Tap No. 6335 Base 6293	Rec. No. 5424 Base 6293	Rec. No. 5897 Base 6293
Cap No. 5523 Base No. 6282	Cap No 6336 Base No. 6282	Cap No. 5657 Base 6282	Cap No. 5700 Base No. 6282	Cap No. 6328 Base No. 6282	Tap No. 5625 Base No 6282	Tap No. 6335 Base No 6282	Rec. No. 5424 Base No. 6282	Rec. No. 5897 Base No. 6282
Cap No. 5523 Base No. 6283	Cap No. 6336 Base No 6283	Cap No. 5657 Base No. 6283	Cap No. 5700 Base No. 6283	Cap No. 6328 Base No. 6283	Tap No. 5625 Base No. 6283	Tap No. 6335 Base No. 6283	Rec. No. 5424 Base No. 6283	Rec. No. 5897 Base No. 6283

Charts Patented, March 21, 1916.

For listing of plates and receptacles for Nos. 6282 and 6283 see previous page.

All devices listed above, except Nos. 6282 and 6283, are packed 10 to a carton. Nos. 6282 and 6283 are packed 1 to a carton.

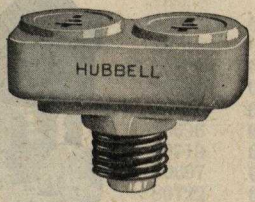
Polished brass, brush brass, polished bronze and oxidized copper are standard finishes for brass plates. All other finishes, excepting gold and silver, add to list 10 cents. For special finished brass covered caps, add to list 5 cents. Brush brass shipped unless otherwise specified.

When two catalogue numbers appear with illustration, the base and cap are packed and sold as separate units, the price of the whole being the aggregate of the units.

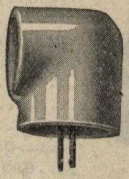
*Not a practical combination.

HUBBELL RECEPTACLES AND ATTACHMENT PLUGS

SCHEDULE H

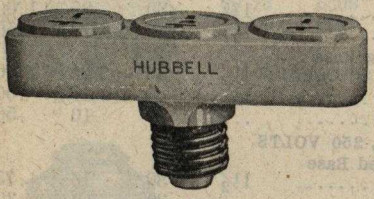


No. 6287



No. 5515

ANGLE RECEPTACLES



No. 6288

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
084014	5515	Without base.....	20	12	$0.50

MULTIPLE PLUGS

Edison Base—10 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
52479	6287	Two outlets.....	10	..	$0.70
52480	6288	Three outlets	10	..	1.05



No. 6289

Base for Hubbell Receptacles—10 Amperes, 250 Volts

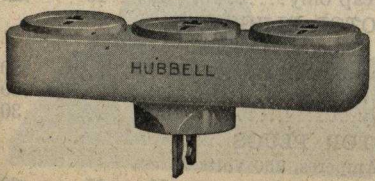
52481	6291	Two outlets.....	10	..	.70
52482	6292	Three outlets	10	..	1.05

Nos. 6291 and 6292 are for use only with flush receptacles having lift cover, No. 5501 type.

52483	6289	Two outlets.....	10	..	.70
52484	6290	Three outlets	10	..	1.05

Nos. 6289 and 6290 are for use with all Hubbell Receptacles, excepting flush receptacles having lift cover.

Caps for the above are listed separately on another page.



No. 6290

HUBBELL RECEPTACLES AND ATTACHMENT PLUGS

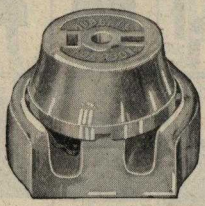
SCHEDULE H





No. 5557





No. 5884





No. 5746

POLARITY RECEPTACLES

20 AMPERES, 250 VOLTS





No. 5895

Concealed Base

Trade No.	Mfrs. No.	Description	Sup. Screws Cent., In.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
039467	5557	With cap	1 7/16	30	25	$1.00
039471	5621	Base only	1 7/16	30	18	.50

Cleat Base

039468	5558	With cap	1 25/32	30	25	1.00
039472	5622	Base only	1 25/32	30	18	.50

Molding Base

039469	5559	With cap	1 1/2	30	25	1.00
039473	5623	Base only	1 1/2	30	18	.50
039470	5553	Cap only	...	25	10	.50

10 AMPERES, 250 VOLTS



Concealed Base

70551	5882	With cap	1 1/2	30	16	.75
70555	5885	Base only	...	30	9	.30

Cleat Base

70552	5883	With cap	1 13/32	30	17	.75
70556	5886	Base only	...	30	10	.30

Molding Base

70553	5884	With cap	1 1/8	30	17	.75
70557	5887	Base only	...	30	10	.30
70554	5567	Cap only	...	30	12	.50



No. 6277

POLARITY CONDULET RECEPTACLES

20 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
063830	5605	For use with Crouse-Hinds Type 8 Condulets	25	20	$1.00



MOTOR ATTACHMENT PLUGS



Composition Base—10 Amperes, 250 Volts

039530	5746	With porcelain cap	50	15	.45
039531	5747	With strain relief bushing, porcelain cap	50	15	.95
039532	5744	Porcelain cap only	50	10	.15
66876	5894	Special composition cap	50	15	.50
66877	5895	With strain relief bushing and special composition cap	50	20	1.00
66878	5896	Special composition cap only	50	10	.20

POLARIZED MOTOR PLUGS



Composition Base—10 Amperes, 250 Volts

105532	6277	With composition cap	30	..	.80
105533	6278	Base only	30	..	.50
105534	6279	Composition cap only	30	..	.30

REVERSE MOTOR PLUGS

No. 6143
Exploded View

All Composition—10 Amperes, 250 Volts

105531	6143	With strain relief bushing	50	25	.60

HUBBELL PLUGS AND RECEPTACLES





No. 6146

SCHEDULE H

SEPARABLE ATTACHMENT PLUGS

For Three-wire Work—660 Watts, 250 Volts

Trade No.	Mfrs. No.	Description	*Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
80693	6040	With porcelain cap.	100	40	$0.50
80718	6146	With composition cap	100	40	.55
80694	6041	With brass covered porcelain cap.	100	40	.60
80721	6308	With brass covered composition cap	100	40	.65
80695	6042	Porcelain base only	100	30	.30
80696	6043	Porcelain cap only	50	12	.25
80719	6149	Composition cap only	50	12	.30
80697	6044	Brass covered porcelain cap	50	12	.35
80722	6150	Brass covered composition cap	50	12	.40





No. 6045

WALL RECEPTACLES

With Concealed Base, for Three-wire Work—10 Amperes, 250 Volts

80698	6045	With porcelain cap.	50	30	.75
80720	6147	With composition cap	50	30	.80
80699	6046	With brass covered porcelain cap.	50	30	.85
80723	6309	With brass covered composition cap	50	30	.90
80700	6047	Porcelain base only for No. 6045 Plug	50	25	.55

Supporting screw holes are spaced 1½ inches on centers.



POLARIZED WALL RECEPTACLES

For Three-wire Work—20 Amperes, 250 Volts

80701	6055	Receptacle, concealed base	30	30	1.25
80702	6058	Cap only	30	15	.60
80703	6059	Base only	30	25	.65

Supporting screw holes are spaced 1 1/16 inches on centers.



No. 6055

WALL RECEPTACLES FOR NATIONAL METAL MOLDING

With Terminal Base—20 Amperes, 250 Volts

80712	6090	With brass covered cap, polarized	30	20	1.00
80713	6091	Base only	30	15	.50
80714	5553	Brass covered cap only, polarized	25	10	.50





No. 6090

With Two-way Base—20 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	*Std. Pkg.	Wt.,Lbs. Std.Pkg.	Price Each
80715	6092	With brass covered cap, polarized	30	20	$1.00
80716	6093	Base only	30	15	.50
80717	5553	Brass covered cap only, polarized	25	10	.50

Polished brass, brush brass and old brass, standard finishes for caps; all other finishes excepting gold, silver and sand-blast, add to list 5 cents.

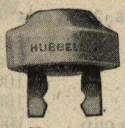
Caps for above receptacles are listed separately on another page.

*Carton quantity, 10.

HUBBELL ATTACHMENT PLUG FITTINGS



No. 5737



No. 5419

SCHEDULE H

LAMP RECEPTACLES

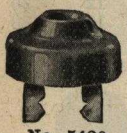
660 Watts, 250 Volts

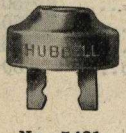
For Polarized Plug Receptacles

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
084031	5737	Porcelain, 10 amps.	10	30	7	$0.30
66894	5898	Porcelain, 20 amps.	10	30	7	.35

FUSELESS CAPS

10 Amperes, 250 Volts


No. 5420



No. 5421

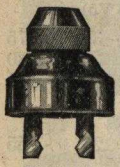
084032	5419	Porcelain.....	10	50	8	.15
084033	5420	Composition.....	10	50	8	.20
084034	5421	Brass-cov. porc.....	10	50	8	.25
084035	5523	Brass-cov. comp....	10	50	8	.30

With Split Bushing Strain Relief

084036	5700	Brass-cov. comp....	10	50	12	.55

With Knostrain Bushing

084037	5657	Brass-cov. comp....	10	50	12	.45


No. 5700



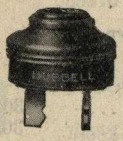
No. 5657

SMALL TYPE FUSELESS CAPS

10 Amperes, 250 Volts

66901	6918	Composition.....	10	50	8	.15
66902	6919	Brass-cov. comp....	10	50	8	.25
102017	6921	Comp. with strain relief bushing....	10	50	9	.25


No. 6918


No. 5553

FUSELESS CAPS, POLARIZED

084038	5567	Brass-cov., 10 amps.	10	30	12	.50
084039	5553	Brass-cov., 20 amps.	10	25	10	.50

With Split Bushing Strain Relief

084040	5665	Brass-cov. porc., for No. 10 jumper cable, 20 amps....	10	25	12	1.00



No. 5665 Exposed



No. 6109

SIGNAL ATTACHMENT PLUGS

10 Amperes, 125 Volts

With Standard Type Knife-blade Contacts

66897	6108	Without lamp.....	10	30	12	.55
66898	6109	Complete with lamp	10	30	12	.95

With Small Type Knife-blade Contacts

66899	6110	Without lamp.....	10	30	12	.55
66900	6111	Complete with lamp	10	30	12	.95

FUSIBLE CAPS

10 Amperes, 250 Volts

084041	5524	Porcelain.....	10	30	6	.20
084042	5525	Composition.....	10	30	6	.25

Equipped with Knostrain Bushing for Re-enforced Cord

084043	5526	Brass-cov. porc.....	10	30	8	.40
084044	5527	Brass-cov. comp....	10	30	8	.45



No. 5524



No. 5526

BRYANT AND PERKINS ATTACHMENT PLUGS

NATIONAL ELECTRICAL CODE STANDARD—660 WATTS, 250 VOLTS


No. 700


No. 500


No. 499



Nos. 1948 and 925


No. 1009

SPARTAN SEPARABLE ATTACHMENT PLUGS

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
123678	700	Separable attachment plug...	10	100	15	$0.25



No. 345

ONE-PIECE PORCELAIN

These plugs are made with a short screw thread so that they are inserted in the socket with only one turn, thereby avoiding the twisting of the cord.

17867	500	Fuseless, with binding screws..	25	250	33	.10
17866	499	Fuseless, without binding screws.....	25	250	33	.09

No. 499 has terminals to which leads are to be soldered.



Nos. 3286 and 1286

BRASS CAP

047772	1948	Fuseless.....	10	250	50	.22
047773	*925	Fusible.....	10	250	50	.22

ENAMELED WOOD HANDLE

047771	1009	Fuseless.....	10	100	12	.12



MOLDED WEATHERPROOF

660 Watts, 600 Volts

047770	345	Fuseless.....	10	100	30	.44

Each No. 345 plug is fitted with 6 inches of No. 14 B. & S. stranded rubber covered wire. Longer wires on special order. Extra charge, 9 cents list per foot (4½ cents each conductor).



No 3386

PORCELAIN CAP

047774	3286	Fuseless.....	10	250	65	.22
047775	*1286	Fusible.....	10	250	65	.22
047769	3386	Fusible.....	10	250	110	.25

No. 3286 has $\frac{13}{32}$-inch hole in cap for No. 16 approved portable cord; No. 1286 has $\frac{9}{32}$-inch hole.

No. 3386 has connections for glass tube enclosed fuses. They are not included with the plug and will not be sent unless ordered separately.


No. 3284

SEPARABLE

Designed to meet the demand for a plug that can be inserted without twisting the cord. The base of the plug is inserted in the socket or receptacle first and the cap is attached afterward. The contacts are substantial and have ample carrying capacity, and the snap catch is sufficiently rigid to prevent accidental detachment of the cap, while a sharp pull on the conducting cord will remove the cap without danger of damaging the receptacle.

047767	3284	Fuseless.....	10	250	85	.25

BRASS CAP, SEPARABLE

047768	3530	Fuseless.....	10	100	40	.32

No. 3530 is the same as No. 3284, but with brass cap.

*Nos. 925 and 1286 plugs are not National Electrical Code Standard.



No. 3530

Illustrations are three eighths actual size.

BRYANT PLUGS AND RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SPARTAN INTERCHANGEABLE PLUGS AND RECEPTACLES

SCHEDULE H



No. KA
$\frac{13}{32}$-in. Hole
No. KJ
$\frac{9}{32}$-in. Hole

Plug Caps—10 Amperes, 250 Volts

Any of these caps can be furnished polarity (non-reversible) without extra charge. To specify polarity caps, change the first letter to M, as: MA, MB, MC, etc.

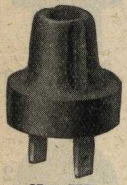
Any of these caps can be furnished with the blades set tandem instead of parallel without extra charge. To specify caps with tandem blades, change the first letter to L, as: LA, LB, LC, etc.



No. KB



No. KC



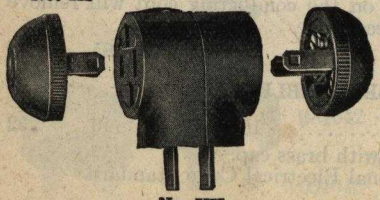
No. KD



No. KE



No. KF



No. KH

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each Complete
123671	KA	Standard plug cap $\frac{13}{32}$-in. hole...	10	50	8	$0.15
123686	KJ	Standard plug cap $\frac{9}{32}$-in. hole...	10	50	8	.15
123672	KB	Brass covered cap.....	10	50	8	.25

The standard finish on this cap is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be shipped without extra charge. For other finishes add 5 cents.

123673	KC	Brass covered cap, with finger grip.....	10	50	10	.35

No. KC cap provides a means of detaching the cap from its base other than pulling on the conducting cord. Finishes are the same as for No. KB cap.

123674	KD	Elongated cap.....	10	50	9	.25

No. KD cap is particularly for use with No. 48 conduit box receptacle when the two are installed in a water-tight floor box. The cap will be found advantageous for general use, however, as it more positively provides against fraying of the cord and exposed conductors than does the standard cap.

123675	KE	Pilot cap, 125 volts.....	10	30	12	.95

The 2 candle power 125-volt candelabra base lamp, which forms a part of No. KE, is connected in multiple with the current-consuming device which is connected to the cap. The lamp burns whenever the plug is inserted in the base and thereby acts as a warning that current is being consumed.

123676	KF	Edison adapter cap, 660 watts.	10	30	6	.20

No. KF permits the insertion of a medium base lamp in any Spartan base, or it may be used as an adapter to connect other makes of Edison attachment plugs into Spartan bases.

123685	KH	Duplex adapter, 660 watts, 250 volts.....	10	10	..	.70

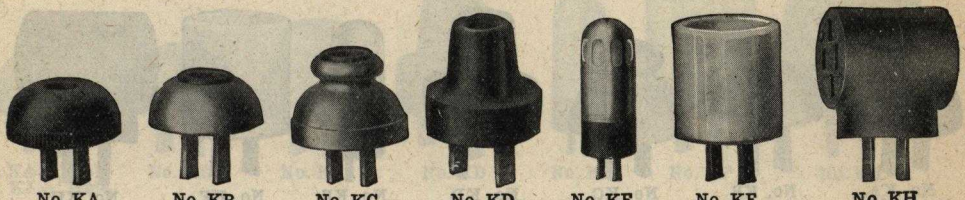
No. KH adapter may be inserted in any Spartan receptacle and provides two Spartan outlets. Price does not include caps.

BRYANT PLUGS AND RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SPARTAN INTERCHANGEABLE PLUGS AND RECEPTACLES

SCHEDULE H



No. KA $\frac{13}{32}$-in Hole
No. KJ $\frac{9}{32}$-in Hole

No. KB

No. KC

No. KD

No. KE

No. KF

No. KH

Attachment Plugs—660 Watts, 250 Volts



No. 100

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each Complete
123677	100	Edison screw body	10	100	15	$0.10
123678	700	Body with standard cap	10	100	25	.25
123679	KB-100	Body with brass covered cap	10	100	25	.35
123680	KC-100	Body with finger grip cap	10	50	25	.45
123681	KD-100	Body with elongated cap	10	50	30	.35
123682	KE-100	Body with pilot cap, 125 volts	10	30	..	1.05
123683	KF-100	Body with Edison adapter cap	10	30	..	.30
54004	KH-100	Body with duplex adapter, no caps	10	30		.80

Screw Base Adapters—660 Watts, 250 Volts

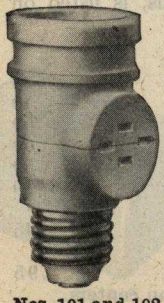
This device is designed to be inserted in an Edison baseboard receptacle, thereby converting it permanently into a Spartan receptacle. It is shorter and the outer end is smaller in diameter than the No. 100 body, so that the lid of the plate may be closed with the adapter in place.



No. 118

54005	118	*Edison screw body	10	100	..	.10
54006	KA-118	*Body with standard cap	10	100	..	.25
54007	KB-118	*Body with brass covered cap	10	100	..	.35
54008	KC-118	*Body with finger grip cap	10	50	..	.45
54009	KD-118	*Body with elongated cap	10	50	..	.35
54010	KE-118	*Body with pilot cap, 125 volts	10	30	..	1.05
54011	KF-118	*Body with Edison adapter cap, 660 watts	10	30	..	.30
54012	KH-118	*Body with duplex adapter, no caps	10	30	..	.80

Multiple Current Taps—660 Watts, 250 Volts



Nos. 101 and 102

123696	101	Multiple current tap body	10	50	..	.35
123697	KA-101	Body with standard cap	10	50	..	.50
123698	KB-101	Body with brass covered cap	10	50	..	.60
123699	KC-101	Body with finger grip cap	10	50	..	.70
123700	KD-101	Body with elongated cap	10	50	..	.60
123701	KE-101	Body with pilot cap, 125 volts	10	30	..	1.30
123702	KF-101	Body with Edison adapter cap	10	30	..	.55
54013	KH-101	Body with duplex adapter, no caps	10	30	..	1.05

Series Current Taps—660 Watts, 250 Volts

123703	102	Series current tap body	10	50	..	.35
123704	KA-102	Body with standard cap	10	50	..	.50
123705	KB-102	Body with brass covered cap	10	50	..	.60
123706	KC-102	Body with finger grip cap	10	50	..	.70
123707	KD-102	Body with elongated cap	10	50	..	.60
123708	KF-102	Body with Edison adapter cap	10	30	..	.55
54014	KH-102	Body with duplex adapter, no caps	10	30	..	1.05

For special finishes on brass covered caps see the listing of No. KB cap on the preceding page.

*Not National Electrial Code Standard.

BRYANT PLUGS AND RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SPARTAN INTERCHANGEABLE PLUGS AND RECEPTACLES

SCHEDULE H



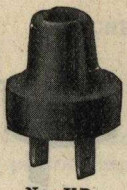
No. KA
$\frac{13}{32}$-in. Hole
No. KJ
$\frac{9}{32}$-in. Hole



No. KB



No. KC



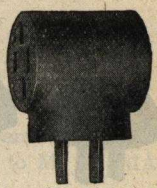
No. KD



No. KE



No. KF



No. KH

Cord Connectors—10 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each Complete
123709	103	Cord connector body...	10	50	10	$0.30
123710	KA-103	With standard cap.....	10	50	10	.45
123711	KB-103	With brass cov. cap....	10	50	15	.55
123712	KC-103	With finger grip cap....	10	50	15	.65
123713	KD-103	With elongated cap....	10	50	15	.55
123714	KE-103	With pilot cap, 125 V...	10	30	..	1.25
123715	KF-103	With Edison adapter cap, 660 watts.....	10	30	..	.50
123718	KH-103	With duplex adapter no caps.....	10	30	..	1.00



No. 103

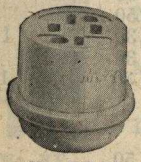




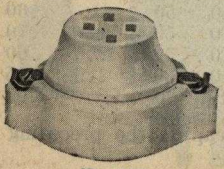
No. KG-103



No. AA-29



No. PT-79



No. 104

Motor Attachment Plugs, 10 Amperes, 250 Volts

This device is designed for supplying current to portable current-consuming devices such as heaters and vacuum cleaners. The part with the knife-blade contacts (measuring 1½ inches in diameter and having holes for supporting screws spaced 1 inch on centers) is permanently attached to the apparatus to which current is to be fed. The body piece is attached to the conductors which supply the current and, as all live parts are completely enclosed, it is impossible for a short circuit or ground to occur should this part, when disconnected from the apparatus, come in contact with some conducting material.

123716	KG	Motor attachment plug cap.....	10	50	10	.20
123717	KG-103	Motor attachment plug, complete.....	10	50	15	.50

New Wrinkle Receptacles—10 Amperes, 250 Volts

No. AA-29 device, in all its various combinations, is listed on another page.

Interchangeable Porcelain Receptacles—10 Amperes, 250 Volts

No. PT-79 device, in all its various combinations, is listed on another page.

Cleat Receptacles—10 Amperes, 250 Volts

123731	104	Cleat base body.....	10	50	20	.25
123732	KA-104	With standard cap.....	10	50	25	.40
123733	KB-104	With brass cov. cap....	10	50	25	.50
123734	KC-104	With finger grip cap....	10	50	25	.60
123735	KD-104	With elongated cap....	10	50	25	.50
123736	KE-104	With pilot cap, 125 V...	10	30	..	1.20
123737	KF-104	With Edison adapter cap, 660 watts.....	10	30	..	.45
123719	KH-104	With duplex adapter no caps.....	10	30	..	.95

Holes for supporting screws are spaced $1\frac{13}{32}$ inches on centers.

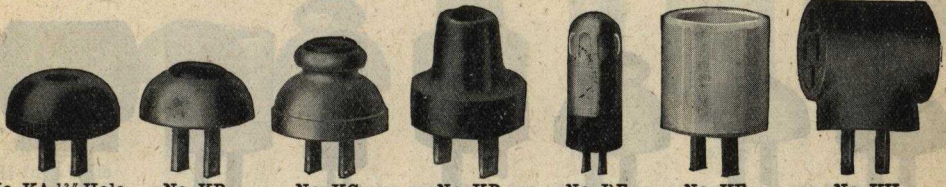
The standard finish on brass covered caps is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be shipped without extra charge. For other finishes add 5 cents.

BRYANT PLUGS AND RECEPTACLES

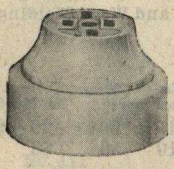
NATIONAL ELECTRICAL CODE STANDARD

SPARTAN INTERCHANGEABLE PLUGS AND RECEPTACLES

SCHEDULE H



No. KA $\frac{13}{32}$" Hole
No. KJ $\frac{3}{32}$" Hole — No. KB — No. KC — No. KD — No. KE — No. KF — No. KH



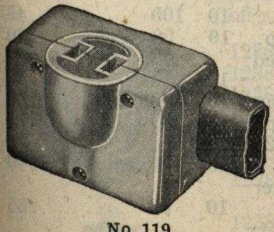
No. 105



No. 106



No. 107



No. 119

Concealed Receptacles—10 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each Complete
123738	105	Concealed base body..	10	50	20	$0.25
123739	KA-105	With standard cap....	10	50	25	.40
123740	KB-105	With brass covered cap	10	50	25	.50
123741	KC-105	With finger grip cap...	10	50	25	.60
123742	KD-105	With elongated cap...	10	50	25	.50
123743	KE-105	With pilot cap, 125 v.	10	30	..	1.20
123744	KF-105	With Edison adapter cap, 660 watts.....	10	30	..	.45
123759	KH-105	With duplex adapter, no caps.....	10	30	..	.95

Outside diameter of base is $2\frac{7}{32}$ inches.
Holes for supporting screws are spaced $1\frac{1}{2}$ inches on centers.]

Receptacles with One-way Base for Metal Molding—10 Amperes, 250 Volts

123745	106	One-way body.....	10	50	20	.25
123746	KA-106	With standard cap....	10	50	23	.40
123747	KB-106	With brass covered cap	10	50	23	.50
123748	KC-106	With finger grip cap...	10	50	23	.60
123749	KD-106	With elongated cap....	10	50	25	.50
123750	KE-106	With pilot cap, 125 v.	10	30	..	1.20
123751	KF-106	With Edison adapter cap, 660 watts.....	10	30	..	.45
123760	KH-106	With duplex adapter, no caps.....	10	30	..	.95

Receptacles with Two-way Base for Metal Molding—10 Amperes, 250 Volts

123752	107	Two-way body.....	10	50	20	.25
123753	KA-107	With standard cap....	10	50	23	.40
123754	KB-107	With brass covered cap	10	50	23	.50
123755	KC-107	With finger grip cap...	10	50	23	.60
123756	KD-107	With elongated cap....	10	50	25	.50
123757	KE-107	With pilot cap, 125 v.	10	30	..	1.20
123758	KF-107	With Edison adapter cap, 660 watts.....	10	30	..	.45
123761	KH-107	With duplex adapter, no caps, 660 watts...	10	30	..	.95

Baseboard Receptacles for National Metal Molding—10 Amperes, 250 Volts

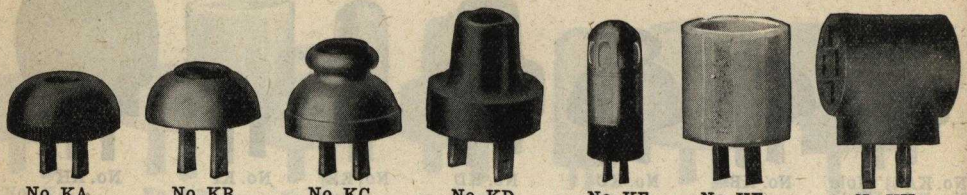
For use with horizontal runs of National Metal Molding along a baseboard. It projects from the surface considerably less than Nos. 106 and 107, and caps can be inserted more conveniently.

123762	119	Metal molding baseboard body.....	10	50	..	.40
123763	KA-119	With standard cap....	10	50	..	.55
123764	KB-119	With brass covered cap	10	50	..	.65
123765	KC-119	With finger grip cap...	10	50	..	.75
123766	KD-119	With elongated cap....	10	50	..	.65
123767	KE-119	With pilot cap, 125 v.	10	30	..	1.35
123768	KF-119	With Edison adapter cap, 660 watts.....	10	30	..	.60
123769	KH-119	With duplex adapter, no caps.....	1	30	..	1.10

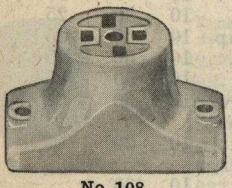
The standard finish on brass covered caps is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be shipped without extra charge. For other finishes add 5 cents.

BRYANT PLUGS AND RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD
SPARTAN INTERCHANGEABLE PLUGS AND RECEPTACLES
SCHEDULE H



No. KA 13/32-in. Hole
No. KJ 9/32-in. Hole
No. KB
No. KC
No. KD
No. KE
No. KF
No. KH



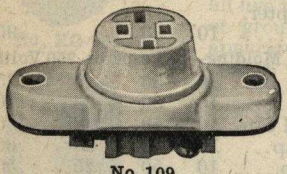
No. 108

Receptacles for ½ and ¾-inch Pipe Taplets and Wood Molding—

10 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each Complete
123773	108	Taplet body	10	50	20	$0.35
123774	KA-108	With standard cap	10	50	23	.50
123775	KB-108	With brass covered cap	10	50	23	.60
123776	KC-108	With finger grip cap	10	50	23	.70
123777	KD-108	With elongated cap	10	50	25	.60
123778	KE-108	With pilot cap, 125 volts	10	30	....	1.30
123779	KF-108	With Edison adapter cap, 660 watts	10	30	....	.55
145249	KH-108	With duplex adapter no caps	10	30	....	1 05

Holes for supporting screws are spaced 2 5/16 inches on centers.



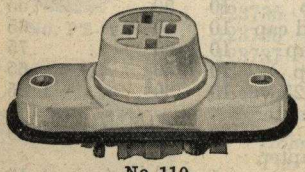
No. 109

Receptacles for ½-inch Obround Condulets—10 Amperes, 250 Volts

123780	109	Condulet body	10	100	....	.40
123781	KA-109	With standard cap	10	50	....	.55
123782	KB-109	With brass covered cap	10	50	....	.65
123783	KC-109	With finger grip cap	10	50	....	.75
123784	KD-109	With elongated cap	10	50	....	.65
123785	KE-109	With pilot cap, 125 volts	10	30	....	1.35
123786	KF-109	With Edison adapter cap, 660 watts	10	30	....	.60
145250	KH-109	With duplex adapter, no caps	10	30	....	1.10

Receptacles for ¾-inch Obround Condulets—10 Amperes, 250 Volts

123787	110	Condulet body	10	100	....	.45
123788	KA-110	With standard cap	10	50	....	.60
123789	KB-110	With brass covered cap	10	50	....	.70
123790	KC-110	With finger grip cap	10	50	....	.80
123791	KD-110	With elongated cap	10	50	....	.70
123792	KE-110	With pilot cap, 125 volts	10	30	....	1.40
123793	KF-110	With Edison adapter cap, 660 watts	10	30	....	.65
145251	KH-110	With duplex adapter, no caps	10	30	....	1.15

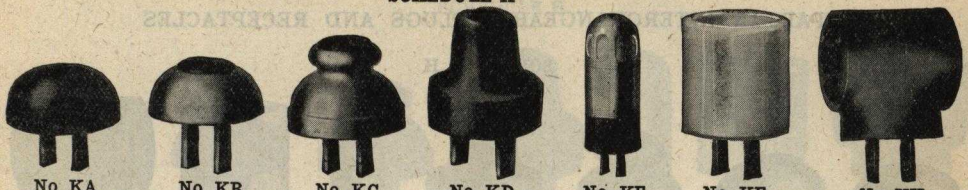


No. 110

The standard finish on brass covered caps is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be shipped without extra charge. For other finishes add 5 cents.

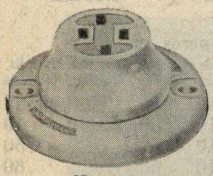
BRYANT PLUGS AND RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD
SPARTAN INTERCHANGEABLE PLUGS AND RECEPTACLES
SCHEDULE H



No. KA — $\frac{13}{32}$-inch Hole
No. KJ — $\frac{9}{32}$-inch Hole
No. KB
No. KC
No. KD
No. KE
No. KF
No. KH

Receptacles with Base for Adaptiboxes—10 Amperes, 250 Volts



No. 111

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std., Pkg.	Price Each Complete
123794	111	Adaptibox body	10	50	25	.35
123795	KA-111	With standard cap	10	50	28	.50
123796	KB-111	With brass covered cap	10	50	28	.60
123797	KC-111	With finger grip cap	10	50	28	.70
123798	KD-111	With elongated cap	10	50	30	.60
123799	KE-111	With pilot cap, 125 volts	10	30	..	1.30
123800	KF-111	With Edison adapter cap, 660 watts	10	30	..	.55
123801	KH-111	With duplex adapter, no caps	10	30	..	1.05

Outside diameter of base is $2\frac{7}{8}$ inches.

Holes for supporting screws are spaced $2\frac{5}{16}$ inches on centers.

Receptacles with Base for Conduit Boxes—10 Amperes, 250 Volts

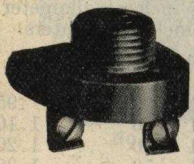


No. 112

123816	112	Conduit box body	10	50	20	.25
123817	KA-112	With standard cap	10	50	23	.40
123818	KB-112	With brass covered cap	10	50	23	.50
123819	KC-112	With finger grip cap	10	50	23	.60
123820	KD-112	With elongated cap	10	50	25	.50
123821	KE-112	With pilot cap, 125 volts	10	30	..	1.20
123822	KF-112	With Edison adapter cap, 660 watts	10	30	..	.45
123802	KH-112	With duplex adapter, no caps	10	30	..	.95

Outside diameter of base is $1\frac{3}{4}$ inches.

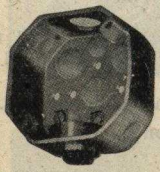
Holes for supporting screws are spaced $\frac{5}{8}$ inch on centers.



No. 113

Receptacles with Base for Conduit Boxes—10 Amperes, 250 Volts

These receptacles are especially designed to be installed in a 4-inch octagon box of the standard type. The neck of the receptacle is threaded the same as ½-inch conduit and can therefore be inserted in any ½-inch knock-out and secured by a ½-inch locknut. When octagon boxes are used for surface work, these receptacles are extremely useful, as the binding posts are so arranged as to be easily accessible after the box has been installed, so that additional taps for drop cords or the like can be taken off at any time with a very slight expenditure of labor.



Showing Manner of Installing No. 113

123823	113	Conduit box body	10	50	..	.25
123824	KA-113	With standard cap	10	50	..	.40
123825	KB-113	With brass covered cap	10	50	..	.50
123826	KC-113	With finger grip cap	10	50	..	.60
123827	KD-113	With elongated cap	10	50	..	.50
123828	KE-113	With pilot cap, 125 volts	10	30	..	1.20
123829	KF-113	With Edison adapter cap, 660 watts	10	30	..	.45
123803	KH-113	With duplex adapter, no caps	10	30	..	.95

The standard finish on brass covered caps is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be shipped without extra charge. For other finishes add 5 cents.

BRYANT PLUGS AND RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SPARTAN INTERCHANGEABLE PLUGS AND RECEPTACLES

SCHEDULE H



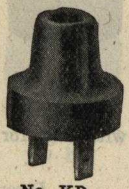
No. KA 13/32" Hole
No. KJ 9/32" Hole



No. KB



No. KC



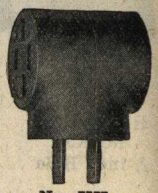
No. KD



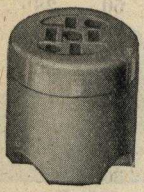
No. KE



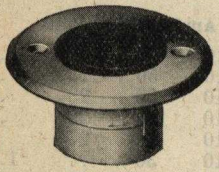
No. KF



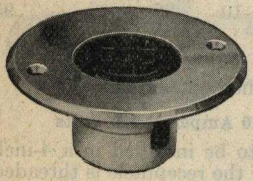
No. KH



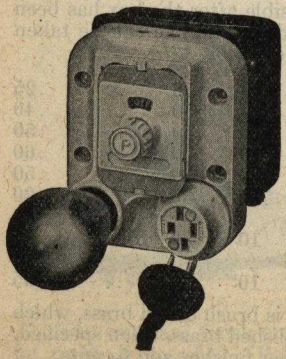
No. 114



No. 115



No. 116



No. 466

Receptacles for Conduit Box Covers—10 Amperes, 250 Volts

Trade No.	No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price, Ea. Complete
123830	114	Conduit cover body	10	50	..	$0.25
123831	KA-114	With standard cap	10	50	..	.40
123832	KB-114	With brass covered cap	10	50	..	.50
123833	KC-114	With finger grip cap	10	50	..	.60
123834	KD-114	With elongated cap	10	50	..	.50
123835	KE-114	With pilot cap, 125 volts	10	30	..	1.20
123836	KF-114	With Edison adapter cap, 660 watts	10	30	..	.45
123837	KH-114	With duplex adapter, no caps	10	30	..	.95

***Flush Receptacles with Round Plate—10 Amperes, 250 Volts**

123851	115	Receptacle body (receptacle and plate)	1	50	..	.85
123852	KA-115	With standard cap	1	50	..	1.00
123853	KB-115	With brass covered cap	1	50	..	1.10
123854	KC-115	With finger grip cap	1	50	..	1.20
123855	KD-115	With elongated cap	1	50	..	1.10
123856	KE-115	With pilot cap, 125 volts	1	30	..	1.80
123857	KF-115	With Edison adapter cap, 660 watts	1	30	..	1.05
123838	KH-115	With duplex adapter, no caps	1	30	..	1.55

Plate is 2¾ inches in diameter. Body is 1 7/16 inches in diameter. Holes for supporting screws are spaced 1⅞ inches on centers.

***Receptacles for 3¾-inch Outlet Boxes—10 Amperes, 250 Volts**

123858	116	Receptacle body (receptacle and plate)	1	50	..	.95
123859	KA-116	With standard cap	1	50	..	1.10
123860	KB-116	With brass covered cap	1	50	..	1.20
123861	KC-116	With finger grip cap	1	50	..	1.30
123862	KD-116	With elongated cap	1	50	..	1.20
123863	KE-116	With pilot cap, 125 volts	1	30	..	1.90
123864	KF-116	With Edison adapter cap, 660 watts	1	30	..	1.15
123839	KH-116	With duplex adapter, no caps	1	30	..	1.65

Plate is 3⅝ inches in diameter. Body of receptacle is 1 7/16 inches in diameter.

Holes for supporting screws are spaced 2¾ inches on centers.

Surface Heater Control Combination

No. 466 is listed on a preceding page.

*Receptacles will regularly be shipped with porcelain bosses, which project through the plate, glazed black. White, when specified, will be shipped without extra charge.

The standard finish on brass covered caps is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be shipped without extra charge. For other finishes add 5 cents.

BRYANT PLUGS AND RECEPTACLES

NATIONAL ELECTRIC CODE STANDARD

SPARTAN INTERCHANGEABLE PLUGS AND RECEPTACLES

SCHEDULE H



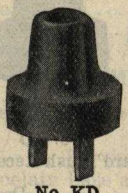
No. KA
13/32-in. Hole
No. KJ
9/32-in. Hole



No. KB



No. KC



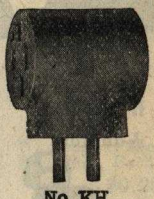
No. KD



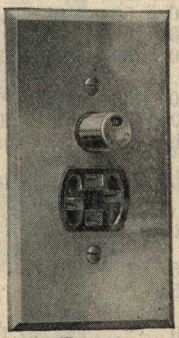
No. KE



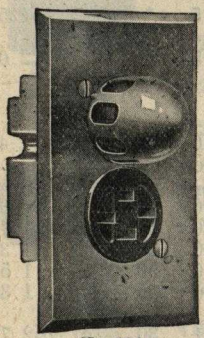
No. KF



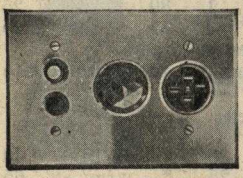
No. KH



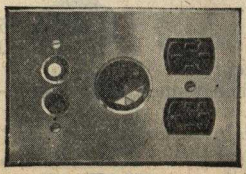
No. 117



No. 121



No. 467



No. 558

***Receptacle and Type O Switch Combination, 10 Amperes, 250 Volts**

This device is a combination of a Spartan flush receptacle and a Type O double-pole, indicating flush switch, ready-wired, and designed to be installed in a standard single switch box. The line wires may be attached to either end of the device. If attached to the switch end, the switch controls the receptacle as well as the outgoing circuit; but if attached to the receptacle end, current may be taken off through the receptacle, irrespective of the position of the switch, which will control only the other out-going circuit.

For combination plates, specify "W" sections for this device.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each Complete
123865	117	Device complete, wthout cap	1	10	....	$2.00
123866	KA-117	With standard cap	1	10	....	2.15
123867	KB-117	With brass covered cap	1	10	....	2.25
123868	KC-117	With finger grip cap	1	10	....	2.35
123869	KD-117	With elongated cap	1	10	....	2.25
123870	KE-117	With pilot cap, 125 volts	1	10	....	2.95
123871	KF-117	With Edison adapter cap, 660 watts	1	10	....	2.20
123872	KH-117	With duplex adapter, no caps	1	10	....	2.70

Plate measures 4½x2¾ inches.

Holes for supporting screws are spaced 3 9/32 inches on centers.

Pilot Receptacles, 10 Amperes, 125 Volts

This device, which may be installed in any standard single switch box, is so arranged that, upon the insertion of the plug, the lamp, which is in parallel with the load, is lighted, thus providing a visual caution against the unintentional consumption of current.

123873	121	Pilot body	1	10	....	2.80
123874	KA-121	With standard cap	1	10	....	2.95
123875	KB-121	With brass covered cap	1	10	....	3.05
123876	KC-121	With finger grip cap	1	10	....	3.15
123877	KD-121	With elongated cap	1	10	....	3.05
123878	KF-121	With Edison adapter cap, 660 watts	1	10	....	3.00
123879	KH-121	With duplex adapter, no caps	1	10	....	3.50

Plate measures 4½x2¾ inches.

Holes for supporting screws are spaced 3 9/32 inches on centers.

Flush Heater Control Combination

No. 467 is listed on another page.

No. 558 is listed on another page.

*Receptacles will regularly be shipped with porcelain bosses, which project through the plate, glazed black. White, when specified, will be shipped without extra charge.

The standard finish on brass covered caps is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be shipped without extra charge. For other finishes add 5 cents.

BRYANT PLUGS AND RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

SPARTAN INTERCHANGEABLE PLUGS AND RECEPTACLES

SCHEDULE H



No. KA
$\frac{13}{32}$-in Hole
No. KJ
$\frac{9}{32}$-in Hole



No. KB



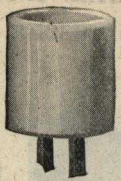
No. KC



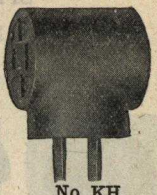
No. KD



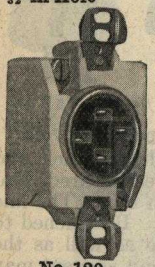
No. KE



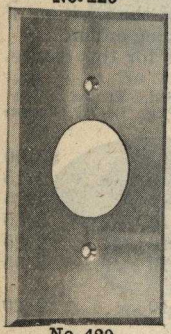
No. KF



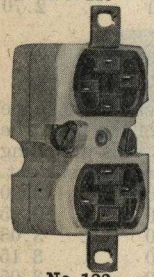
No. KH



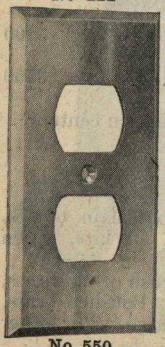
No. 120



No. 429



No. 122



No. 550

†Standard Flush Receptacles—10 Amperers, 250 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each Complete
123886	120	Flush receptacle body	10	50	28	$0.60
123887	KA-120	Body with standard cap	10	50	28	.75
123888	KB-120	Body with brass covered cap	10	50	28	.85
123889	KC-120	Body with finger grip cap	10	50	28	.95
123890	KD-120	Body with elongated cap	10	50	30	.85
123891	KE-120	Body with pilot cap, 125 volts	10	30	..	1.55
123892	KF-120	Body with Edison adapter cap, 660 watts	10	30	..	.80
123905	KH-120	Body with duplex adapter, no caps	10	30	..	1.30

Outside supporting screw holes are spaced $3\frac{9}{32}$ inches on centers; inside holes, $2\frac{3}{16}$ inches.

In ordering combination plates, specify "F" sections to accommodate the above receptacles.

Plates for Spartan Standard Flush Receptacles

036277	429	Single plate, stamped, $\frac{1}{16}$-inch, $4\frac{1}{2}$x$2\frac{3}{4}$ inches	25	*	..	.35
104647	545	Single plate, solid, $4\frac{1}{2}$x$3\frac{3}{4}$ inches	25	*	..	.50
104648	529	Two-gang plate, solid, $4\frac{1}{2}$x$4\frac{9}{16}$ inches	10	*	..	1.00
104649	530	Three-gang plate, solid, $4\frac{1}{2}$x$6\frac{3}{8}$ inches	5	*	..	1.50
104650	531	Four-gang plate, solid, $4\frac{1}{2}$x$8\frac{3}{16}$ inches	5	*	..	2.00
123906	3650	Two-gang comb. plate, $4\frac{1}{2}$x$4\frac{9}{16}$ in. .040 thick, for standard push button switch and No. 120 Spartan receptacle	10	50	..	.40

Receptacles in gangs are spaced $1\frac{13}{16}$ inches on centers.

†Duplex Flush Receptacles—Each Outlet 10 Amperes, 250 Volts

123893	122	Duplex receptacle body	10	50	40	.85
123894	KA-122	Body with two standard caps	10	50	..	1.15
123895	KB-122	Body with two brass covered caps	10	50	..	1.35
123896	KC-122	Body with two finger grip caps	10	50	..	1.55
123897	KD-122	Body with two elongated caps	10	50	..	1.35
123898	KE-122	Body with two pilot caps, 125 volts	1	30	..	2.75
123899	KF-122	Body with two Edison adapter caps, 660 watts	1	30	..	1.25
123907	KH-122	Body with two duplex adapters	1	30	..	2.25

Holes for supporting screws are spaced $3\frac{9}{32}$ inches on centers.

In ordering combination plates, specify "V" sections to accommodate the above receptacles.

Plates for Spartan Duplex Receptacles

123900	550	Single plate, stamped, $\frac{1}{16}$-inch, $4\frac{1}{2}$x$2\frac{3}{4}$ inches	25	*	15	.40
123901	551	Single plate, solid, $4\frac{1}{2}$x$2\frac{3}{4}$ inches	25	*	..	.65
123902	552	Two-gang plate, solid, $4\frac{1}{2}$x$4\frac{9}{16}$ in.	10	*	..	1.30
123903	553	Three-gang plate, solid, $4\frac{1}{2}$x$6\frac{3}{8}$ inches	5	*	..	1.95
123904	554	Four-gang plate, solid, $4\frac{1}{2}$x$8\frac{3}{16}$ in.	5	*	..	2.60

Receptacles in gangs are spaced $1\frac{13}{16}$ inches on centers.

*A standard package of plates consists of a sufficient number to accommodate 100 receptacles.

†Receptacles will regularly be shipped with porcelain bosses, which project through the plate, glazed black. White will be shipped without extra charge, when specified.

C-H ATTACHMENT PLUGS AND RECEPTACLES





No. 7600



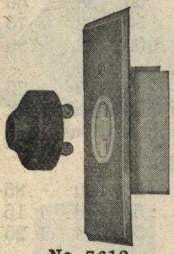


No. 7650





No. 7655



No. 7612





No. 7617





No. 7622

NATIONAL ELECTRICAL CODE STANDARD

ATTACHING CAPS

Trade No.	Mfrs. No.	Description	*Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
41290	7604	Porcelain	50	8	$0.15
41291	7607	Composition	50	8	.15

ATTACHMENT PLUGS

With Separable Cap—660 Watts, 250 Volts

Trade No.	Mfrs. No.	Description	*Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
41271	7600	White porcelain base and cap, No. 7604	250	80	$0.25
41272	7601	White porcelain base with black composition cap, No. 7607	250	80	.25
41273	7602	Black composition base and cap No. 7607	250	80	.35

NOTE.—Standard package discount allowed on assortment of 250 of Nos. 7600 and 7601 in full cartons of ten.

CORD CONNECTORS

10 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	*Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
41283	7650	Black composition	100	23	$0.45

MOTOR ATTACHMENT PLUGS

10 Amperes, 250 Volts

41286	7655	Black composition	100	23	.50

ATTACHMENT PLUG RECEPTACLES

Flush Receptacles with Brass Plate—660 Watts, 250 Volts

41274	7611	With porcelain attachment plug cap, No. 7604	50	40	1.00
41275	7612	With black composition attachment plug cap, No. 7607	50	40	1.00
41276	7613	Without cap	50	40	.85

Flush receptacles consist of porcelain receptacles and struck-up plates 4½x2¾ inches. Finished in polished brass, brush brass, polished nickel, polished bronze and oxidized copper. For other finishes, except gold and silver, add 10 cents to list prices.

Round Base Surface Receptacles—660 Watts, 250 Volts

41277	7616	With porcelain attachment plug cap, No. 7604, for concealed work	50	23	.35
41278	7617	With black composition attachment plug cap, No. 7607 for concealed work	50	23	.35
41279	7618	Without cap, for concealed work	50	23	.20

Rectangular Base Surface Receptacles—660 Watts, 250 Volts

41280	7621	With porcelain attachment plug cap, No. 7604, for molding work	50	25	.35
41281	7622	With black composition attachment plug cap, No. 7607, for molding work	50	25	.35
41282	7623	Without cap, for molding work	50	25	.20

Slotted Round Base Surface Receptacles—660 Watts, 250 Volts

41287	7627	With porcelain attachment plug cap, No. 7604, for open wiring	50	28	.35
41288	7628	With black Thermoplax attachment plug cap, No. 7607, for open wiring	50	28	.35
41289	7629	Without cap, for open wiring	50	28	.20

*Carton quantity for all the above plugs and receptacles is 10.

C-H STANDARD INTERCHANGEABLE PLUGS AND RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD

660 Watts, 250 Volts

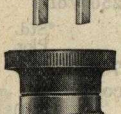


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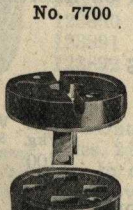
No. 7703



No. 7700



No. 7750



No. 7755



No. 7710



No. 7720



No. 7736

THE 7700 LINE

The arrangement of outlet contact slots and attaching cap contact blades in the C-H 7700 line of Standard attachment plugs and receptacles conform to the standard adopted by the leading electrical manufacturers who by this move have made the Standard attaching caps interchangeable on the thousands of plugs and receptacles of their manufacture.

The C-H Standard attaching cap has parallel contact blades riveted to the thermoplax body. Riveting holds the blades in permanent alignment, and there are no screws to loosen.

ATTACHMENT PLUGS

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
133383	7700	Standard separate attachment plug	10	100	18	$0.25
133384	7701	Body only	10	100	14	.10
133381	7702	Standard cap only	10	50	8	.15
133382	7703	Cap with tandem blades	10	50	8	.20
133403	7704	Polarity cap only	10	50	8	.15
133404	7705	Body and polarity cap	10	100	18	.25

*CORD CONNECTORS

133385	7750	Body and cap No. 7702	10	50	10	.45
133386	7751	Body and cap No. 7703	10	50	10	.50
133387	7752	Body only	10	50	10	.30

*MOTOR ATTACHMENT PLUGS

133388	7755	Body and cap	10	50	15	.50
133405	7752	Body only	10	50	10	.30
133389	7757	Cap only	10	50	8	.20

SINGLE FLUSH RECEPTACLES

133393	7710	Body only	10	50	28	.60
133394	7711	Body and cap No. 7702	10	50	32	.75
133395	7712	Body and cap No. 7703	10	50	32	.80
133396	7646	Flush plate, stamped, 1/16-inch metal 2¾x4½ inches	25	50	15	.35

Outside supporting screw holes are spaced $3\frac{9}{32}$ inches on centers.
Inside supporting screw holes are spaced $2\frac{3}{16}$ inches on centers.

DUPLEX FLUSH RECEPTACLES

133397	7720	Body only	10	50	40	.85
133398	7721	Body, two No. 7702 caps	10	50	48	1.15
133399	7723	Body, two No. 7703 caps	10	50	48	1.25
133400	7722	Flush plate, stamped, 1/16-inch metal 2¾x4½ inches	25	50	15	.40

Holes for supporting screws are spaced $3\frac{9}{32}$ inches on centers.

FLUSH RECEPTACLES

With 2⅞-inch Round Plate

133406	7733	Receptacle body (receptacle and plate)	1	50	30	.85
133407	7734	Body and cap No. 7702	1	50	30	1.00
133408	7735	Body and cap No. 7703	1	50	30	1.05

Body is $1\frac{7}{16}$ inches in diameter.
Holes for supporting screws are spaced $1\frac{7}{8}$ inches on centers.

FLUSH RECEPTACLES FOR 3¼-INCH OUTLET BOXES

With 3⅝-inch Round Plate

133409	7736	Receptacle body (receptacle and plate)	1	50	35	.95
133410	7737	Body and cap No. 7702	1	50	35	1.10
133411	7738	Body and cap No. 7703	1	50	35	1.15

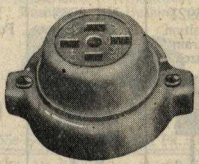
Body is $1\frac{7}{16}$ inches in diameter.
Holes for supporting screws are spaced $2\frac{3}{4}$ inches on centers.
*Rated at 10 amperes, 250 volts.

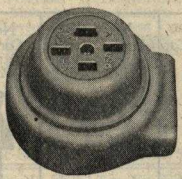
C-H STANDARD INTERCHANGEABLE PLUGS AND RECEPTACLES

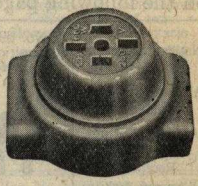
NATIONAL ELECTRICAL CODE STANDARD
660 Watts, 250 Volts


No. 7717


No. 7724


No. 7727


No. 7760


No. 7763

ROUND SURFACE RECEPTACLES

For Concealed Work

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
133390	7717	Body only	10	50	20	$0.25
133391	7718	Body and cap No. 7702	10	50	25	.40
133392	7719	Body and cap No. 7703	10	50	25	.45

Outside diameter of base is $2\frac{7}{32}$ inches. Holes for supporting screws are spaced $1\frac{1}{2}$ in. on centers.


No. 7730

ROUND SLOTTED BASE RECEPTACLES

For Open Work

151335	7724	Body only	10	50	20	.25
151336	7725	Body and cap No. 7702	10	50	25	.40
151337	7726	Body and cap No. 7703	10	50	25	.45

Outside diameter of base is $2\frac{7}{32}$ inches. Holes for supporting screws are spaced $1\frac{1}{2}$ in. on centers.

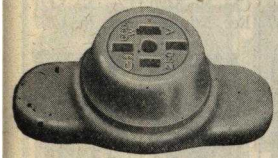

No. 7766

CLEAT RECEPTACLES

151338	7727	Body only	10	50	20	.25
151339	7728	Body and cap No. 7702	10	50	25	.40
151340	7729	Body and cap No. 7703	10	50	25	.45

METAL MOLDING RECEPTACLES WITH ONE-WAY BASE

151341	7760	Body only	10	50	20	.25
151342	7761	Body and cap No. 7702	10	50	23	.40
151343	7762	Body and cap No. 7703	10	50	23	.45


No. 7713

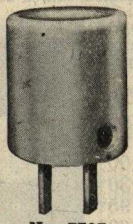
METAL MOLDING RECEPTACLES WITH TWO-WAY BASE

151344	7763	Body only	10	50	20	.25
151345	7764	Body and cap No. 7702	10	50	23	.40
151346	7765	Body and cap No. 7703	10	50	23	.45

CONDUIT BOX RECEPTACLES

151347	7730	Body only	10	50	20	.25
151348	7731	Body and cap No. 7702	10	50	23	.40

Outside diameter of base is $1\frac{3}{4}$ inches. Holes for supporting screws are spaced $\frac{5}{8}$ in. on centers.


No. 7707

RECEPTACLES FOR ½ AND ¾-INCH PAISTE TAPLETS

151349	7766	Body only	10	50	20	.35
151350	7767	Body and cap No. 7702	10	50	23	.50
151351	7768	Body and cap No. 7703	10	50	23	.55

RECEPTACLES FOR ½-INCH OBROUND CONDULETS

151352	7713	Body only	10	100	20	.40
151353	7714	Body and cap No. 7702	10	50	23	.55
151354	7715	Body and cap No. 7703	10	50	23	.60

CURRENT TAPS

133401	7707	Series tap only, without plug base	10	50	25	.35
133402	7708	Multiple tap only, without plug base	10	50	25	.35


No. 7770

SIDE OUTLET CURRENT TAPS

151355	7770	Multiple, body only	10	50	20	.35
151356	7771	Body and cap No. 7702	10	50	20	.50
151357	7772	Series, body only	10	50	20	.35
151358	7773	Body and cap No. 7702	10	50	20	.50

HUBBELL ATTACHMENT PLUGS

FLUSH RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD, 6 AMPERES, 250 VOLTS

SCHEDULE H

Listing of combinations of different caps with receptacles illustrated below are continued on the following page.

National Electrical Code Standard All Screw Base Plugs 660 Watts, 250 Volts All other Plugs, Connectors and Receptacles 6 Amperes, 250 Volts	No. 6918 Composition Cap Polarized	No. 6919 Brass Covered Composition Polarized	No. 6921 Composition "Knostrain" Polarized	No. 6565 Br. Cov. Compo "Knostrain" Polarized	No. 5419 Porcelain Cap	No. 5420 Composition Cap	No. 5421 Brass Covered Porcelain Cap
	15c-Std. Pk. 50	25c-Std. Pk. 50	25c-Std. Pk. 50	55c-Std. Pk. 50	15c-Std. Pk. 50	20c-Std. Pk. 50	25c-Std. Pk. 50
No. 5547 Flush Receptacle 60c-Std. Pk. 50	Cap No. 6918 Rec. No. 5547	Cap No. 6919 Rec. No. 5547	Cap No. 6921 Rec. No. 5547	Cap No. 6565 Rec. No. 5547	Cap No. 5419 Rec. No. 5547	Cap No. 5420 Rec. No. 5547	Cap No. 5421 Rec. No. 5547
No. 5579 Flush Receptacle With Lift Cover 60c-Std. Pk. 50	Cap No. 6918 Rec. No. 5579	Cap No. 6919 Rec. No. 5579	Cap No. 6921 Rec. No. 5579	Cap No. 6565 Rec. No. 5579	Cap No. 5419 Rec. No. 5579	Cap No. 5420 Rec. No. 5579	Cap No. 5421 Rec. No. 5579
No. 6257 Duplex Flush Receptacle 85c-Std. Pk. 50	Cap No. 6918 Rec. No. 6257	Cap No. 6919 Rec. No. 6257	Cap No. 6921 Rec. No. 6257	Cap No. 6565 Rec. No. 6257	Cap No. 5419 Rec. No. 6257	Cap No 5420 Rec. No 6257	Cap No. 5421 Rec. No. 6257

Charts Patented, March 21, 1916.

FLUSH PLATES FOR No. 5547 RECEPTACLES



Nos. 5548 and 6585

Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std.Pkg.	Price Each
5548	Single (stamped .060 metal) 4½x-2¾ in.	10	50	16	$0.35
6585	Single (solid) 4½x2¾ in.	10	50	18	.65
5549	Two-gang (stamped .060 metal) 4½x4 9/16 in.	1	25	13	1.00†
6586	Two-gang (solid) 4½x4 9/16 in.	1	25	15	1.30†
5550	Three-gang (solid) 4½x6 3/8 in.	1	20	18	1.95†
5599	Four-gang (solid) 4½x8 3/16 in.	1	10	20	2.60†
	Steel Plate, Genuine Bauer Barff Finish				
6584	Single (stamped .060 metal) 4½x 2¾ in.	10	50	16	.65



No. 6584

Outside supporting screw holes, 3 3/32 inches on centers; inside supporting screw holes, 2 13/16 inches on centers.

All devices listed above, with exceptions noted, packed 10 to a carton.

Porcelain receptacle, plate and cap packed in separate cartons, under their respective catalogue numbers.

When two catalogue numbers appear with illustration, the receptacle and cap are packed and sold as separate units, the price of the whole, including separately listed plates, being the aggregate of the units.

Polished brass, brush brass, polished bronze and oxidized copper are standard finishes for brass flush plates. All other finishes on standard plates excepting gold and silver, add to list, per unit, 10 cents for plate without lift cover and 20 cents per unit for plate with lift cover. Brush brass shipped unless otherwise specified.

When an equal number of receptacles, plates and brass covered caps are ordered, caps will be furnished in the finishes standard on plates without extra charge.

†For plates arranged in tandem add 20 per cent to the list price.

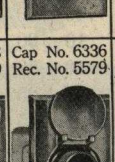
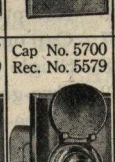
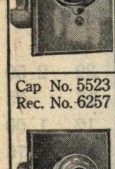
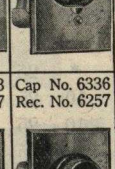
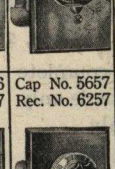
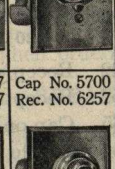
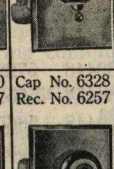
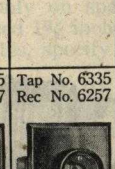
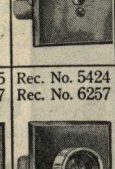
HUBBELL ATTACHMENT PLUGS

FLUSH RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD, 6 AMPERES, 250 VOLTS

SCHEDULE H

Receptacles only for combinations listed below are illustrated on the previous page.

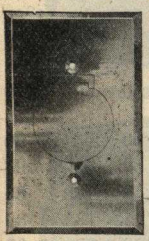
No. 5523 Brass Covered Composition	No. 6336 Elongated Composition	No. 5657 Br.Cov.Compo. "Knostrain" Bushing	No. 5700 Br.Cov.Compo. "Knostrain" Bushing	No. 6328 Compo. Swivel "Knostrain" Bushing	No. 5625 Porcelain Multiple Current Tap	No. 6335 Composition Multiple Current Tap	No. 5424 Porcelain Lamp Receptacle	No. 5897 Composition Lamp Receptacle
								
30c–Std. Pk. 50	25c–Std. Pk. 50	45c–Std. Pk. 50	55c–Std. Pk. 50	35c–Std. Pk. 50	35c–Std. Pk. 50	40c–Std. Pk. 50	25c–Std. Pk. 50	30c–Std. Pk. 50
Cap No. 5523 Rec. No. 5547	Cap No. 6336 Rec. No. 5547	Cap No. 5657 Rec. No. 5547	Cap No. 5700 Rec. No. 5547	Cap No. 6328 Rec. No. 5547	Tap No. 5625 Rec. No. 5547	Tap No. 6335 Rec. No. 5547	Rec. No. 5424 Rec. No. 5547	Rec. No. 5897 Rec. No. 5547
								
Cap No. 5523 Rec. No. 5579	Cap No. 6336 Rec. No. 5579	Cap No. 5657 Rec. No. 5579	Cap No. 5700 Rec. No. 5579	Cap No. 6328 Rec. No. 5579	☆	☆	Rec. No. 5424 Rec. No. 5579	☆
								
Cap No. 5523 Rec. No. 6257	Cap No. 6336 Rec. No. 6257	Cap No. 5657 Rec. No. 6257	Cap No. 5700 Rec. No. 6257	Cap No. 6328 Rec. No. 6257	Tap No. 5625 Rec. No. 6257	Tap No. 6335 Rec No. 6257	Rec. No. 5424 Rec. No. 6257	Rec. No. 5897 Rec. No. 6257
								

FLUSH PLATES FOR No. 5579 RECEPTACLES

Double Hinge Lift Cover Plates

Charts Patented, March 21, 1916.

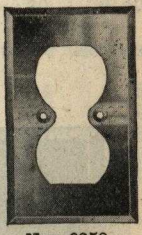
Mfrs. No.	Description	Carton	Std. Pkg.	Wt.,Lbs. Std. Pkg.	Price Each
5580	Single (solid) 4½x2¾ in.	10	50	22	$1.40
5581	Two-gang (solid) 4½x4 9/16 in.	1	25	18	2.80†
5582	Three-gang (solid) 4½x6⅜ in.	1	20	17	4.20†
5600	Four-gang (solid) 4½x8 5/16 in.	1	10	20	5.60†



No. 5580

FLUSH PLATES FOR No. 6257 DUPLEX RECEPTACLES

6258	Single (stamped .060 metal) 4½-x2¾ in.	10	50	15	.40
6587	Single (solid) 4½x2¾ in.	10	50	16	.65
6259	Two-gang (stamped .060 metal) 4½x4 9/16 in.	1	25	12	1.30†
6588	Two-gang (solid) 4½x4 9/16 in.	1	25	13	1.50†
6260	Three-gang (solid) 4½x6⅜ in.	1	20	17	2.25†
6261	Four-gang (solid) 4½x8 5/16 in.	1	10	18	3.00†



Nos. 6258 and 6587

Outside supporting screw holes, 3 5/32 inches on centers; inside supporting screw holes, 2 1/16 inches on centers.

All devices listed above, with exceptions noted, packed 10 to a carton

Porcelain receptacle, plate and cap packed in separate cartons, under their respective catalogue numbers.

When two catalogue numbers appear with illustration, the receptacle and cap are packed and sold as separate units, the price of the whole, including separately listed plates, being the aggregate of the units.

Polished brass, brush brass, polished bronze and oxidized copper are standard finishes for brass flush plates. All other finishes on standard plates excepting gold and silver, add to list, per unit, 10 cents for plate without lift cover and 20 cents per unit for plate with lift cover. Brush brass shipped unless otherwise specified.

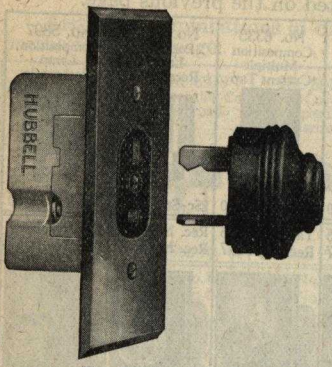
When an equal number of receptacles, plates and brass covered caps are ordered, caps will be furnished in the finishes standard on plates without extra charge.

†For plates arranged in tandem add 20 per cent to the list price.

*Not a practical combination.

HUBBELL FLUSH RECEPTACLES

SCHEDULE H



No. 5551

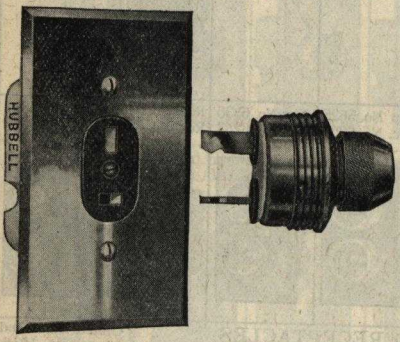
POLARITY TYPE FLUSH RECEPTACLES

20 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg	Wt. Lbs. Std. Pkg.	Price Each
039432	5551	Recep. complete	*	25	32	$2.00
039433	5552	Receptacle only	10	25	17	.75
039434	5553	Cap only	10	25	10	.50
039435	5554	Single plate	10	25	10	.75
039436	5555	Two-gang plate	1	15	10	1.50
039437	5556	Three-gang plate	1	10	10	2.25
039438	5586	Four-gang plate	1	10	14	3.00

10 Amperes, 250 Volts

039439	5565	Recep. complete	*	50	60	1.75
039440	5566	Receptacle only	10	50	30	.60
039441	5567	Cap only	10	30	12	.50
039442	5568	Single plate	10	50	22	.65
039443	5569	Two-gang plate	1	25	18	1.30
039444	5570	Three-gang plate	1	15	17	1.95
039445	5587	Four-gang plate	1	10	14	2.60



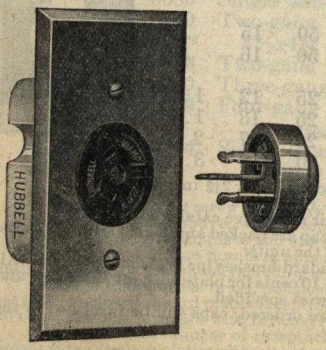
No. 5722

With Split Bushing Strain Relief Cap for No. 10 Jumper Cable—20 Amperes, 250 Volts

039446	5722	Recep. complete	*	25	32	2.50
039447	5552	Receptacle only	10	25	17	.75
039448	5665	Cap only	10	25	12	1.00
039435	5554	Single plate	10	25	10	.75
039436	5555	Two-gang plate	1	15	10	1.50
039437	5556	Three-gang plate	1	10	10	2.25
039438	5586	Four-gang plate	1	10	14	3.00

Without Lift Cover—For Three-wire Work 10 Amperes, 250 Volts

80001	6048	Without cap	*	50	55	1.60
80002	6049	With No. 6043 porcelain cap	*	50	60	1.85
80005	6148	With No. 6149 comp. cap	*	50	60	1.90
80003	6050	With No. 6044 brass-covered porcelain cap	*	50	60	1.95
80008	6310	With No. 6150 brass-covered composition cap	*	50	60	2.00
80004	6051	Receptacle only	10	50	35	.95
039419	5548	Single plate	10	50	16	.65
039420	5549	Two-gang plate	1	25	13	1.30
039421	5550	Three-gang plate	1	20	18	1.95
039422	5599	Four-gang plate	1	10	20	2.60



No. 6049

Outside supporting screw holes, $3\frac{9}{32}$ in. on centers.

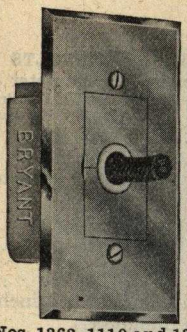
Inside supporting screw holes, $2\frac{5}{16}$ in. on centers.

Sizes of plates: Single, $4\frac{1}{2}$x$2\frac{3}{4}$ inches; two-gang, $4\frac{1}{2}$x$4\frac{9}{16}$ inches; three-gang, $4\frac{1}{2}$x$6\frac{3}{8}$ inches; four-gang, $4\frac{1}{2}$x$8\frac{3}{16}$ inches.

*Porcelain receptacle, plate and cap, packed in separate cartons under their respective numbers.

BRYANT FLUSH RECEPTACLES

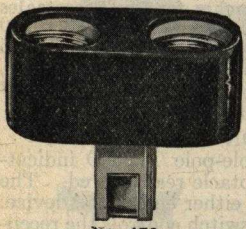
NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE H



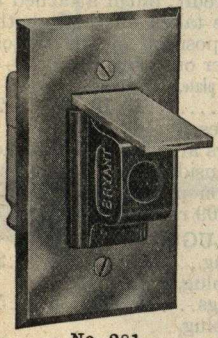
Nos. 1363, 1110 and 1364



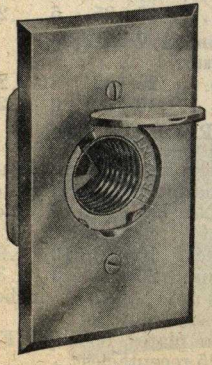
No. 397



No. 472



No. 281



No. 1708 and No. 1709

CHAPMAN RECEPTACLES

12 Amperes, 250 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
036278	1363	Gang receptacle	10	100	50	$0.40
036280	1110	Plug only (porcelain)	25	100	10	.20
036285	486	Polarity plug (porcelain)	25	100	10	.20
036281	397	Plug only (indestructible)	25	25	3	.40
104641	472	Chapman to Edison (Twin) Adapter	5	10	6	.50

Outside supporting screw holes, $3\frac{9}{32}$ inches on centers.
Inside supporting screw holes, $2\frac{13}{16}$ inches on centers.
When ordering combination plates, specify "C" sections to take No. 1363.

Plates

036279	1364	Single plate, $4\frac{1}{2}$x$2\frac{3}{4}$ in.	25	*	25	.45
104642	543	Single plate, $4\frac{1}{2}$x$2\frac{3}{4}$ in.	25	*	30	.70
036282	1365	2-gang plate, $4\frac{1}{2}$x$4\frac{9}{16}$ in.	10	*	40	1.40
036283	1366	3-gang plate, $4\frac{1}{2}$x$6\frac{3}{8}$ in.	5	*	37	2.10
036284	1367	4-gang plate, $4\frac{1}{2}$x$8\frac{3}{16}$ in.	5	*	34	2.80

Receptacles in gangs spaced $1\frac{13}{16}$ inches on centers.
No. 1364 is stamped, $\frac{1}{16}$-inch. The others are solid.

CHAPMAN RECEPTACLES (OLD STYLE)

FUSIBLE

036286	281	Gang receptacle	5	25	15	.70
036287	282	Single plate, $4\frac{1}{4}$x$2\frac{1}{2}$ inches.	25	25	12	.65
036288	283	Plug only, composition	5	25	4	.50

Holes for supporting screws are spaced $3\frac{9}{32}$ inches on centers.
Gang plates will be furnished only on special order. When so mounted, the receptacles will be spaced $1\frac{13}{16}$ inches on centers.
When ordering combination plates, specify "N" sections to take No. 281.

BRYANT SCREW PLUG FLUSH RECEPTACLES

660 Watts, 250 Volts

These receptacles will receive any Edison attachment plug.

036275	1708	Gang receptacle	10	100	53	.30

Outside supporting screw holes, $3\frac{9}{32}$ inches on centers.
Inside supporting screw holes, $2\frac{13}{16}$ inches on centers.
When ordering combination plates for No. 1708 specify "E" sections if lids are wanted and "F" sections if lids are not wanted.

Plates, with Lids

036276	1709	Single plate, $4\frac{1}{2}$x$2\frac{3}{4}$ in.	25	*	30	.40
104643	544	Single plate, $4\frac{1}{2}$x$2\frac{3}{4}$ in.	25	*	45	.60
104644	526	2-gang plate, $4\frac{1}{2}$x$4\frac{9}{16}$ in.	10	*	40	1.20
104645	527	3-gang plate, $4\frac{1}{2}$x$6\frac{3}{8}$ in.	5	*	35	1.80
104646	528	4-gang plate, $4\frac{1}{2}$x$8\frac{3}{16}$ in.	5	*	30	2.40

Plates, without Lids

These plates are necessary when receptacles are to be used as lamp sockets.

036277	429	Single plate, $4\frac{1}{2}$x$2\frac{3}{4}$ in.	25	*	4	.35
104647	545	Single plate, $4\frac{1}{2}$x$2\frac{3}{4}$ in.	25	*	6	.50
104648	529	2-gang plate, $4\frac{1}{2}$x$4\frac{9}{16}$ in.	10	*	37	1.00
104649	530	3-gang plate, $4\frac{1}{2}$x$6\frac{3}{8}$ in.	5	*	36	1.50
104650	531	4-gang plate, $4\frac{1}{2}$x$8\frac{3}{16}$ in.	5	*	35	2.00

Receptacles in gangs spaced $1\frac{13}{16}$ inches on centers.
Nos. 1709 and 429 are stamped, $\frac{1}{16}$ inch. The others are solid.

BRYANT DUPLEX SCREW PLUG FLUSH RECEPTACLES

Each Outlet 660 Watts, 250 Volts

This receptacle will receive two Edison attachment plugs and can be installed in any standard single switch box.

121224	546	Duplex receptacle	10	30	..	.45

Holes for supporting screws are spaced $3\frac{9}{32}$ inches on centers.

Plate, with Lid

121225	547	Solid plate, $2\frac{3}{4}$x$4\frac{1}{2}$ in.	25	25	..	.80

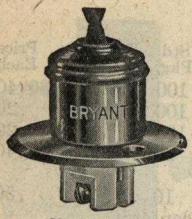
Plate, without Lid

121226	548	Solid plate, $2\frac{3}{4}$x$4\frac{1}{2}$ in.	25	25	..	.60

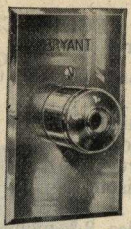
*Standard package consists of a sufficient number to accommodate 100 receptacles.

BRYANT RECEPTACLES AND PLUGS

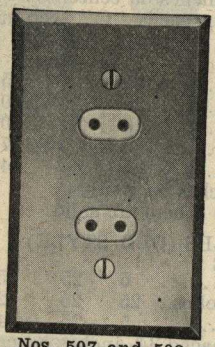
NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE H



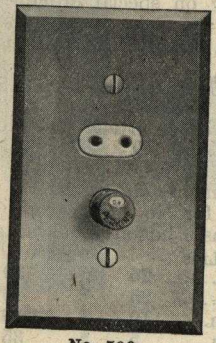
No. 1508



Nos. 411 and 412



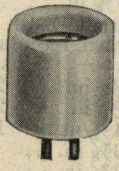
Nos. 507 and 508



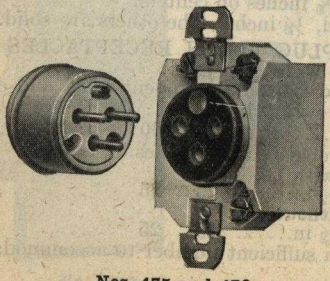
No. 509



No. 517



No. 496



Nos. 475 and 476

JUNIOR FLUSH RECEPTACLES

12 AMPERES, 125 VOLTS—6 AMPERES, 250 VOLTS

With Small Round Plate, $2\frac{1}{16}$ Inches in Diameter

Trade No.	Mfrs. No.	Description	Std. Wt., Lbs. Carton	Std. Pkg.	Price Each
071123	1508	With No. 375 plug...	5	25	12 .80
071124	1509	Without plug.....	1	25	10 .55

Holes for supporting screws are spaced $1\frac{15}{32}$ inches on centers. Porcelain is 1 inch in diameter.

With Large Round Plate $3\frac{5}{8}$ Inches in Diameter With $3\frac{1}{4}$-inch Round Outlet Boxes

071126	393	With No. 375 plug...	1	25	25 .90
071127	394	Without plug.....	1	25	20 .65

Holes for supporting screws are spaced $2\frac{3}{4}$ inches on centers. Porcelain is 1 inch in diameter.

With Rectangular Plate $4\frac{1}{2}$x$2\frac{3}{4}$ Inches, for One Receptacle

071129	411	Receptacle only.....	25	25	25	$0.40
071130	412	Single Plate, stamped $\frac{1}{16}$-inch.	25	25	8	.35

Outside supporting screw holes, $3\frac{9}{32}$ in. on centers.
Inside supporting screw holes, $2\frac{13}{16}$ in. on centers.
When ordering Combination plates, specify "J" sections to accommodate No. 411 receptacles.

With Rectangular Plate $4\frac{1}{2}$x$2\frac{3}{4}$ Inches, for Two Receptacles

105159	507	Two-gang receptacles	10	10	3 .60
105160	508	Plate, stamped $\frac{1}{16}$-inch	10	10	3 .45

Supporting screw holes spaced $3\frac{9}{32}$ in. on centers.
When ordering combination plates, specify "L" sections to accommodate No. 507 receptacles.

JUNIOR COMBINATION RECEPTACLES

A combination of a double-pole Type O indicating switch and a Junior Receptacle ready-wired. The line wires may be attached to either end of the device. If attached to switch end, the switch controls the receptacle as well as the outgoing circuit; but if attached to receptacle end, current may be taken off through the receptacle irrespective of the position of the switch, which will control only the other outgoing circuit.

105161	509	Receptacle with plug and plate, stamped, $\frac{1}{16}$-inch.....	1	10	17	2.25

Size of plate, $4\frac{1}{2}$x$2\frac{3}{4}$ inches.
Holes for supporting screws are spaced $3\frac{9}{32}$ inches on centers outside; $2\frac{13}{16}$ inches inside.
When ordering combination plates, specify "U" sections to accommodate No. 509 receptacles.

JUNIOR PLUGS

105162	375	Brass covered plug...	25	25	5	.25
105170	*517	Brass covered plug, with long prongs..	25	25	5	.50
105164	485	Brass covered plug, fusible (3 amps.)..	10	10	3	.50
105163	1510	Porcelain plug.....	25	25	5	.25

JUNIOR ADAPTERS—660 WATTS

105165	468	Adapter permitting use of Junior plugs in Edison sockets...	25	25	3	.20
105166	496	Junior to Edison adapter....	10	30	6	.20

THREE-WIRE FLUSH RECEPTACLES

10 Amperes, 250 Volts

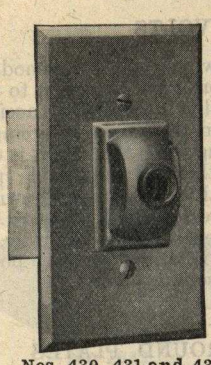
For connection to small polyphase motors, heating appliances requiring heat variations, telephones, etc.
This receptacle takes the No. 429 series of plates listed on another page.

105167	475	3-wire plug receptacle	10	30	12	.95
105168	476	3-wire polarized plug.	25	25	5	.35

Holes for supporting screws are spaced $3\frac{9}{32}$ inches on centers outside; $2\frac{13}{16}$ inches inside.
When ordering combination plates, specify "F" sections to accommodate No. 475 receptacles.
*Not National Electrical Code Standard.

BRYANT FLUSH RECEPTACLES

NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE H



Nos. 430, 431 and 432

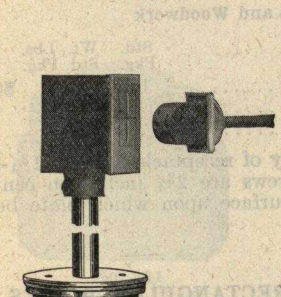
D. D. (DISAPPEARING DOOR) FLUSH RECEPTACLES
10 Amperes, 250 Volts

The doors open and close automatically with the insertion and withdrawal of the plug. This makes the receptacle suitable for floor as well as baseboard use, as dirt and dust cannot enter. It is also a very safe receptacle as it is almost impossible to gain access to the live parts except by means of plug.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
123920	430P	D. D. polarity receptacle..	10	30	15	$0.50
19732	430	D. D. gang receptacle.....	10	30	15	.50
19734	432	D. D. plug, brass covered..	10	30	6	.60
19738	494	D. D. plug, without metal cover....	10	30	5	.60
19744	539	D. D. plug, polarity	10	30	6	.60
19733	431	Single plate, stamped 1/16-in. 4 1/2x2 3/4 in.	25	*	11	.45
19745	520	Single plate, solid, 4 1/2x2 3/4 in.	25	*	12	.70
19746	523	Two-gang plate, solid, 4 1/2x4 9/16 in.....	10	*	15	1.40
19747	524	Three-gang plate, solid, 4 1/2x6 3/8 in.....	5	*	14	2.10
123919	525	Four-gang plate, solid, 4 1/2x8 3/16 in.....	5	*	13	2.80

*A standard package of D. D. plates consists of a sufficient number to accommodate 25 receptacles.

Outside supporting screw holes, 3 9/32 inches on centers.
Inside supporting screw holes, 2 13/16 inches on centers.



No. 497

D. D. FLOOR OUTLET BOX EXTENSIONS

These extensions are a combination of any water-tight floor box and a Bryant disappearing door receptacle supported above the point where water might reach it by a piece of rigid conduit.

19740	497	Floor box and single D. D. recep....	1	10	15	2.00
19741	498	Floor box and two-gang D. D. recep.	1	5	12	5.00

The above prices are for black enameled boxes with brush brass plates. Plugs are not included.

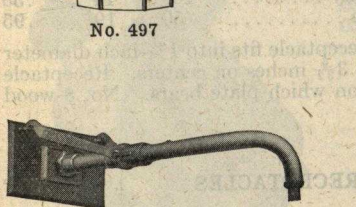
D. D. HOTEL SAMPLE ROOM BRACKETS

The lamp, socket, cord, bracket, plug and braces can be removed at will, the receptacle alone remaining.

19742	489	Special D. D. bracket plate, 2 3/4x4 1/2 in.....	10	10	8	1.00
19743	490	D. D. plug and bracket....	1	10	10	3.50

Socket and cord not included in above prices.

Length of bracket is 10 1/8 inches. The plate attaches to a regular No. 430 D. D. receptacle.



Nos. 430, 489 and 490

HIGH CAPACITY D. D. RECEPTACLES
25 Amperes, 250 Volts

The design is the same as the D. D. receptacle listed above. It should be particularly noted that this receptacle occupies the space of two standard flush receptacles.

A Perkins high capacity flush switch may be used for controlling the current to these receptacles and these two devices may be mounted together on a single flush plate, in which case a four-gang switch box would be required.

19735	446	Gang receptacle.....	1	10	9	1.50
19736	447	Single plate, solid, 4 1/2x4 9/16 in...	1	10	8	2.00
19737	448	Indestructible plug	1	10	6	1.50

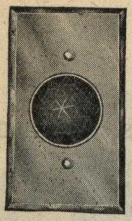
There are holes for four supporting screws spaced 3 9/32 inches on centers vertically and 1 13/16 inches on centers horizontally. Plates for mounting these receptacles in gangs will be furnished only on special order. When so mounted the receptacles will be spaced 3 5/8 inches on centers.

When ordering combination plates, specify "D" sections to accommodate No. 430; "Z" sections for No. 446.



Nos. 446, 447 and 448

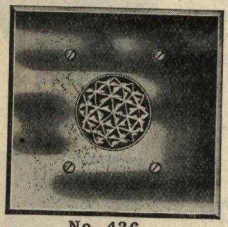
BRYANT RECEPTACLES AND CONTROL COMBINATIONS



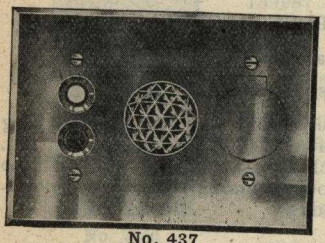
No. 428



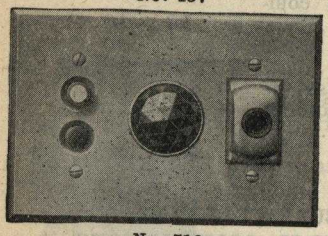
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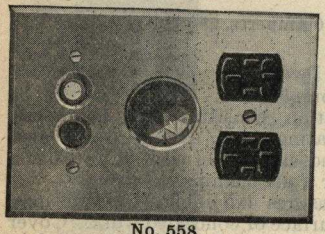
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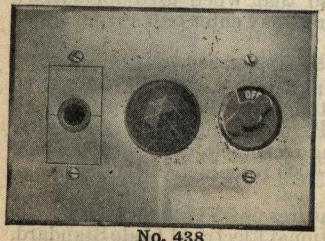
No. 437



No. 518



No. 558



No. 438

SCHEDULE H
BULL'S-EYE RECEPTACLES

The outfit consists of a flush plate of standard dimensions in the center of which is a ruby glass bull's-eye. The lighted lamp beneath serves as an effective cautionary or danger signal. The lamp holding receptacle may be installed individually or may be mounted up in gangs with switches and receptacles and the entire combination covered by a single plate.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
19748	427	Receptacle, with 2 candle power 125-volt candelabra base lamp	10	30	15	$1.00
19749	428	Single plate for above, $4\frac{1}{2}$x$2\frac{3}{4}$ inches.....	5	25	8	1.25

Outside supporting screw holes, $3\frac{9}{32}$ inches on centers.
Inside supporting screw holes, $2\frac{13}{16}$ inches on centers.

Plates for mounting these receptacles in gangs will be furnished only on special order. When so mounted, the receptacle will be spaced $1\frac{13}{16}$ inches on centers.

The above receptacle is designed to receive a Form H (General Electric) lamp. Lamps with candelabra bases are commercially limited to a maximum voltage of 125. When bull's-eye outfits are wanted for circuits above 125 volts, it is necessary to connect up two No. 427 receptacles in series and cover them with a No. 436 plate illustrated and listed below.

In ordering combination plates, specify "A" or "B" sections to accommodate No. 427 receptacle; specify "X" sections to accommodate two No. 427 receptacles wired in series.

19751	436	Single plate, $4\frac{1}{2}$x$4\frac{9}{16}$ inches	1	10	..	1.60

FLUSH HEATER CONTROL COMBINATIONS

All Inter-connections made Complete

These combinations are designed to be installed in a three-gang box. There are holes for four supporting screws spaced $3\frac{9}{32}$ inches on centers vertically and $3\frac{5}{8}$ inches on centers horizontally.

660 Watts, 125 Volts

19767 437 Combination complete 1 10 30 5.50

This combination consists of No. 2520 D. P. switch cup, No. 2523 D. P. switch mechanism, No. 3639 flush plate, No. 427 lamp holder, with lamp, No. 428 flush plate, No. 1708 plug receptacle and No. 544 flush plate.

10 Amperes, 125 Volts

19770 518 Combination complete 1 10 35 6.00

This combination consists of No. 2520 D. P. switch cup, No. 2523 D. P. switch mechanism, No. 3639 flush plate, No. 427 lamp holder, with lamp, No. 428 flush plate, No. 430 D. P. receptacle, No. 520 flush plate and No. 432 D. P. plug.

19769 467 Combination complete 1 10 35 5.75

This combination consists of No. 2520 D. P. switch cup, No. 2523 D. P. switch mechanism, No. 3639 flush plate, No. 427 lamp holder with lamp, No. 428 flush plate, No. 120 Spartan receptacle and No. 545 Spartan plate.

19771 558 Combination complete 1 10 30 6.25

This combination consists of No. 2520 D. P. switch cup, No. 2523 D. P. switch mechanism, No. 3639 flush plate, No. 427 lamp holder, with lamp, No. 428 flush plate, No. 122 Spartan Receptacle and No. 551 Spartan plate.

19768 438 Combination complete 1 10 30 6.00

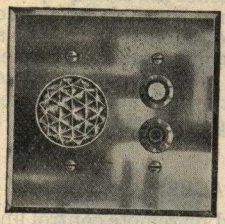
This combination consists of No. 2344 D. P. indicating switch, No. 2345 flush plate, No. 427 lamp holder, with lamp, No. 428 flush plate, No. 1363 Chapman receptacle, No. 543 Chapman plate and No. 397 Chapman plug.

Illustrations are one-fourth actual size.

BRYANT HEATER CONTROL COMBINATIONS

NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE H



No. 413

READY WIRED BULL'S-EYE COMBINATIONS

10 Amperes, 125 Volts

In these combinations the devices are mounted on a single piece of porcelain and all necessary connections are complete, so that in installing the outfit it is only necessary to attach the line and load wires.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
19752	413	Combination complete..	1	10	28	$4.50

This outfit consists of No. 427 lamp holder with lamp, No. 428 flush plate, No. 2520 D. P. switch cup, No. 2523 D. P. switch mechanism and No. 3639 flush plate.

92438	514	Combination complete...	1	10	..	4.50

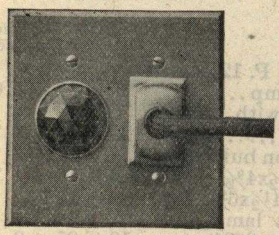
This combination consists of No. 430 D. D. receptacle, No. 520 D. D. plate, No. 432 D. D. plug, No. 427 lamp holder with lamp and No. 428 flush plate. So arranged that lamp lights when plug is inserted.

19753	419	Combination complete...	1	10	30	4.00

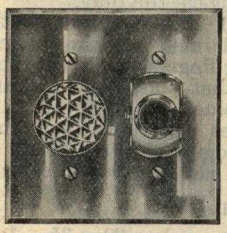
This outfit consists of No. 427 lamp holder with lamp, No. 428 flush plate, No. 2520 receptacle cup, No. 2528 receptacle mechanism No. 2567 receptacle plug and No. 3639 flush plate.

92439	515	Combination complete....	1	10	..	4.00

This combination consists of No. 427 lamp holder with lamp, No. 428 flush plate, No. 2520 receptacle cup, No. 2567 receptacle plug, No. 2702 receptacle mechanism and No. 3639 flush plate. So arranged that lamp lights when plug is inserted.



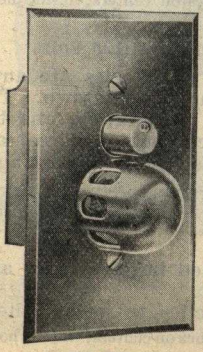
No. 514



Nos. 419 and 515

The above combinations are designed to be installed in a two-gang box. There are holes for four supporting screws, spaced $3\frac{9}{32}$ inches on centers vertically and $1\frac{13}{16}$ inches on centers horizontally.

19754	465	Combination complete, with 125-volt lamp and plate	1	10	18	3.50
92440	469	Same combination as No. 465 with rotary lock flush switch.....	1	10	18	4.00
92441	495	Combination similar to No. 465 but with three-point Type O flush switch instead of double-pole switch.....	1	10	18	3.50



No. 465

No. 465 combination consists of a No. 2494 Type O double-pole indicating switch mounted in a special porcelain that also provides a receptacle for a candelabra base lamp, which is covered by a perforated brass cage, so that the lamp cannot be removed without removing the plate. The lamp is in circuit whenever the switch is closed. This outfit may be installed in any standard single switch box.

Outside supporting screw holes, $3\frac{9}{32}$ inches on centers.

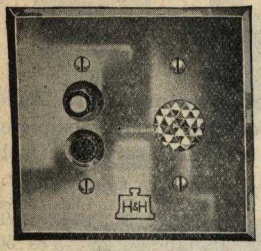
Inside supporting screw holes, $2\frac{13}{16}$ inches on centers.

Plates for mounting these receptacles in gangs will be furnished only on special order. When so mounted, the receptacles will be spaced $1\frac{13}{16}$ inches on centers.

When ordering combination plates, specify "M" sections to accommodate Nos. 465 and 495 switches.

H & H RECEPTACLES

INDICATING PILOT LAMPS



No. 4149

When several momentary contact switches are used to operate, from separate points, the same remote control switch, a common pilot circuit is often run from the remote controlled device to all the momentary contact stations. On this circuit at each momentary contact station is installed one of the pilot lamp receptacles, No. 2999, and both the momentary contact switch and this receptacle, No. 2999, are covered by one two-gang plate, No. 4149, as shown in the illustration.

PILOT LAMP RECEPTACLES

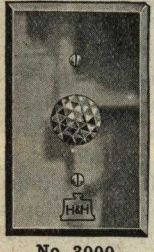


No. 2999

For installation on heater circuits and on remote control lines and on vacuum cleaner systems to indicate when the current is on. For use wherever a pilot light is needed. A candelabra lamp is mounted in the porcelain base and glows through the ruby cut glass bull's-eye when the circuit is closed. The plate is of standard dimensions and can be furnished in gangs and also in gang with other kinds of flush plates.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
68601	2999	Receptacle with 2 C. P. 125-volt candelabra base lamp.....	25	17	$1.00
68602	3000	Single plate (4x2¾) with bull's-eye.....	25	13	1.25
68603	4149	Two-gang combination bull's-eye and push plate (4½x4⅜).....	10	..	1.75
68604	4152	Combination plate (4½x6⅜) for push switch, pilot lamp and plug receptacle (No. 2034)....	10	25	2.40

BASEBOARD RECEPTACLES



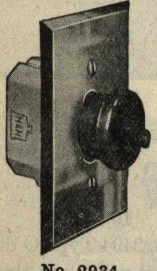
No. 3000

The contacts are deep sleeves of bronze that closely engage the plug fingers over a large conducting area. Although they grip the fingers tightly, a slight pull will disengage the plug.

These devices have great overload capacity because the contacts are separated by a wall of porcelain so that the current cannot jump across and because the plug fingers reach the contacts through narrow tubes of porcelain that choke the arc and prevent its reaching the plate when the plug is withdrawn.

The porcelain base is only 1¼ inches deep and 1¼ inches wide so that it allows plenty of wiring room in the wall case.

These receptacles fit all standard wall cases and conduit boxes.



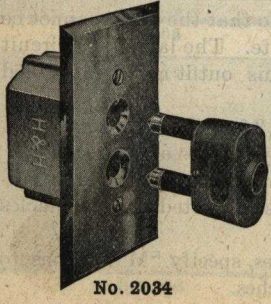
No. 2934

10 Amperes, 250 Volts

68605	2934	Receptacle complete	30	35	1.00
68606	3001	Base only	30	16	.40
68607	3002	Plug only	30	7	.25
68608	3011	Plate only.....	30	15	.35

Plates in gangs are spaced 1 13/16 inches between centers.

Outside supporting screw holes are spaced 3 3/32 inches on centers; inside holes 2 11/16 inches.



No. 2034

Dirt-Proof Baseboard Receptacles—10 Amperes, 125 Volts

The apertures in the faceplate of these receptacles are automatically closed with shutters when the plug is withdrawn. The insertion of the plug automatically opens the shutters and the plug fingers are snugly engaged by spring contacts. A great advantage is that the plug can be so easily inserted from any angle.

038617	2034	Receptacle complete.....	30	31	1.40
038618	2001	Receptacle base	30	15	.50
038619	2002	Receptacle plug	30	5	.25
038620	2033	Single plate for receptacle	30	15	.65

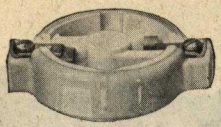
These receptacle plates may be furnished in gangs and also in gang combinations with switch plates.

Receptacles in gangs are spaced 1 13/16 inches between centers.

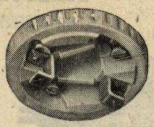
Outside supporting screw holes are spaced 3 3/32 inches on centers; inside holes, 2 11/16 inches.

BRYANT ROSETTES

SCHEDULE H



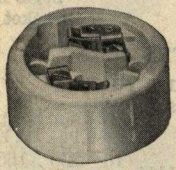
Cleat Base



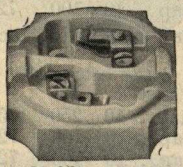
Fusible Cap



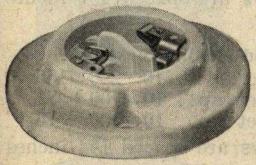
Fuseless Cap



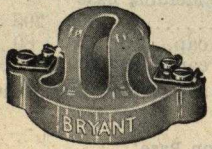
Concealed Base



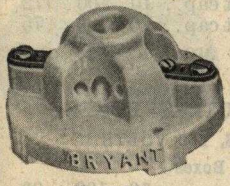
Molding Base



Outlet Box Base



No. 1999



No. 1499





Cleat Rosette

BRYANT JUNIOR TWO-PIECE ROSETTES

Fusible caps are rated for a capacity of 2 amperes, 125 volts.

Fuseless caps are rated for a capacity of 3 amperes, 250 volts.

With Cleat Base

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043089	1501	With fusible cap	10	250	115	$0.16
043093	297	With fuseless cap	10	250	115	.15

Holes for supporting screws are spaced 1⅝ inches on centers.

With Concealed Base

043090	1502	With fusible cap	10	250	130	.16
043094	298	With fuseless cap	10	250	130	.15

Outside diameter of base is 2⅜ inches.

Holes for supporting screws are spaced 1⅝ inches on centers.

With Wood Molding Base

043091	1503	With fusible cap	10	250	125	.16
043095	299	With fuseless cap	10	250	125	.15

Holes for supporting screws are spaced 1⅝ inches on centers.

With Base for 3¼-inch Outlet Boxes

043092	368	With fusible cap	1	100	75	.32
043096	369	With fuseless cap	1	100	75	.30

Outside diameter of base is 3½ inches.

Holes for supporting screws are spaced 2¾ inches on centers.

BRYANT JUNIOR ONE-PIECE ROSETTES

Fuseless, 3 Amperes, 250 Volts

043098	1999	Cleat and concealed combined	10	250	70	.08
043099	384	Two-wire wood molding	10	250	145	.08

Holes for supporting screws are spaced 1¼ inches on centers.

K. P. FUSELESS ROSETTES

One-piece, 3 Amperes, 250 Volts

043100	1499	Cleat	10	250	310	.16
043101	1710	Concealed	10	250	290	.16

Outside diameter of base is 3⅛ inches.

Holes for supporting screws are spaced 2½ inches on centers.

BRYANT CLEAT ROSETTES

With Covered Connections

076644	965	Fusible, 2-amp., 125-v	20	250	125	.26
112966	565	Fuseless, 3-amp., 250-v	20	250	125	.20

Holes for supporting screws are spaced 1$\frac{1}{16}$ inches on centers.

BRYANT ROSETTES

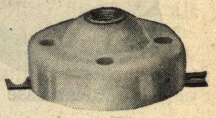
SCHEDULE H

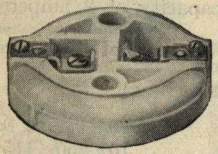


Cleat Base

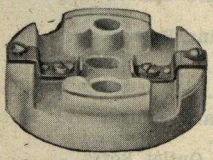

Pendent Cap

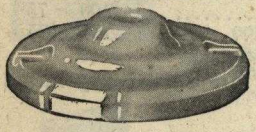

Style A Bracket Cap

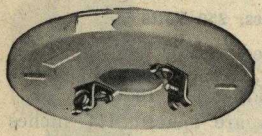

Style B Bracket Cap

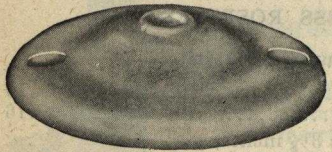

Concealed Base

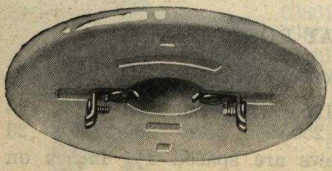

Two-wire Molding Base


Combination Base


No. 572


No. 574


No. 573


No. 575

K-W ROSETTES

FUSIBLE, 2 AMPERES, 125 VOLTS

With Cleat Base

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043061	950	With pendent cap.....	10	250	165	$0.26
043062	870	With pendent cap, cast lugs	10	250	170	.26
043068	1176	With Style A bracket cap..	10	100	75	.36
043073	1178	With Style B bracket cap..	10	100	72	.36

Holes for supporting screws are spaced 1⅝ inches on centers.

With Concealed Base

043063	871	With pendent cap.....	10	250	155	.26
043067	873	With Style A bracket cap..	10	100	72	.36
043072	1073	With Style B bracket cap..	10	100	72	.36

Outside diameter of base is 2⅞ inches.

Holes for supporting screws are spaced 1⅝ inches on centers.

With Two-wire Wood Molding Base

043064	926	With pendent cap.....	10	250	155	.26
043069	1177	With Style A bracket cap..	10	100	71	.36
043074	1179	With Style B bracket cap..	10	100	75	.36

Holes for supporting screws are spaced 1⅝ inches on centers.

With Three-wire Wood Molding Base

043065	1426	With pendent cap.....	10	250	205	.26
043070	287	With Style A bracket cap..	10	100	80	.36
043075	288	With Style B bracket cap..	10	100	80	.36

Holes for supporting screws are spaced 2⅝ inches on centers.

With Combination Base

043066	872	With pendent cap.....	10	250	160	.26
043071	1402	With Style A bracket cap..	10	100	72	.36
043076	1403	With Style B bracket cap..	10	100	75	.36

Holes for supporting screws are spaced 1⅝ inches on centers.

ROSETTES FOR OUTLET BOXES

FUSES, 3 AMPERES, 250 VOLTS

For 3¼-inch Boxes

146112	572	Plain rosette.....	10	100	60	.10
146113	574	Rosette, with terminals....	10	100	60	.20

Outside diameter of base is 3⅝ inches.

Holes for supporting screws are spaced 2¾ inches on centers.

For 4-inch Boxes

146114	573	Plain rosette.....	5	100	98	.14
146115	575	Rosette, with terminals....	5	100	105	.27

Outside diameter of base is 4⅝ inches.

Holes for supporting screws are spaced 3½ inches on centers.

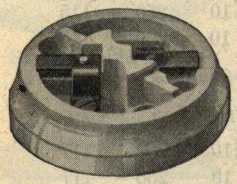
BRYANT ROSETTES

NATIONAL ELECTRICAL CODE STANDARD

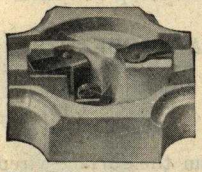
SCHEDULE H



Cleat Base



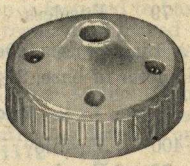
Concealed Base



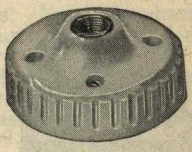
Wood Molding Base

THOMAS ROSETTES

FUSIBLE, 2 AMPERES, 125 VOLTS



Pendent Cap



Bracket Cap

With Cleat Base

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043077	3414	With pendent cap...	10	250	182	$0.26
043086	3417	With bracket cap...	10	100	80	.36

Holes for supporting screws are spaced 1⅝ inches on centers.

With Concealed Base

043078	3415	*With pendent cap...	10	250	170	.26
043087	3418	*With bracket cap...	10	100	75	.36

Outside diameter of base is 2⅞ inches.
Holes for supporting screws are spaced 1⅝ inches on centers.

With Wood Molding Base

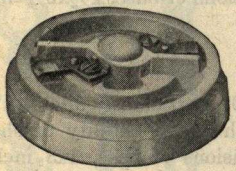
043079	3416	*With pendent cap...	10	250	172	.26
043088	3419	*With bracket cap...	10	100	70	.36

Holes for supporting screws are spaced 1⅝ inches on centers.

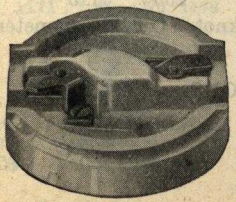
FUSIBLE, 3 AMPERES, 250 VOLTS



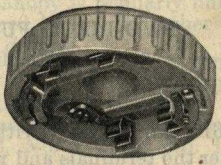
Cleat Base



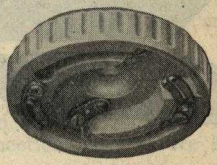
Concealed Base



Wood Molding Base



Cap with Connections for Enclosed Fuses



Cap with Connections for Open Link Fuses

With Cleat Base

043083	3423	With enclosed fuse cap.....	10	250	260	.30
043080	3420	*With link fuse cap..	10	250	250	.30

Holes for supporting screws are spaced $2\frac{3}{32}$ inches on centers.

With Concealed Base

043084	3424	With enclosed fuse cap.....	10	250	250	.30
043081	3421	*With link fuse cap..	10	250	240	.30

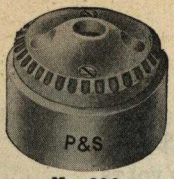
Outside diameter of base is 3 3/16 inches.
Holes for supporting screws are spaced 2 1/16 inches on centers.

With Wood Molding Base

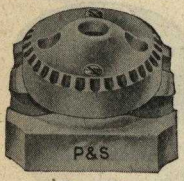
043085	3425	With enclosed fuse cap.....	10	250	245	.30
043082	3422	*With link fuse cap..	10	250	245	.30

Holes for supporting screws are spaced 1⅝ inches on centers.
*Not National Electrical Code Standard.

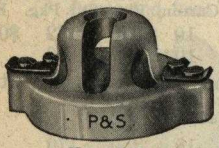
P & S ROSETTES



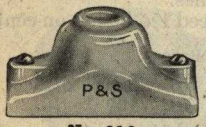
No. 390



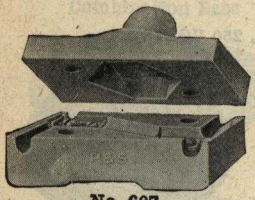
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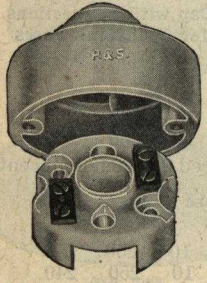


No. 1999

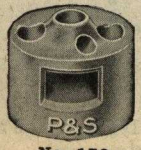


No. 610


No. 607



No. 604



No. 170

SCHEDULE XA

LITTLE GEM ROSETTES

Two-piece, Concealed

Trade No.	Mfrs. No.	Style	Sup. Screws Centered, In.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
021446	390	Fusible	1 13/32	10	250	140	$0.16
021447	79	Fuseless	1 13/32	10	250	140	.15

Have a 1-inch base. Deeply recessed to take loom or tubes. Outside diameter of base, 2¼ inches.

Two-piece, Cleat

021448	400	Fusible	1 7/16	10	250	115	.16
021449	76	Fuseless	1 7/16	10	250	115	.15

Outside dimensions of base, 2⅛ x 2⅞ inches.

Two-piece, Molding

021450	810	Fusible	1 21/32	10	250	117	.16
021451	176	Fuseless	1 21/32	10	250	117	.15

Outside dimensions of base, 2 1/16 x 2 1/16 inches.

All above rosettes will fit P & S Fixture Loop No. 1171.

ONE-PIECE FUSELESS CLEAT ROSETTES

Trade No.	Mfrs. No.	Sup. Screws Centered, In.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
91423	1999	1⅝	10	250	62	$0.08

No. 1999 carries the wires ½ inch from the surface wired over. It can be used on concealed work also, as holes for bringing the wires up through the base have been provided in the rosette. Outside dimensions, 2 7/32 x 2 25/32 inches.

TWO-PIECE FUSELESS ROSETTES

For Wood Molding or Conduit Fittings

042944	610	2 9/32	10	250	75	.17

No. 610 can be used without cutting molding. Wires are looped over the terminals and run straight through. Will fit P & S Fixture Loop No. 1171. Outside dimensions of base, 1½x2¾ in.

Cleat

042946	607	1⅝	25	250	81	.17

The enclosed terminals make No. 607 particularly adapted for use on low ceilings and does away with the possibility of shock from exposed terminals. Outside dimensions of base, 1x3 inches.

Concealed

021444	604	1 31/32	10	250	125	.17
021445	605	Extra caps	10	250	115	.11

Has generous space for wiring and knot. Outside diameter of base, 2½ inches.

CEILING BUTTONS

Trade No.	Mfrs. No.	Sup. Screws Centered, In.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
042949	170	1 3/32	50	250	56	$5.70

Glazed, self-tying ceiling button.

Outside diameter, 1 25/32 inches.

P & S ROSETTES

NATIONAL ELECTRICAL CODE STANDARD

CONCEALED ROSETTES

SCHEDULE XA

Rosettes with Brass Cap, Fuseless—For 3¼ or 4-inch Boxes

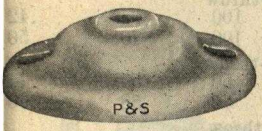


Nos. 200 and 112

Trade No.	Mfrs. No.	Outside Diameter Inches	Sup. Screws Centered, In.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
*021440	200	4 21/32	2¾ and 3½	1	50	75	$0.80
		Brass cap is fastened to base by spring contacts.					
*021441	112	4 21/32	2¾ and 3½	1	50	72	.80
		Brass cap is fastened to base by screws.					

Cap is regularly finished in brush brass. No extra charge for polished brass. All other finishes take the same advance as for complete devices.

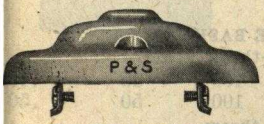
Terminals are ½ inch from surface wired over, which permits its use for many types of concealed wiring.



Nos. 1172 and 1173

Porcelain Outlet Box Rosettes or Covers, Fuseless—For 3¼-inch Boxes only

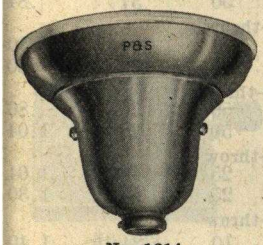
*017626	1172	3 21/32	2¾	10	100	60	.10
		There are no brass fittings attached.					
		Each carton contains the necessary screws to fasten to outlet box.					
*017628	1174	3 21/32	2¾	10	100	60	.20
		Furnished complete with brass terminals.					
		Each carton contains the necessary screws to fasten to outlet box.					



Nos. 1174 and 1175

Porcelain Outlet Box Rosettes or Covers, Fuseless—For 4-inch Boxes only

*017627	1173	4 21/32	3½	5	100	98	.14
		There are no brass fittings attached.					
		Each carton contains the necessary screws to fasten to outlet box.					
*017629	1175	4 21/32	3½	5	100	105	.27
		Furnished complete with brass terminals.					
		Each carton contains the necessary screws to fasten to outlet box.					



No. 1214

CANOPY ROSETTES

SCHEDULE XA

Rosettes with deep brass canopy, fuseless, for use on wall, metal ceilings, or 3¼ and 4-inch outlet boxes.

017631	1214	4 21/32	.....	1	50	75	.80

The canopy is fastened to the base by twin spring lugs, which allow the canopy to be removed for wiring and replaced instantly.

Inside depth of canopy is 3 inches from base to nipple, permitting its use where a pipe extends through the outlet box.

Terminals are ½ inch from surface wired over, which permits its use for many types of concealed wiring.

The canopy is regularly finished in brush brass. No extra charge for polished brass. All other finishes take the same advance as for complete devices.

FIXTURE LOOPS

SCHEDULE SM

The illustration shows how it is possible to make a very handsome and inexpensive fixture by using rosettes No. 200, No. 112, No. 1172, No. 1173, No. 1174 or No. 1175, in connection with fixture loops Nos. 1170 or 1171.

In using this rosette the cost of a canopy, canopy insulator or insulating ring, insulating joint and hickey is saved.

These rosettes also have a wide range of use in connection with pendent drop cord work.



No. 1170



No. 1171



No. 1178



Rosette Fixture

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
017623	1170	With ¼-in. threaded shank to fit ⅛-in. cap socket.....	50	100	14	$0.11
017624	1171	With 9/16-in. threaded shank and brass hexagon nut.....	50	100	15	.13

Regular finish, brush brass. No extra charge for polished brass. For all other finishes, add 2 cents to list.

BRASS PLATED IRON FIXTURE CHAIN

SCHEDULE SM

Trade No.	Mfrs. No.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per Ft.
017630	1178	100 Ft.	45	$0.20

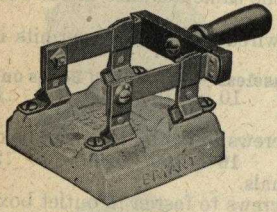
Standard finish, brush brass. For special finishes add to list 10 cents per foot. Cannot be supplied in special finishes in lengths greater than 10 feet.

*Hole in cap will take fixture loop No. 1171.

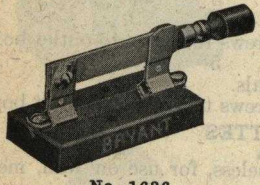
BRYANT BABY KNIFE SWITCHES



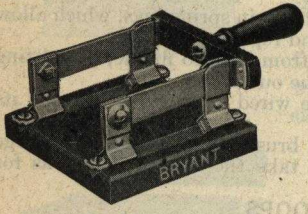
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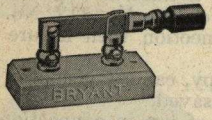
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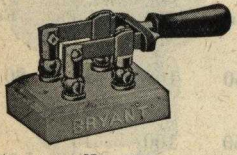
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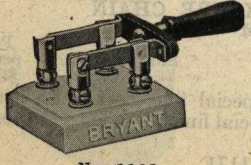
No. 1638



No. 1001



No. 974



No. 1102

SCHEDULE H 125 VOLTS

MOUNTED ON PORCELAIN BASE

Trade No.	Mfrs. No.	Capacity Amperes	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
		Single-pole, Single-throw				
094982	1436	15	10	100	40	$0.34
094983	1437	30	10	100	45	.44
		Single-pole, Double-throw				
094984	1454	15	10	50	25	.60
094985	1455	30	10	50	27	.74
		Double-pole, Single-throw				
094986	1438	15	10	100	65	.42
094987	1439	30	10	100	70	.50
		Double-pole, Double-throw				
094988	1456	15	5	50	56	.74
094989	1457	30	5	50	58	.90
		Triple-pole, Single-throw				
094990	1440	15	5	25	30	.90
094991	1441	30	5	25	32	1.10

250 VOLTS

MOUNTED ON SLATE BASE

		Single-pole, Single-throw				
094992	1636	15	10	100	45	.40
094993	1637	30	10	100	50	.50
		Single-pole, Double-throw				
094994	1654	15	5	50	35	.68
094995	1655	30	5	50	37	.84
		Double-pole, Single-throw				
094996	1638	15	5	100	100	.50
094997	1639	30	5	100	105	.60
		Double-pole, Double-throw				
094998	1656	15	5	50	75	.86
094999	1657	30	5	50	78	1.04
		Triple-pole, Single-throw				
095000	1640	15	5	25	40	1.04
095001	1641	30	5	25	45	1.30
		Triple-pole, Double-throw				
095002	1658	15	1	10	24	1.40
095003	1659	30	1	10	26	1.64

FOR BATTERY AND TELEPHONE CIRCUITS

TYPE A, MOUNTED ON PORCELAIN BASE

		Single-pole, Single-throw				
095004	1001	15	10	100	25	.34
095005	977	30	10	100	27	.44
		Single-pole, Double-throw				
095006	1039	15	10	50	18	.60
095007	1040	30	10	50	20	.74
		Double-pole, Single-throw				
095008	974	15	10	100	40	.42
		Double-pole, Double-throw				
095032	1041	15	5	50	33	.74
095033	1042	30	1	50	35	.90
		Triple-pole, Double-throw—Slate Base				
095036	1158	15	1	10	15	1.20
095037	1159	30	1	10	17	1.40

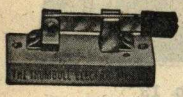
TYPE B, MOUNTED ON PORCELAIN BASE

		Single-pole, Single-throw				
054067	1245	15	10	100	25	.20
054068	1246	30	10	100	27	.30
		Double-pole, Single-throw				
054069	1102	15	10	100	60	.35
054070	1074	30	10	100	65	.44

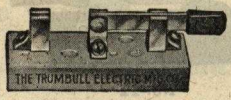
Mounted switches are plain finish, but will be furnished polished on special order, at 20 per cent advance.

30-ampere switches for 125 and 250-volt circuits are National Electrical Code Standard.

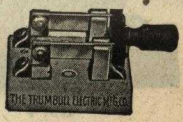
TRUMBULL SWITCHES



No. 707



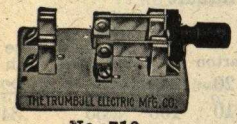
No. 708



No. 709

IGNITION OR BATTERY SWITCHES

All ignition or battery switches are fitted with the return bend, self-adjusting type of clip, which is unusually suitable for this type of switch. Projections on posts prevent turning on bases.

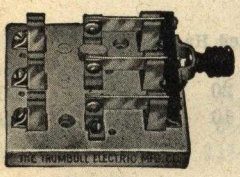


No. 710

25 AMPERES—FRONT CONNECTIONS

Porcelain Base

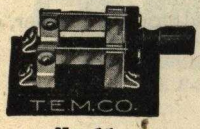
Trade No.	Mfrs. No.	Style	Size of Base, In. Length	Width	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
067175	707	S. P., S. T.	1⅛	x3⅛	10	150	48	$0.20
067176	708	S. P., D. T.	1⅜	x3⅞	5	100	45	.32
067177	709	D. P., S. T.	2	x2⅝	10	100	50	.35
067178	710	D. P., D. T.	2⅝	x3⅞	5	50	46	.50
067179	711	3 P., S. T.	3¼	x2⅝	5	50	45	.56
067180	712	3 P., D. T.	3¼	x3⅞	5	50	67	.90



No. 712

Slate Base

067181	14	D. P., S. T.	2	x3	..	50	30	.45
067182	15	D. P., D. T.	2	x4	..	25	22	.75
067183	16	3 P., S. T.	2½	x3¼	..	50	40	.66
067184	17	3 P., D. T.	3¼	x3⅝	..	25	30	1.10
067185	18	4 P., S. T.	3	x4½	..	25	30	1.00
067186	19	4 P., D. T.	4	x5½	..	10	20	1.70



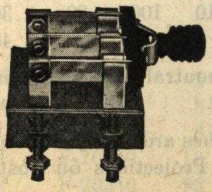
No. 14

25 AMPERES—BACK CONNECTIONS

Unmounted

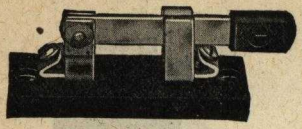
1¼-inch break, 1$\frac{3}{16}$-inch separation. Designed for switchboard work or in connection with fire and burglar alarm systems.

Trade No.	Mfrs. No.	Style	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price, Each Plain	Pol.	N. P.
067187	777	S. P., S. T.	150	24	$0.34	$0.48	$0.52
067188	778	S. P., D. T.	100	24	.50	.72	.78
067189	779	D. P., S. T.	100	33	.56	.80	.86
067190	780	D. P., D. T.	50	26	.80	1.16	1.25
067191	781	3 P., S. T.	50	18	.84	1.20	1.30
067192	782	3 P., D. T.	50	23	1.25	1.74	1.92


No. 781

Unless otherwise specified, polished finish will be sent.

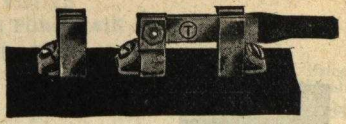
TRUMBULL SWITCHES



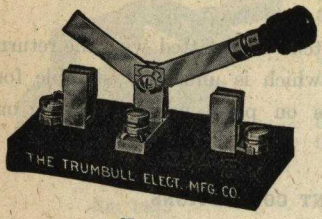
No. 7
Rubber Handle



No. 11
Enameled Handle



No. 13
Enameled Handle

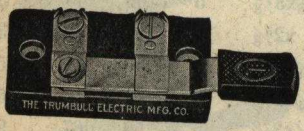


No. 980

FIBRE BASE BATTERY SWITCHES

With Hard Rubber Handle

Trade No.	Mfrs. No.	Cap. Amps.	Style	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
068029	7	25	S.P., S.T.	20	200	36	$0.22
068030	8	25	S.P., D.T.	10	100	30	.34
068031	9	25	D.P., S.T.	10	100	41	.42
068032	10	25	D.P., D.T.	10	50	36	.80
77251	40	25	T.P., S.T.	10	50	35	.75
77252	41	25	T.P., D.T.	10	25	20	1.25
77253	42	25	4P., S.T.	10	25	20	1.10
77254	43	25	4P., D.T.	10	10	10	1.75



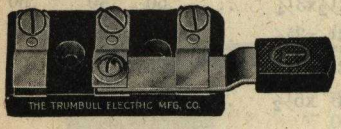
No. 1

With Black Enameled Handle

068033	11	25	S.P., S.T	20	200	34	.20
068034	13	25	S.P., D.T.	10	100	29	.32

GAS ENGINE SWITCHES

Trade No.	Mfrs. No.	Style	Size of Base Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
068035	980	S.P.	2x4	5	50	42	$0.70
77255	984	D.P.	4x4	5	25	35	1.40



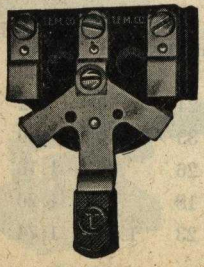
No. 2

For changing from one set of batteries to another, or from battery to magneto.

JUNIOR BATTERY SWITCHES

On Composition Bases

Trade No.	Mfrs. No.	Style	Size of Base Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
068036	1	S.P., S.T.	1 1/16x2 1/16	10	200	32	$0.20
068037	2	S.P., D.T.	1 1/16x2 1/4	10	100	20	.30
068038	5	.....	1 3/4x2 1/4	5	100	28	.40



No. 5

Spring holds lever of No. 5 in neutral position and in each contact.

All telephone or battery switches are fitted with the return bend, self-adjusting clips. Projections on posts, prevent turning on bases.

F. A. TYPE F SWITCHES

PUNCHED CLIP—250 VOLTS D. C. OR 500 VOLTS A. C.

Front Connection—Plain Finish—On Oiled Slate Bases, without Fuse Connnections



No. F-3310



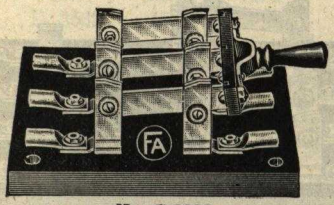
No. F-3320

SINGLE-POLE

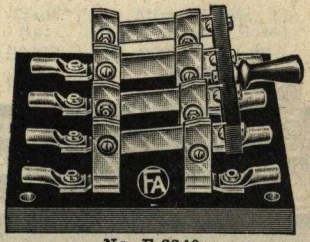
Single-throw Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Double-throw Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each
96883	*F- 3310	1½	$0.42	30	96887	*F- 3310T	3	$0.76
96919	F- 3510	2	.66	30	96920	F- 3510T	3½	1.16
96884	F- 6310	2½	.74	60	96888	F- 6310T	4½	1.30
96885	F-10310	4	1.50	100	96889	F-10310T	6¼	2.94
96886	F-20310	7	2.70	200	96890	F-20310T	10	4.88

DOUBLE-POLE

96891	*F- 3320	2½	.68	30	96895	*F- 3320T	4¾	1.16
96921	F- 3520	3½	1.06	30	96922	F- 3520T	6	1.70
96892	F- 6320	4¼	1.22	60	96896	F- 6320T	7½	2.00
96893	F-10320	6½	2.50	100	96897	F-10320T	10½	4.50
96894	F-20320	11½	4.50	200	96898	F-20320T	16½	7.50



No. F-3330



No. F-3340

TRIPLE-POLE

96899	*F- 3330	3¾	1.02	30	96904	*F- 3330T	7	1.80
96900	F- 3530	6¼	1.60	30	96905	F- 3530T	11½	2.66
96901	F- 6330	6¼	1.84	60	96906	F- 6330T	11½	3.10
96902	F-10330	10	3.76	100	96907	F-10330T	16¾	6.90
96903	F-20330	17	6.76	200	96908	F-20330T	24½	11.60

FOUR-POLE

96909	*F- 3340	5	1.36	30	96914	*F- 3340T	9½	2.56
96910	F- 3540	8½	2.14	30	96915	F- 3540T	15	3.84
96911	F- 6340	8½	2.44	60	96916	F- 6340T	15	4.40
96912	F-10340	13	5.00	100	96917	F-10340T	21	9.80
96913	F-20340	23	9.00	200	96918	F-20340T	33	15.50

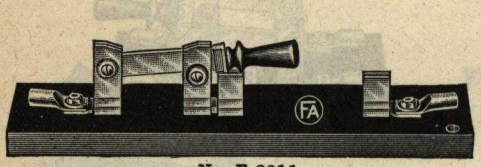
*For 250 volts D. C. only.

F. A. TYPE F SWITCHES

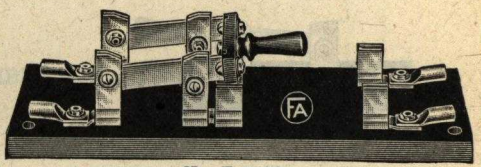
PUNCHED CLIP—250 VOLTS D. C. OR A. C.

Front Connection—Plain Finish—On Oiled Slate Bases, with N. C. Fuse Connections at Handle End

Fuse connections can be readily reversed to hinge end by hinging knife blades to opposite set of clips. Patent No. 1,010,069.



No. F-3311



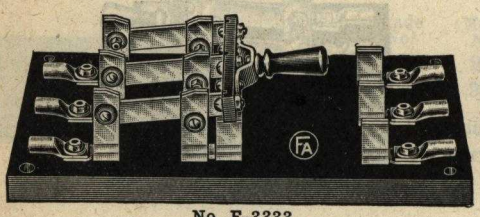
No. F-3322

SINGLE-POLE

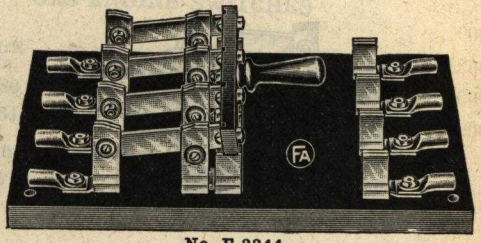
Single-Throw					Double-Throw			
Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each
96841	F- 3311	2¾	$0.70	30	96845	F- 3311T	5¼	$1.54
96842	F- 6311	4½	1.18	60	96846	F- 6311T	7½	2.38
96843	F-10311	6½	2.38	100	96847	F-10311T	12½	5.18
96844	F-20311	11	4.40	200	96848	F-20311T	20	9.80

DOUBLE-POLE

96849	F- 3322	4½	1.06	30	96853	F- 3322T	8¾	2.20
96850	F- 6322	7½	1.80	60	96854	F- 6322T	12½	3.40
96851	F-10322	11	3.66	100	96855	F-10322T	21	7.40
96852	F-20322	18½	6.76	200	96856	F-20322T	33	13.00



No. F-3333



No. F-3344

THREE-POLE

96857	F- 3333	6½	1.60	30	96861	F- 3333T	13	3.52
96858	F- 6333	11	2.70	60	96862	F- 6333T	18½	5.44
96859	F-10333	16½	5.50	100	96863	F-10333T	31	11.84
96860	F-20333	27½	10.14	200	96864	F-20333T	50	20.80

FOUR-POLE

96865	F- 3344	9	2.12	30	96869	F- 3344T	17½	4.84
96866	F- 6344	15	3.60	60	96870	F- 6344T	25	7.48
96867	F-10344	22	7.30	100	96871	F-10344T	42	16.28
96868	F-20344	37	13.50	200	96872	F-20344T	66	26.60

Double-throw switches will be furnished with fuse connections at both ends.

F. A. TYPE F SWITCHES

PUNCHED CLIP—500 VOLTS A. C., WITH 600-VOLT N. C. FUSE CONNECTIONS

Front Connection—Plain Finish—On Oiled Slate Bases

THREE SWITCHES IN ONE

Fuse Connections At Handle End

Fuse Connections At Hinge End

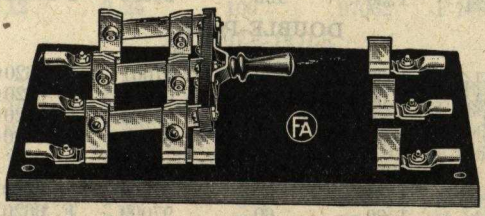
Reasonable Depth of Box

Fuse connections can be readily reversed to hinge end by hinging knife blades to opposite set of clips. Patent No. 1,010,069.

Same switch can be used with fuse connections on handle end or on hinge end, or with blades thrown over, fuses can be placed in reasonable depth of box.

THREE-POLE

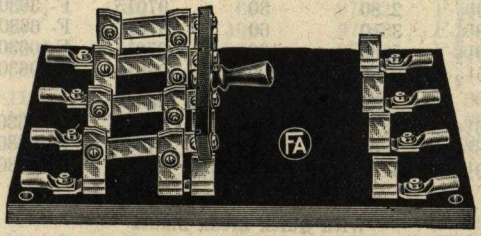
With Fuses At Handle End



Single-Throw					Double-Throw			
Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each
96929	F- 3533	11½	$2.80	30	96933	F- 3533T	20	$6.00
96930	F- 6533	15	3.50	60	96934	F- 6533T	20½	7.40
96931	F-10533	20	7.00	100	96935	F-10533T	33	14.00
96932	F-20533	30	12.20	200	96936	F-20533T	45	21.50

FOUR-POLE

With Fuses At Handle End



96937	F- 3544	20	3.70	30	96941	F- 3544T	30	8.00
96938	F- 6544	20½	4.80	60	96942	F- 6544T	30½	9.80
96939	F-10544	33	9.30	100	96943	F-10544T	50	18.60
96940	F-20544	45	16.20	200	96944	F-20544T	67	28.60

Double-throw switches will be furnished with fuse connections at both ends.

F. A. TYPE F KNIFE SWITCHES

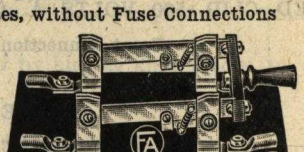
PUNCHED CLIP—600 VOLTS D. C. OR A. C.

WITH AND WITHOUT QUICK BREAK

Front Connection—Plain Finish—On Oiled Slate Bases, without Fuse Connections



No. F-3610Q



No. F-3620Q

SINGLE-POLE

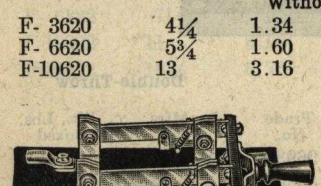
With Quick Break Blades

Trade No.	Single-Throw Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Double-Throw Mfrs. No.	Wt., Lbs. Boxed	Price Each
96983	F- 3610Q	2½	$1.08	30	96987	F- 3610QT	6½	$2.64
96984	F- 6610Q	3½	1.20	60	96988	F- 6610QT	7	2.76
96985	F-10610Q	7¾	2.16	100	96989	F-10610QT	10½	4.08
96986	F-20610Q	10	4.20	200	96990	F-20610QT	16	6.60
				Without Quick Break Blades				
96991	F- 3610	2½	.80	30	96994	F- 3610T	4½	1.66
96992	F- 6610	3½	.96	60	96995	F- 6610T	8½	1.90
96993	F-10610	7¾	1.90	100	96996	F-10610T	11	3.90

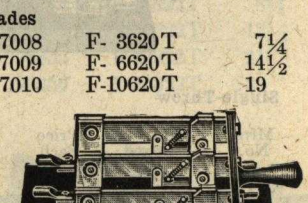
DOUBLE-POLE

With Quick Break Blades

96997	F- 3620Q	4¼	1.80	30	97001	F- 3620QT	11½	4.76
96998	F- 6620Q	5¾	2.00	60	97002	F- 6620QT	12	5.00
96999	F-10620Q	13	3.60	100	97003	F-10620QT	17¾	7.40
97000	F-20620Q	17	7.00	200	97004	F-20620QT	26½	12.00
				Without Quick Break Blades				
97005	F- 3620	4¼	1.34	30	97008	F- 3620T	7¼	2.20
97006	F- 6620	5¾	1.60	60	97009	F- 6620T	14½	2.60
97007	F-10620	13	3.16	100	97010	F-10620T	19	5.20



No. F-3630Q



No. F-3640Q

THREE-POLE

With Quick Break Blades

97011	F- 3630Q	6½	2.80	30	97015	F- 3630QT	17½	7.64
97012	F- 6630Q	8½	3.10	60	97016	F- 6630QT	18	8.00
97013	F-10630Q	19½	5.60	100	97017	F-10630QT	26½	11.84
97014	F-20630Q	25½	10.86	200	97018	F-20630QT	39½	19.20
				Without Quick Break Blades				
97019	F- 3630	6½	2.10	30	97022	F- 3630T	11¼	3.70
97020	F- 6630	8½	2.50	60	97023	F- 6630T	21¼	4.30
97021	F-10630	19½	4.90	100	97024	F-10630T	28¼	8.60

FOUR-POLE

With Quick Break Blades

97025	F- 3640Q	8½	3.80	30	97029	F- 3640QT	23½	10.52
97026	F- 6640Q	11¼	4.20	60	97030	F- 6640QT	24	11.00
97027	F-10640Q	26	7.50	100	97031	F-10640QT	35½	16.28
97028	F-20640Q	34	14.70	200	97032	F-20640QT	53	26.40
				Without Quick Break Blades				
97033	F- 3640	8½	2.80	30	97036	F- 3640T	15½	5.00
97034	F- 6640	11¾	3.30	60	97037	F- 6640T	29	6.00
97035	F-10640	13	6.60	100	97038	F-10640T	38	12.00

F. A. TYPE F KNIFE SWITCHES

PUNCHED CLIP—600 VOLTS D. C. OR A. C.

WITH AND WITHOUT QUICK BREAK

Front Connection—Plain Finish—On Oiled Slate Base, with N. C. Fuse Connections at Handle End

Fuse connections can be readily reversed to hinge end by hinging knife blades to opposite set of clips. Patent No. 1,010,069.



No. F-3611Q



No. F-3622Q

SINGLE-POLE

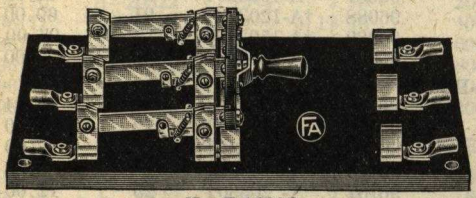
With Quick Break Blades

Single-Throw					Double-Throw			
Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each
97049	F- 3611Q	4½	$1.70	30	97053	F- 3611QT	13	$3.74
97050	F- 6611Q	6	1.96	60	97054	F- 6611QT	17	4.08
97051	F-10611Q	12	3.60	100	97055	F-10611QT	23	6.88
97052	F-20611Q	21	6.50	200	97056	F-20611QT	35	10.46
				Without Quick Break Blades				
97057	F- 3611	4½	1.40	30	97060	F- 3611T	13	3.30
97058	F- 6611	6	1.70	60	97061	F- 6611T	17	3.75
97059	F-10611	12	3.25	100	97062	F-10611T	24	7.50

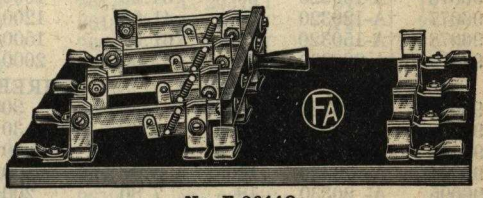
DOUBLE-POLE

With Quick Break Blades

97063	F- 3622Q	7½	2.60	30	97067	F- 3622QT	21½	6.74
97064	F- 6622Q	10¼	3.00	60	97068	F- 6622QT	28	7.40
97065	F-10622Q	20	5.50	100	97069	F-10622QT	38	12.50
97066	F-20622Q	35	10.00	200	97070	F-20622QT	58	19.00
				Without Quick Break Blades				
97071	F- 3622	7½	2.20	30	97074	F- 3622T	22	4.40
97072	F- 6622	10¼	2.60	60	97075	F- 6622T	28	5.00
97073	F-10622	20	5.00	100	97076	F-10622T	40	10.00



No. F-3633Q



No. F-3644Q

THREE-POLE

With Quick Break Blades

97077	F- 3633Q	11	4.16	30	97081	F- 3633QT	32	10.84
97078	F- 6633Q	15½	4.80	60	97082	F- 6633QT	42	11.84
97079	F-10633Q	30	8.80	100	97083	F-10633QT	57	20.00
97080	F-20633Q	52	16.00	200	97084	F-20633QT	87	30.40
				Without Quick Break Blades				
97085	F- 3633	11	3.50	30	97088	F- 3633T	33	7.26
97086	F- 6633	15½	4.16	60	97089	F- 6633T	42	8.25
97087	F-10633	30	8.00	100	97090	F-10633T	60	16.50

FOUR-POLE

With Quick Break Blades

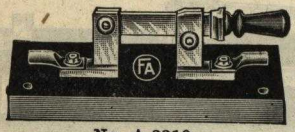
97091	F- 3644Q	15	5.70	30	97095	F- 3644QT	43	14.92
97092	F- 6644Q	20½	6.60	60	97096	F- 6644QT	56	16.28
97093	F-10644Q	40	12.00	100	97097	F-10644QT	76	27.50
97094	F-20644Q	70	22.00	200	97098	F-20644QT	116	41.80
				Without Quick Break Blades				
97099	F- 3644	15	4.84	30	97102	F- 3644T	44	10.00
97100	F- 6644	20½	5.70	60	97103	F- 6644T	56	11.50
97101	F-10644	40	11.00	100	97104	F-10644T	80	23.00

Double-throw switches will be furnished with fuse connections at both ends.

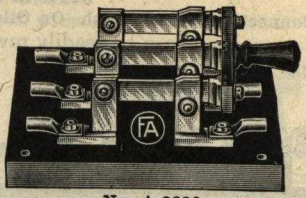
F. A. TYPE A SWITCHES

250 VOLTS D. C. OR 500 VOLTS A. C.

Front Connection—Plain Finish—On Oiled Slate Bases, without Fuse Connections



No. A-3310



No. A-3330

Trade No.	Single-throw Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Double-throw Mfrs. No.	Wt., Lbs. Boxed	Price Each
				SINGLE-POLE				
96047	*A- 3310	2	$0.80	30	96058	*A- 3310T	3	$1.18
96139	A- 3510	2½	1.14	30	96140	A- 3510T	4	1.58
96048	A- 6310	3	1.20	60	96059	A- 6310T	5	1.74
96049	A- 10310	4½	2.25	100	96060	A- 10310T	7	3.34
96050	A- 20310	8	3.48	200	96061	A- 20310T	10	5.34
96051	A- 40310	12½	8.14	400	96062	A- 40310T	20	12.54
96052	A- 60310	18	11.54	600	96063	A- 60310T	30	17.34
96053	†A- 80310	27½	20.00	800	96064	†A- 80310T	47½	28.00
96054	†A-100310	30	22.68	1000	96065	†A-100310T	52	31.68
96055	†A-120310	34	27.34	1200	96066	†A-120310T	54½	40.00
96056	†A-150310	39	41.00	1500	96067	†A-150310T	69	62.68
96057	†A-200310	55	54.68	2000	96068	†A-200310T	89	80.00
				DOUBLE-POLE				
96069	*A- 3320	3	1.20	30	96080	*A- 3320T	5	1.76
96141	A- 3520	4	1.64	30	96142	A- 3520T	7	2.26
96070	A- 6320	5	1.78	60	96081	A- 6320T	8	2.60
96071	A- 10320	7½	3.38	100	96082	A- 10320T	11½	5.00
96072	A- 20320	12	5.20	200	96083	A- 20320T	17	8.00
96073	A- 40320	21	12.20	400	96084	A- 40320T	33½	18.80
96074	A- 60320	30	17.30	600	96085	A- 60320T	50	26.00
96075	†A- 80320	46	30.00	800	96086	†A- 80320T	79	42.00
96076	†A-100320	50	34.00	1000	96087	†A-100320T	87	47.50
96077	†A-120320	57	41.00	1200	96088	†A-120320T	91	60.00
96078	†A-150320	65	61.50	1500	96089	†A-150320T	115	94.00
96079	†A-200320	92	82.00	2000	96090	†A-200320T	148	120.00
				THREE-POLE				
96091	*A- 3330	4½	1.80	30	96103	*A- 3330T	7½	2.64
96092	A- 3530	7½	2.48	30	96104	A- 3530T	12	3.40
96093	A- 6330	7½	2.68	60	96105	A- 6330T	12	3.90
96094	A- 10330	11	5.08	100	96106	A- 10330T	18	7.50
96095	A- 20330	18	7.80	200	96107	A- 20330T	25	12.00
96096	A- 40330	31	18.30	400	96108	A- 40330T	50	28.20
96097	A- 60330	45	25.96	600	96109	A- 60330T	75	39.00
96098	†A- 80330	69	45.00	800	96110	†A- 80330T	118	63.00
96099	†A-100330	75	51.00	1000	96111	†A-100330T	130	71.25
96100	†A-120330	85	61.50	1200	96112	†A-120330T	136	90.00
96101	†A-150330	97	92.25	1500	96113	†A-150330T	173	141.00
96102	†A-200330	138	123.00	2000	96114	†A-200330T	222	180.00
				FOUR-POLE				
96115	*A- 3340	6	2.40	30	96127	*A- 3340T	10	3.52
96116	A- 3540	10	3.30	30	96128	A- 3540T	16	4.60
96117	A- 6340	10	3.56	60	96129	A- 6340T	16	5.20
96118	A- 10340	15	6.76	100	96130	A- 10340T	23	10.00
96119	A- 20340	24	10.40	200	96131	A- 20340T	34	16.00
96120	A- 40340	42	25.94	400	96132	A- 40340T	67	37.60
96121	A- 60340	60	36.78	600	96133	A- 60340T	100	52.00
96122	†A- 80340	92	60.00	800	96134	†A- 80340T	158	84.00
96123	†A-100340	100	68.00	1000	96135	†A-100340T	174	95.00
96124	†A-120340	114	82.00	1200	96136	†A-120340T	182	120.00
96125	†A-150340	130	123.00	1500	96137	†A-150340T	230	188.00
96126	†A-200340	184	164.00	2000	96138	†A-200340T	296	240.00

*For 250 volts D. C. only. †Send size wire used so that we can furnish proper lugs.

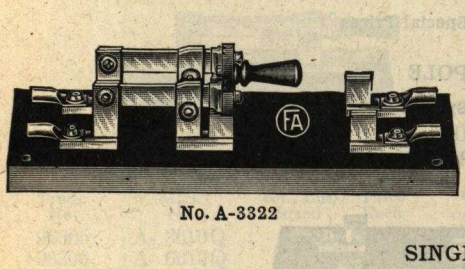
For polished finish, 30 to 200-ampere, add 30 per cent; above 200-ampere, 20 per cent.

For double-break switches, add 50 per cent.

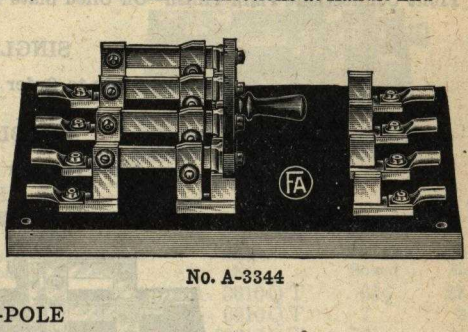
F. A. TYPE A SWITCHES

250 VOLTS D. C. OR A. C.

Front Connection—Plain Finish—On Oiled Slate Bases, with N. C. Fuse Connections at Handle End



No. A-3322



No. A-3344

SINGLE-POLE

Trade No.	Single-Throw Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Double-Throw Mfrs. No.	Wt., Lbs. Boxed	Price Each
96149	A- 3311	3	$1.18	30	96158	A- 3311T	5¼	$2.28
96150	A- 6311	5	1.74	60	96159	A- 6311T	8	3.08
96151	A- 10311	7	3.34	100	96160	A- 10311T	13½	6.20
96152	A- 20311	11½	5.14	200	96161	A- 20311T	22½	9.34
96153	A- 40311	20½	11.64	400	96162	A- 40311T	43	18.68
96154	A- 60311	29	16.34	600	96163	A- 60311T	59	27.68
96155	* A- 80311	42½	26.34	800	96164	A- 80311T	66	42.68
96156	* A-100311	47	30.34	1000	96165	A-100311T	70	50.68
96157	* A-120311	52	35.68	1200	96166	A-120311T	73	58.68

DOUBLE-POLE

96167	A- 3322	5	1.76	30	96176	A- 3322T	8¾	3.40
96168	A- 6322	8¼	2.60	60	96177	A- 6322T	13½	4.60
96169	A- 10322	11¾	5.00	100	96178	A- 10322T	22½	9.30
96170	A- 20322	19½	7.70	200	96179	A- 20322T	34	14.00
96171	A- 40322	34½	17.46	400	96180	A- 40322T	72	28.00
96172	A- 60322	48½	24.50	600	96181	A- 60322T	99	41.50
96173	* A- 80322	71	39.50	800	96182	A- 80322T	110	64.00
96174	* A-100322	78	45.50	1000	96183	A-100322T	117	76.00
96175	* A-120322	87	53.50	1200	96184	A-120322T	122	88.00

THREE-POLE

96185	A- 3333	7½	2.64	30	96194	A- 3333T	13	5.10
96186	A- 6333	12¾	3.90	60	96195	A- 6333T	20	6.90
96187	A- 10333	17½	7.50	100	96196	A- 10333T	33	13.96
96188	A- 20333	29	11.56	200	96197	A- 20333T	51	21.00
96189	A- 40333	51½	26.20	400	96198	A- 40333T	108	42.00
96190	A- 60333	72	36.75	600	96199	A- 60333T	148	62.25
96191	* A- 80333	106	59.25	800	96200	A- 80333T	165	96.00
96192	* A-100333	117	68.25	1000	96201	A-100333T	175	114.00
96193	* A-120333	131	80.25	1200	96202	A-120333T	183	132.00

FOUR-POLE

96203	A- 3344	10	3.52	30	96212	A- 3344T	17½	6.80
96204	A- 6344	16½	5.20	60	96213	A- 6344T	27	9.20
96205	A- 10344	23½	10.00	100	96214	A- 10344T	45	18.60
96206	A- 20344	39	15.40	200	96215	A- 20344T	68	28.00
96207	A- 40344	69	37.10	400	96216	A- 40344T	144	56.00
96208	A- 60344	97	52.06	600	96217	A- 60344T	198	83.00
96209	* A- 80344	142	79.00	800	96218	A- 80344T	220	128.00
96210	* A-100344	156	91.00	1000	96219	A-100344T	234	152.00
96211	* A-120344	174	107.00	1200	96220	A-120344T	244	176.00

Will furnish fuse connections at hinge end, when so ordered, at same price.
For polished finish, 30 to 200-ampere, add 30 per cent; above 200-ampere, 20 per cent.
For double-break switches, add 50 per cent.
Double-throw switches will be furnished with fuse connnections at both ends.
*Send size wire used so that we can furnish the proper lugs.

F. A. TYPE A SWITCHES

500 VOLTS A. C.

WITH 600-VOLT FUSE CONNECTIONS

Front Connection—Plain Finish—On Oiled Slate Bases, with N. C. Fuse Connections at Handle End

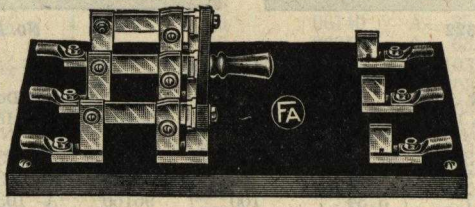
SINGLE-POLE

Made to Order at Special Prices

DOUBLE-POLE

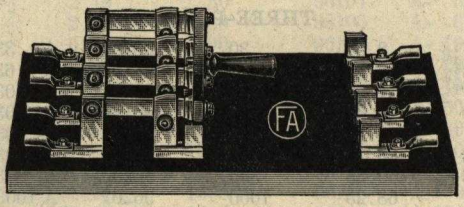
Made to Order at Special Prices

THREE-POLE



Single-Throw					Double-Throw			
Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each
96231	A- 33633	12	$4.00	30	96240	A- 33633T	31	$7.50
96232	A- 63633	15½	4.60	60	96241	A- 63633T	41	9.00
96233	A- 103633	21	8.20	100	96242	A- 103633T	43	16.00
96234	A- 203633	32	13.10	200	96243	A- 203633T	57½	23.50
96235	A- 403633	51½	28.50	400	96244	A- 403633T	115	48.00
96236	A- 603633	72½	40.00	600	96245	A- 603633T	161	72.00
96237	* A- 803633	120	62.00	800	96246	* A- 803633T	174	110.00
96238	* A-1003633	127	70.00	1000	96247	* A-1003633T	186	120.00
96239	* A-1203633	131	84.00	1200	96248	* A-1203633T	200	140.00

FOUR-POLE



96249	A- 33644	16	5.34	30	96258	A- 33644T	42	10.00
96250	A- 63644	21	6.14	60	96259	A- 63644T	55	12.00
96251	A- 103644	28	10.94	100	96260	A- 103644T	58	21.32
96252	A- 203644	42	17.48	200	96261	A- 203644T	77	31.32
96253	A- 403644	70	38.00	400	96262	A- 403644T	154	60.00
96254	A- 603644	97	53.34	600	96263	A- 603644T	214	96.00
96255	* A- 803644	160	82.68	800	96264	* A- 803644T	232	146.66
96256	* A-1003644	170	93.34	1000	96265	* A-1003644T	248	160.00
96257	* A-1203644	175	112.00	1200	96266	* A-1203644T	266	186.66

Will furnish fuse connections at hinge end, when so ordered, at same price.
For polished finish, 30 to 200-ampere, add 30 per cent; above 200-ampere, 20 per cent.
For double-break switches, add 50 per cent.
Double-throw switches will be furnished with fuse connections at both ends.
*Send size wire used so that we can furnish proper lugs.

F. A. TYPE A SWITCHES

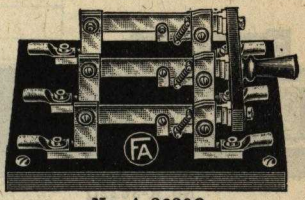
600 VOLTS D. C. OR A. C.

WITH AND WITHOUT QUICK BREAK

Front Connection—Plain Finish—On Oiled Slate Bases, without Fuse Connections



No. A-3610Q



No. A-3630Q

Trade No.	Single-Throw Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Double-Throw Mfrs. No.	Wt., Lbs. Boxed	Price Each
				SINGLE-POLE				
				With Quick Break Blades				
96305	A- 3610Q	3¾	$1.50	30	96311	A- 3610QT	6½	$2.64
96306	A- 6610Q	4	1.60	60	96312	A- 6610QT	7	2.76
96307	A-10610Q	6	2.76	100	96313	A-10610QT	10½	4.08
96308	A-20610Q	10	4.40	200	96314	A-20610QT	16	6.60
96309	A-40610Q	14½	9.36	400	96315	A-40610QT	27	13.76
96310	A-60610Q	20½	12.38	600	96316	A-60610QT	31	17.60
				Without Quick Break Blades				
96317	A- 3610	3½	1.18	30	96320	A- 3610T	6¼	2.36
96318	A- 6610	4	1.28	60	96321	A- 6610T	7	2.48
96319	A-10610	6	2.20	100	96322	A-10610T	10¼	3.58
				DOUBLE-POLE				
				With Quick Break Blades				
96323	A- 3620Q	6½	2.72	30	96329	A- 3620QT	11½	4.76
96324	A- 6620Q	7	2.90	60	96330	A- 6620QT	12	5.00
96325	A-10620Q	10¼	5.00	100	96331	A-10620QT	17¾	7.40
96326	A-20620Q	17	8.00	200	96332	A-20620QT	26½	12.00
96327	A-40620Q	24½	17.00	400	96333	A-40620QT	45½	25.00
96328	A-60620Q	34	22.50	600	96334	A-60620QT	52	32.00
				Without Quick Break Blades				
96335	A- 3620	6½	2.12	30	96338	A- 3620T	11	4.26
96336	A- 6620	6¾	2.30	60	96339	A- 6620T	11½	4.50
96337	A-10620	10	4.00	100	96340	A-10620T	17¼	6.50
				THREE-POLE				
				With Quick Break Blades				
96341	A- 3630Q	10	4.38	30	96347	A- 3630QT	17½	7.64
96342	A- 6630Q	10½	4.64	60	96348	A- 6630QT	18	8.00
96343	A-10630Q	15¼	8.00	100	96349	A-10630QT	26½	11.84
96344	A-20630Q	25½	12.80	200	96350	A-20630QT	39½	19.20
96345	A-40630Q	37	27.20	400	96351	A-40630QT	68	40.00
96346	A-60630Q	51	36.00	600	96352	A-60630QT	78	51.20
				Without Quick Break Blades				
96353	A- 3630	9½	3.40	30	96356	A- 3630T	16½	6.84
96354	A- 6630	10	3.68	60	96357	A- 6630T	17	7.20
96355	A-10630	15	6.40	100	96358	A-10630T	26	10.40
				FOUR-POLE				
				With Quick Break Blades				
96359	A- 3640Q	13½	6.02	30	96365	A- 3640QT	23½	10.52
96360	A- 6640Q	14	6.38	60	96366	A- 6640QT	24	11.00
96361	A-10640Q	20½	11.00	100	96367	A-10640QT	35½	16.28
96362	A-20640Q	34	17.60	200	96368	A-20640QT	53	26.40
96363	A-40640Q	49	37.40	400	96369	A-40640QT	91	55.00
96364	A-60640Q	68	49.50	600	96370	A-60640QT	104	70.40
				Without Quick Break Blades				
96371	A- 3640	13	4.70	30	96374	A- 3640T	22½	9.42
96372	A- 6640	13½	5.06	60	96375	A- 6640T	23	9.90
96373	A-10640	20	8.80	100	96376	A-10640T	34½	14.30

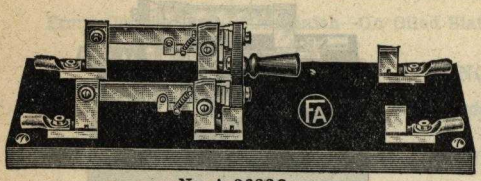
For polished finish, 30 to 200-ampere, add 30 per cent; above 200-ampere, 20 per cent.
For double-break switches, add 50 per cent.

F. A. TYPE A SWITCHES

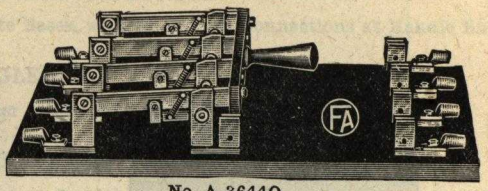
600 VOLTS D. C. OR A. C.

WITH AND WITHOUT QUICK BREAK

Front Connection—Plain Finish—On Oiled Slate Bases, with N. C. Fuse Connections at Handle End



No. A-3622Q



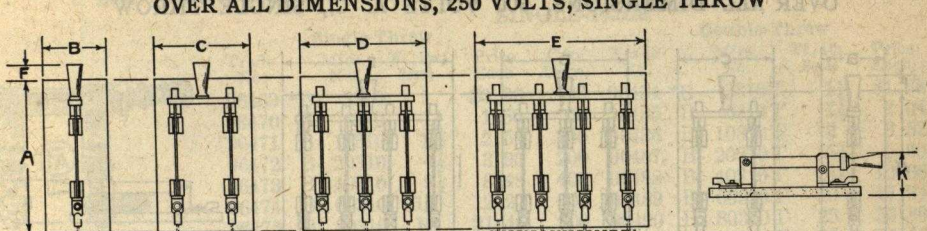
No. A-3644Q

Trade No.	Single-Throw Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Double-Throw Mfrs. No.	Wt., Lbs. Boxed	Price Each
				SINGLE-POLE				
				With Quick Break Blades				
96387	A- 3611Q	5¼	$2.18	30	96393	A- 3611QT	13	$3.74
96388	A- 6611Q	6½	2.34	60	96394	A- 6611QT	17	4.08
96389	A-10611Q	11½	3.90	100	96395	A-10611QT	23	6.88
96390	A-20611Q	19	6.16	200	96396	A-20611QT	35	10.46
96391	A-40611Q	30	12.94	400	96397	A-40611QT	49	19.80
96392	A-60611Q	39	17.34	600	96398	A-60611QT	59	29.70
				Without Quick Break Blades				
96399	A- 3611	5	1.84	30	96402	A- 3611T	12½	3.12
96400	A- 6611	6	2.04	60	96403	A- 6611T	16½	3.58
96401	A-10611	11	3.48	100	96404	A-10611T	22½	6.34
				DOUBLE-POLE				
				With Quick Break Blades				
96405	A- 3622Q	8¾	3.92	30	96411	A- 3622QT	21½	6.74
96406	A- 6622Q	11	4.26	60	96412	A- 6622QT	28	7.40
96407	A-10622Q	19	7.10	100	96413	A-10622QT	38	12.50
96408	A-20622Q	32	11.20	200	96414	A-20622QT	58	19.00
96409	A-40622Q	50	23.50	400	96415	A-40622QT	82	36.00
96410	A-60622Q	65	31.50	600	96416	A-60622QT	99	54.00
				Without Quick Break Blades				
96417	A- 3622	8½	3.32	30	96420	A- 3622T	21	5.42
96418	A- 6622	10½	3.70	60	96421	A- 6622T	27½	6.00
96419	A-10622	18½	6.30	100	96422	A-10622T	37½	11.50
				THREE-POLE				
				With Quick Break Blades				
96423	A- 3633Q	13	6.30	30	96429	A- 3633QT	32	10.84
96424	A- 6633Q	16½	6.82	60	96430	A- 6633QT	42	11.84
96425	A-10633Q	28	11.36	100	96431	A-10633QT	57	20.00
96426	A-20633Q	48	17.92	200	96432	A-20633QT	87	30.40
96427	A-40633Q	75	37.60	400	96433	A-40633QT	123	57.60
96428	A-60633Q	97	50.40	600	96434	A-60633QT	149	86.40
				Without Quick Break Blades				
96435	A- 3633	12½	5.34	30	96438	A- 3633T	31	9.40
96436	A- 6633	15½	5.92	60	96439	A- 6633T	41	10.40
96437	A-10633	27½	10.08	100	96440	A-10633T	56	18.40
				FOUR-POLE				
				With Quick Break Blades				
96441	A- 3644Q	17½	8.66	30	96447	A- 3644QT	43	14.92
96442	A- 6644Q	22	9.38	60	96448	A- 6644QT	56	16.28
96443	A-10644Q	38	15.62	100	96449	A-10644QT	76	27.50
96444	A-20644Q	64	24.64	200	96450	A-20644QT	116	41.80
96445	A-40644Q	100	51.70	400	96451	A-40644QT	164	79.20
96446	A-60644Q	130	69.30	600	96452	A-60644QT	198	118.80
				Without Quick Break Blades				
96453	A- 3644	17	7.34	30	96456	A- 3644T	42	12.50
96454	A- 6644	21	8.14	60	96457	A- 6644T	55	13.50
96455	A-10644	37	13.86	100	96458	A-10644T	75	25.30

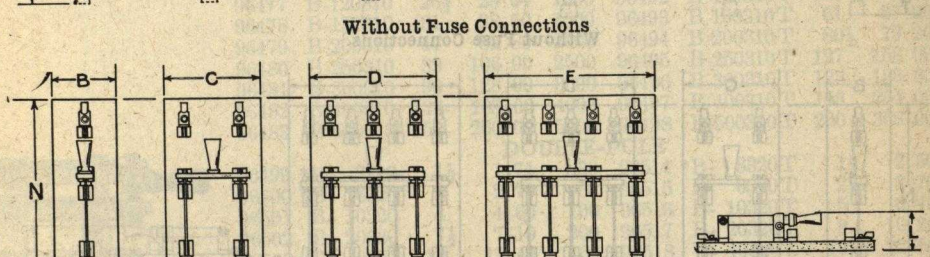
Will furnish fuse connections at hinge end, when so ordered, at same price.
For polished finish, 30 to 200-ampere, add 30 per cent; above 200-ampere, 20 per cent.
For double-break switches, add 50 per cent.
Double-throw switches will be furnished with fuse connections at both ends.

F. A. TYPES A AND F KNIFE SWITCHES

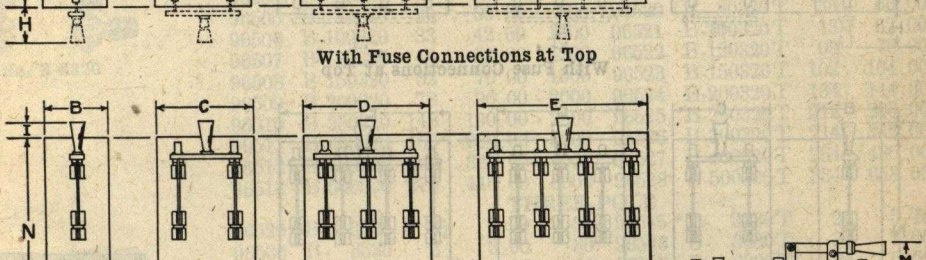
OVER ALL DIMENSIONS, 250 VOLTS, SINGLE THROW



Without Fuse Connections



With Fuse Connections at Top



With Fuse Connections at Bottom

30 to 600 Amperes, 250 Volts, Unfused

Cap. Amps.	Types A and F							Type A	Type F
	A	B	C	D	E	F	G	K	K
30	4½	2	3½	6	8½	1¼	3 5/16	2¼	2 1/16
60	7	3	5	8	11	1⅛	3 7/8	2 5/16	2 9/16
100	8½	3½	5½	9	12	1 3/8	4 5/16	3 9/16	3 1/16
200	11	4	6½	10½	14½	1½	4 15/16	4 9/16	3 11/16
400	14	5	7½	12½	17	1 7/8	6 3/16	6¼	...
600	17	5	9	14	19	1 15/16	6¾	6¾	...

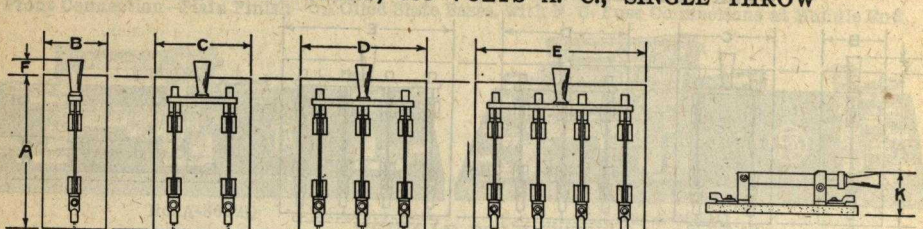
30 to 600 Amperes, 250 Volts, Fused

Cap. Amps.	Types A and F							Type A			Type F			
	B	C	D	E	H	I	J	K	L	M	K	L	M	N
30	2	3½	6	8½	3 3/8	1 5/16	1¼	2¼	2¼	2¼	2 1/16	2¼	2¼	6½
60	3	5	8	11	3 3/4	1	1½	2 5/16	2 5/16	2 5/16	2 9/16	3 1/8	3 1/8	10½
100	3½	5½	9	12	4 5/16	1 3/8	*	3 9/16	3 9/16	3 9/16	3 1/16	3 5/16	3 5/16	14½
200	4	6½	10½	14½	5 3/16	1 5/8	*	4 9/16	4 9/16	4 9/16	3 11/16	4 5/8	4 5/8	18
400	5	8½	13	18	6 3/16	1 7/8	*	6¼	6¼	6¼	...	...	...	23
600	6	10	15	20	6 7/8	2 1/16	*	6¾	7 3/8	6¾	...	...	...	28

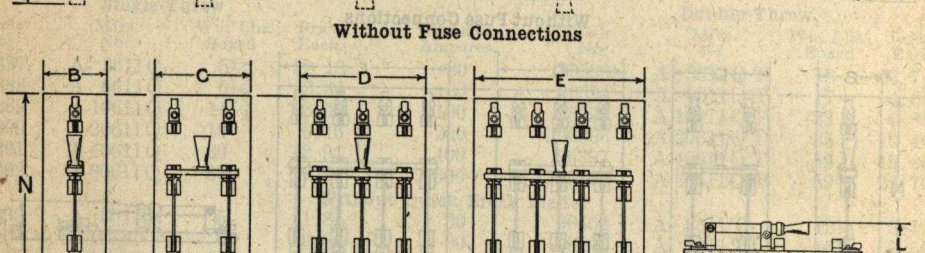
*Handle does not extend beyond slate base.

F. A. TYPES A AND F KNIFE SWITCHES

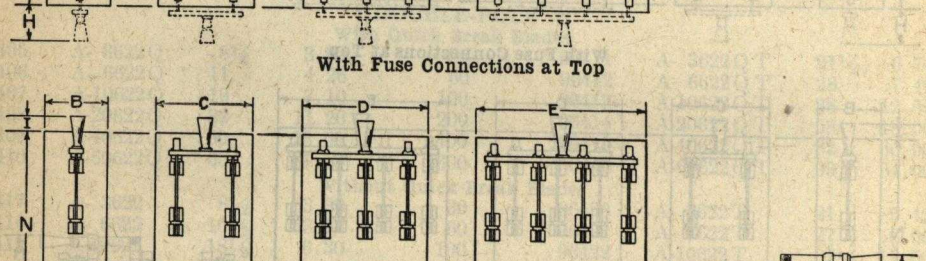
OVER ALL DIMENSIONS, 500 VOLTS A. C., SINGLE THROW



Without Fuse Connections



With Fuse Connections at Top



With Fuse Connections at Bottom

30 to 600 Amperes, 500 Volts A. C., Unfused

Cap. Amps.	Types A and F							Type A	Type F
	A	B	C	D	E	F	G	K	K
30	6½	3	5	8	11	1⅜	4⅛	2 15/16	2 9/16
60	7	3	5	8	11	1⅛	3⅞	2 15/16	2 9/16
100	8½	3½	5½	9	12	1⅜	4 5/16	3 9/16	3 1/16
200	11	4	6½	10½	14½	1½	4 15/16	4 9/16	3 11/16
400	14	5	7½	12½	17	1⅞	6 3/16	6¼	...
600	17	5	9	14	19	1 15/16	6¾	6¾	...

30 to 400 Amperes, 500 Volts A. C., Fused

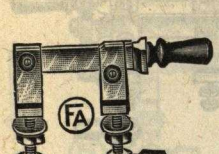
Cap. Amps.	Types A and F							Type A			Type F			
	B	C	D	E	H	I	J	K	L	M	K	L	M	N
30	3	5	8	11	4 1/16	1 5/16	*	2 15/16	3⅛	3⅛	2 9/16	3⅛	3⅛	12
60	3	5	8	11	3 3/4	1	*	2 15/16	3⅛	3⅛	2 9/16	3⅛	3⅛	13
100	3½	5½	9½	12½	4 5/16	1 3/8	*	3 9/16	3 9/16	3 9/16	3 1/16	3 5/16	3 5/16	16½
200	4	6½	10½	14½	4 15/16	1 3/8	*	5 9/16	5 9/16	5 9/16	3 11/16	4 5/8	4 5/8	21
400	5	8½	13	18	6 3/16	1 7/8	*	6¼	6¼	6¼	...	...	...	26

*Handle does not extend beyond slate base.

F. A. TYPE B KNIFE SWITCHES

250 VOLTS D. C. OR 500 VOLTS A. C.

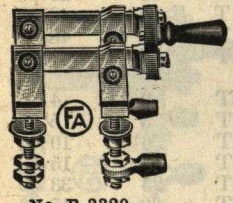
Back Connection—Polished Finish—Unmounted, without Fuse Connections



No. B-3310

SINGLE-POLE

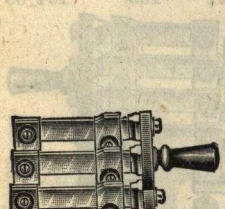
Single-Throw Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each	Cap. Amps.	Double-Throw Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each
96469	*B- 3310	1	$0.96	30	96484	*B- 3310T	1½	$1.38
96470	B- 6310	1½	1.50	60	96485	B- 6310T	1½	2.04
96471	B- 10310	2½	2.54	100	96486	B- 10310T	3	3.52
96472	B- 20310	4½	3.90	200	96487	B- 20310T	5½	5.60
96473	B- 40310	9½	8.48	400	96488	B- 40310T	11½	12.38
96474	B- 60310	15	12.20	600	96489	B- 60310T	19	17.34
96475	B- 80310	18	21.46	800	96490	B- 80310T	23	30.80
96476	B-100310	20	23.38	1000	96491	B-100310T	26	34.10
96477	B-120310	26½	29.04	1200	96492	B-120310T	41	42.90
96478	B-150310	31	38.50	1500	96493	B-150310T	61	57.20
96479	B-200310	47	52.80	2000	96494	B-200310T	80½	79.20
96480	B-250310	89	106.00	2500	96495	B-250310T	127	158.00
96481	B-300310	90	128.00	3000	96496	B-300310T	128	188.00
96482	B-400310	120	188.00	4000	96497	B-400310T	158	264.00
96483	B-500310	152	250.00	5000	96498	B-500310T	200	368.00



No. B-3320

DOUBLE-POLE

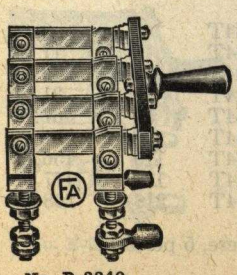
96499	*B- 3320	1½	1.74	30	96514	*B- 3320T	1¾	2.50
96500	B- 6320	2	2.70	60	96515	B- 6320T	2½	3.70
96501	B- 10320	4	4.60	100	96516	B- 10320T	5	6.40
96502	B- 20320	7½	7.10	200	96517	B- 20320T	9	10.20
96503	B- 40320	16	15.40	400	96518	B- 40320T	19	22.50
96504	B- 60320	25	22.20	600	96519	B- 60320T	32	31.50
96505	B- 80320	30	39.00	800	96520	B- 80320T	38	56.00
96506	B-100320	33	42.50	1000	96521	B-100320T	43	62.00
96507	B-120320	44	52.80	1200	96522	B-120320T	68	78.00
96508	B-150320	52	70.00	1500	96523	B-150320T	102	104.00
96509	B-200320	78	96.00	2000	96524	B-200320T	134	144.00
96510	B-250320	148	190.00	2500	96525	B-250320T	212	280.00
96511	B-300320	150	230.00	3000	96526	B-300320T	214	342.00
96512	B-400320	200	325.00	4000	96527	B-400320T	264	480.00
96513	B-500320	270	440.00	5000	96528	B-500320T	334	658.00



No. B-3330

THREE-POLE

96529	*B- 3330	2¼	2.60	30	96545	*B- 3330T	2½	3.75
96530	B- 3530	3	3.90	30	96546	B- 3530T	3¾	5.20
96531	B- 6330	3	4.06	60	96547	B- 6330T	3¾	5.56
96532	B- 10330	6	6.90	100	96548	B- 10330T	7½	9.60
96533	B- 20330	11	10.66	200	96549	B- 20330T	13½	15.30
96534	B- 40330	24	23.10	400	96550	B- 40330T	28½	33.75
96535	B- 60330	37	33.30	600	96551	B- 60330T	48	47.25
96536	B- 80330	45	58.50	800	96552	B- 80330T	57	84.00
96537	B-100330	50	63.75	1000	96553	B-100330T	65	93.00
96538	B-120330	66	79.20	1200	96554	B-120330T	102	117.00
96539	B-150330	79	105.00	1500	96555	B-150330T	153	156.00
96540	B-200330	116	144.00	2000	96556	B-200330T	200	216.00
96541	B-250330	222	284.00	2500	96557	B-250330T	318	424.00
96542	B-300330	225	350.00	3000	96558	B-300330T	320	521.00
96543	B-400330	300	475.00	4000	96559	B-400330T	396	706.00
96544	B-500330	400	660.00	5000	96560	B-500330T	500	980.00



No. B-3340

FOUR-POLE

96561	*B- 3340	3	3.48	30	96573	*B- 3340T	4½	5.00
96562	B- 3540	4	5.20	30	96574	B- 3540T	5	7.00
96563	B- 6340	4	5.40	60	96575	B- 6340T	5	7.40
96564	B- 10340	8	9.20	100	96576	B- 10340T	10	12.80
96565	B- 20340	15	14.20	200	96577	B- 20340T	18	20.40
96566	B- 40340	32	32.72	400	96578	B- 40340T	38	45.00
96567	B- 60340	50	47.18	600	96579	B- 60340T	64	63.00
96568	B- 80340	60	78.00	800	96580	B- 80340T	76	112.00
96569	B-100340	66	85.00	1000	96581	B-100340T	86	124.00
96570	B-120340	88	105.60	1200	96582	B-120340T	136	156.00
96571	B-150340	104	140.00	1500	96583	B-150340T	204	208.00
96572	B-200340	156	192.00	2000	96584	B-200340T	268	288.00

*For 250 volts only.

For switches mounted on slate templates, add 25 per cent.

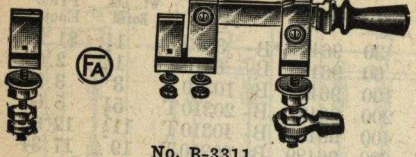
For plain finish, 30 to 400-ampere, deduct 10 per cent; above 400-ampere, 5 per cent. For double-break switches, add 50 per cent.

Unless otherwise specified all switches will be furnished for 1½-in. panel mounting.

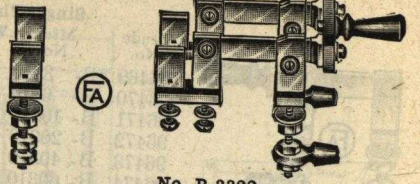
F. A. TYPE B KNIFE SWITCHES

250 VOLTS D. C. OR A. C.

Back Connection—Polished Finish—Unmounted, with N. C. Fuse Connections at Hinge End



No. B-3311



No. B-3322

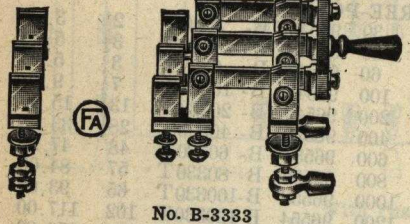
SINGLE-POLE

Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.
	Single-Throw				
96595	B- 3311	1	$1.24	30	96604
96596	B- 6311	1½	1.88	60	96605
96597	B- 10311	3	3.52	100	96606
96598	B- 20311	5½	5.32	200	96607
96599	B- 40311	11½	11.28	400	96608
96600	B- 60311	18	16.36	600	96609
96601	B- 80311	27½	27.06	800	96610
96602	B-100311	30½	30.58	1000	96611
96603	B-120311	44½	36.86	1200	96612

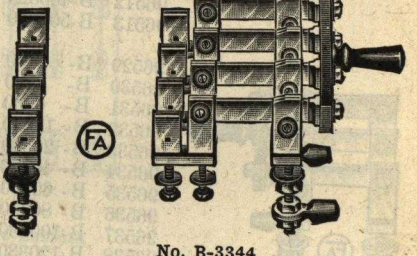
DOUBLE-POLE

	Double-Throw				
96613	B- 3322	1¾	2.24	30	96622
96614	B- 6322	2½	3.42	60	96623
96615	B- 10322	5¼	6.40	100	96624
96616	B- 20322	9	9.66	200	96625
96617	B- 40322	19	20.50	400	96626
96618	B- 60322	30	29.74	600	96627
96619	B- 80322	46	49.20	800	96628
96620	B-100322	51	55.60	1000	96629
96621	B-120322	74	67.00	1200	96630

Mfrs. No.	Wt., Lbs. Boxed	Price Each
Double-Throw		
B- 3311T	1¼	$2.64
B- 6311T	1¾	3.08
B- 10311T	3¾	5.50
B- 20311T	8	8.58
B- 40311T	15	18.44
B- 60311T	23	25.08
B- 80311T	33	42.90
B-100311T	36	48.68
B-120311T	65	57.20
B- 3322T	2	4.80
B- 6322T	3	5.60
B- 10322T	6¼	10.00
B- 20322T	13	15.60
B- 40322T	25	33.50
B- 60322T	39	45.60
B- 80322T	55	78.00
B-100322T	61	88.50
B-120322T	109	104.00



No. B-3333



No. B-3344

THREE-POLE

96631	B- 3333	2¾	3.36	30	96640
96632	B- 6333	3½	5.14	60	96641
96633	B- 10333	8	9.60	100	96642
96634	B- 20333	13½	14.50	200	96643
96635	B- 40333	28½	30.75	400	96644
96636	B- 60333	45	44.62	600	96645
96637	B- 80333	69	73.80	800	96646
96638	B-100333	76	83.40	1000	96647
96639	B-120333	111	100.50	1200	96648

B- 3333T	3	7.20
B- 6333T	4½	8.40
B- 10333T	9½	15.00
B- 20333T	19½	23.40
B- 40333T	37	50.25
B- 60333T	59	68.40
B- 80333T	82	117.00
B-100333T	91	132.75
B-120333T	163	156.00

FOUR-POLE

96649	B- 3344	2½	4.48	30	96658
96650	B- 6344	5	6.84	60	96659
96651	B- 10344	10½	12.80	100	96660
96652	B- 20344	18	19.32	200	96661
96653	B- 40344	38	43.56	400	96662
96654	B- 60344	60	63.20	600	96663
96655	B- 80344	92	98.40	800	96664
96656	B-100344	102	111.20	1000	96665
96657	B-120344	148	134.00	1200	96666

B- 3344T	4	9.60
B- 6344T	6	11.20
B- 10344T	12½	20.00
B- 20344T	26	31.20
B- 40344T	50	67.00
B- 60344T	78	91.20
B- 80344T	110	156.00
B-100344T	122	177.00
B-120344T	218	208.00

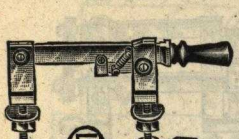
For switches mounted on slate template, add 25 per cent.
For plain finish, 30 to 400-ampere, deduct 10 per cent; above 400-ampere, 5 per cent.
For double-break switches, add 50 per cent.
Unless otherwise specified all switches will be furnished for 1½-in. panel mounting.

F. A. TYPE B KNIFE SWITCHES

600 VOLTS D. C. OR A. C.

WITH AND WITHOUT QUICK BREAK

Back Connection—Polished Finish—Unmounted, without Fuse Connections



No. B-3610Q

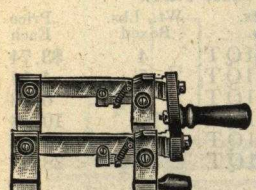
SINGLE-POLE

With Quick Break Blades

Single-Throw Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each	Cap. Amps.	Double-Throw Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each
96677	B- 3610Q	1½	$2.10	30	96683	B- 3610QT	2¾	$3.22
96678	B- 6610Q	1¾	2.20	60	96684	B- 6610QT	3	3.30
96679	B-10610Q	2¾	3.58	100	96685	B-10610QT	4¼	4.96
96680	B-20610Q	5	5.28	200	96686	B-20610QT	6½	7.38
96681	B-40610Q	10½	11.00	400	96687	B-40610QT	13½	15.40
96682	B-60610Q	16½	15.40	600	96688	B-60610QT	19½	20.90

Without Quick Break Blades

96689	B- 3610	1¼	1.84	30	96692	B- 3610T	2½	2.70
96690	B- 6610	1½	1.94	60	96693	B- 6610T	2¾	2.80
96691	B-10610	2½	3.04	100	96694	B-10610T	4	4.08



No. B-3620Q

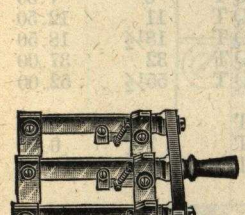
DOUBLE-POLE

With Quick Break Blades

96695	B- 3620Q	2¼	3.82	30	96701	B- 3620QT	4½	5.74
96696	B- 6620Q	2¾	4.00	60	96702	B- 6620QT	5	6.00
96697	B-10620Q	4¾	6.50	100	96703	B-10620QT	7¼	9.00
96698	B-20620Q	8½	9.60	200	96704	B-20620QT	11	13.40
96699	B-40620Q	17½	20.00	400	96705	B-40620QT	23	28.00
96700	B-60620Q	27½	28.00	600	96706	B-60620QT	32½	38.00

Without Quick Break Blades

96707	B- 3620	2	3.32	30	96710	B- 3620T	4	4.86
96708	B- 6620	2¼	3.50	60	96711	B- 6620T	4½	5.10
96709	B-10620	4¼	5.50	100	96712	B-10620T	6¾	7.40



No. B-3630Q

THREE-POLE

With Quick Break Blades

96713	B- 3630Q	3½	6.12	30	96719	B- 3630QT	7	9.24
96714	B- 6630Q	4	6.40	60	96720	B- 6630QT	7½	9.60
96715	B 10630Q	7	10.40	100	96721	B-10630QT	11	14.40
96716	B-20630Q	12½	15.36	200	96722	B-20630QT	16½	21.44
96717	B-40630Q	26	32.00	400	96723	B-40630QT	35	44.80
96718	B-60630Q	41	44.80	600	96724	B-60630QT	49	60.80

Without Quick Break Blades

96725	B- 3630	3	5.34	30	96728	B- 3630T	6¼	7.80
96726	B- 6630	3½	5.60	60	96729	B- 6630T	6¾	8.16
96727	B-10630	6½	8.80	100	96730	B-10630T	10	11.74

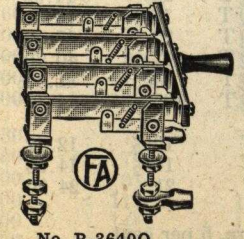
FOUR-POLE

With Quick Break Blades

96731	B- 3640Q	5	8.44	30	96737	B- 3640QT	9½	12.72
96732	B- 6640Q	5½	8.80	60	96738	B- 6640QT	10	13.20
96733	B-10640Q	9½	14.30	100	96739	B-10640QT	14½	19.80
96734	B-20640Q	17	21.12	200	96740	B-20640QT	22	29.48
96735	B-40640Q	35	44.00	400	96741	B-40640QT	46	61.60
96736	B-60640Q	55	61.60	600	96742	B-60640QT	65	83.60

Without Quick Break Blades

96743	B- 3640	4	7.34	30	96746	B- 3640T	8½	10.74
96744	B- 6640	4½	7.70	60	96747	B- 6640T	9	11.22
96745	B-10640	8½	12.10	100	96748	B-10640T	13½	16.28



No. B-3640Q

For switches mounted on slate template, add 25 per cent.

For plain finish, 30 to 400-ampere, deduct 10 per cent; above 400-ampere, 5 per cent.

For double-break switches, add 50 per cent.

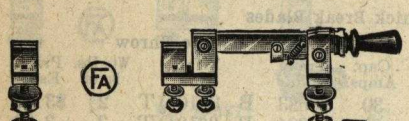
Unless otherwise specified all switches will be furnished for 1½-in. panel mounting.

F. A. TYPE B KNIFE SWITCHES

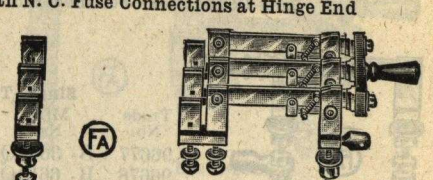
600 VOLTS D. C. OR A. C.

WITH AND WITHOUT QUICK BREAK

Back Connection—Polished Finish—Unmounted, with N. C. Fuse Connections at Hinge End



No. B-3611Q



No. B-3633Q

SINGLE-POLE

With Quick Break Blades

Trade No.	Single-Throw Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Double-Throw Mfrs. No.	Wt., Lbs. Boxed	Price Each
96759	B- 3611Q	2¼	$2.66	30	96765	B- 3611QT	4	$3.74
96760	B- 6611Q	3	2.96	60	96766	B- 6611QT	5	4.14
96761	B-10611Q	4½	4.68	100	96767	B-10611QT	6½	6.88
96762	B-20611Q	7	6.94	200	96768	B-20611QT	11	10.18
96763	B-40611Q	13½	14.58	400	96769	B-40611QT	19	20.36
96764	B-60611Q	23½	20.08	600	96770	B-60611QT	31½	28.60

Without Quick Break Blades

96771	B- 3611	2	2.34	30	96774	B- 3611T	3½	3.18
96772	B- 6611	2½	2.60	60	96775	B- 6611T	4½	3.58
96773	B-10611	4	4.08	100	96776	B-10611T	6	6.06

DOUBLE-POLE

With Quick Break Blades

96777	B- 3622Q	3¾	4.82	30	96783	B- 3622QT	6½	6.88
96778	B- 6622Q	5	5.40	60	96784	B- 6622QT	8	7.50
96779	B-10622Q	7½	8.50	100	96785	B-10622QT	11	12.50
96780	B-20622Q	12	12.60	200	96786	B-20622QT	18½	18.50
96781	B-40622Q	23	26.50	400	96787	B-40622QT	32	37.00
96782	B-60622Q	39	36.50	600	96788	B-60622QT	55½	52.00

Without Quick Break Blades

96789	B- 3622	3½	4.22	30	96792	B- 3622T	6	5.76
96790	B- 6622	4½	4.70	60	96793	B- 6622T	7¼	6.50
96791	B-10622	7	7.40	100	96794	B-10622T	10½	11.00

THREE-POLE

With Quick Break Blades

96795	B- 3633Q	5½	7.74	30	96801	B- 3633QT	9½	10.84
96796	B- 6633Q	7½	8.64	60	96802	B- 6633QT	12	12.00
96797	B-10633Q	11¼	13.60	100	96803	B-10633QT	16½	20.00
96798	B-20633Q	18	20.16	200	96804	B-20633QT	27½	29.60
96799	B-40633Q	35	42.40	400	96805	B-40633QT	48	59.20
96800	B-60633Q	58	58.40	600	96806	B-60633QT	73½	83.20

Without Quick Break Blades

96807	B- 3633	5	6.78	30	96810	B- 3633T	9	9.24
96808	B- 6633	7	7.52	60	96811	B- 6633T	11	10.40
96809	B-10633	10½	11.84	100	96812	B-10633T	15½	17.60

FOUR-POLE

With Quick Break Blades

96813	B- 3644Q	7½	10.64	30	96819	B- 3644QT	13	14.92
96814	B- 6644Q	10	11.88	60	96820	B- 6644QT	16	16.50
96815	B-10644Q	15	18.70	100	96821	B-10644QT	22	27.50
96816	B-20644Q	24	27.72	200	96822	B-20644QT	37	40.70
96817	B-40644Q	46	58.30	400	96823	B-40644QT	64	81.40
96818	B-60644Q	78	80.30	600	96824	B-60644QT	105	114.40

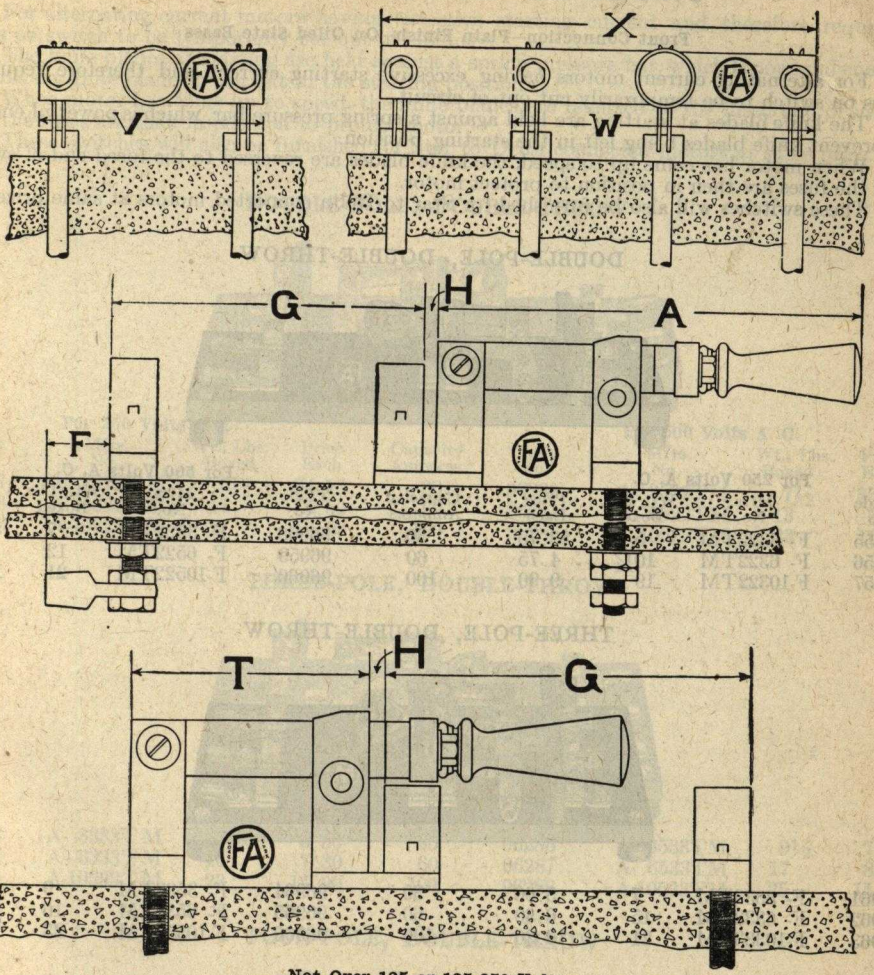
Without Quick Break Blades

96825	B- 3644	7	9.32	30	96828	B- 3644T	12½	12.72
96826	B- 6644	9	10.34	60	96829	B- 6644T	14½	14.30
96827	B-10644	14	16.28	100	96830	B-10644T	21	24.20

For switches mounted on slate template, add 25 per cent.
For plain finish, 30 to 400-ampere, deduct 10 per cent; above 400-ampere, 5 per cent.
For double-break switches, add 50 per cent.
Unless otherwise specified all switches will be furnished for 1½-in. panel mounting.

F. A. TYPE B KNIFE SWITCHES

OVERALL DIMENSIONS FOR TYPE B BACK CONNECTION KNIFE SWITCHES



Not Over 125 or 125-250 Volts

Cap. Amps.	A	F	G	H	T	V	W	X
30	3 15/16	13/32	2 3/16	1/32	1 13/16	2 1/16	3 11/16	....
60	5 11/32	19/32	3 3/16	1/8	2 7/16	2 13/16	5 1/16	....
100	7 1/2	7/8	5 3/4	1/4	3 13/16	3 1/4	5 3/4	....
200	9 5/16	1 1/16	7	3/8	4 13/16	4 1/2	8	....
400	11 7/8	1 9/16	8 1/2	1/2	6 1/16	5 3/4	10 1/4	....
600	13 15/16	2	10 1/2	3/4	7 1/16	6 1/2	11 1/2	....
			Not over 250 Volts					
30	4 3/4	13/32	2 3/16	1/32	2 9/16	2 13/16	5 3/16	7 9/16
60	6 11/32	19/32	3 3/16	1/8	3 7/16	3 5/8	6 11/16	9 3/4
100	7 1/2	7/8	5 3/4	1/4	3 13/16	4	7 1/4	10 1/2
200	9 5/16	1 1/16	7	3/8	4 13/16	4 7/8	8 3/4	12 5/8
400	11 7/8	1 9/16	8 1/2	1/2	6 1/16	5 3/4	10 1/4	14 3/4
600	13 15/16	2	10 1/2	3/4	7 1/16	6 1/2	11 1/2	16 1/2
			Not over 600 Volts					
30	7 13/16	3/8	5 1/4	5/32	4 15/16	5 5/16	10 1/16	14 13/16
60	7 13/16	9/16	5 3/4	3/32	4 15/16	5 5/16	10 1/16	14 13/16
100	9 1/2	7/8	7 3/4	1/4	5 15/16	6 1/4	11 3/4	17 1/4
200	11 9/16	1 1/16	9 1/2	3/8	7 1/16	7 1/8	13 1/4	19 3/8
400	14 3/8	1 9/16	11 1/2	1/2	8 9/16	7 1/2	13 3/4	20
600	16 7/16	2	13 1/2	3/4	9 13/16	8	14 1/2	21

F. A. TYPE F MOTOR STARTING SWITCHES

PUNCHED CLIP—250 AND 500 VOLTS A. C.

Front Connection—Plain Finish—On Oiled Slate Bases

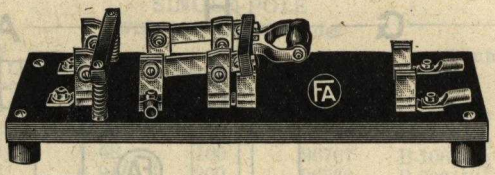
For alternating current motors having excessive starting current and therefore requiring fuses on switch to be temporarily cut out of circuit.

The knife blades at starting are held against a spring pressure bar, which is powerful enough to prevent knife blades being left in the starting position.

When motor has come up to speed, the knife blades are reversed to the fused end of switch and the fuses are then in position to protect motor.

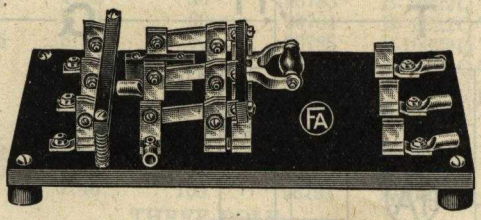
These switches will also be furnished for Star to Delta connected motors at same price.

DOUBLE-POLE, DOUBLE-THROW



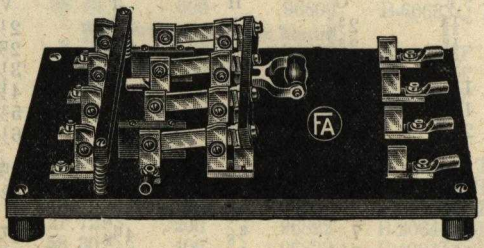
For 250 Volts A. C.					For 500 Volts A. C.			
Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each
96955	F- 3322TM	5	$3.75	30	96958	F- 3522TM	7	$4.50
96956	F- 6322TM	10¼	4.75	60	96959	F- 6522TM	12	5.60
96957	F-10322TM	19	9.90	100	96960	F-10522TM	21	10.90

THREE-POLE, DOUBLE-THROW



96961	F- 3333TM	7	5.00	30	96964	F- 3533TM	9	6.00
96962	F- 6333TM	15	6.30	60	96965	F- 6533TM	16	7.50
96963	F-10333TM	21	13.20	100	96966	F-10533TM	23	14.50

FOUR-POLE, DOUBLE-THROW



96967	F- 3344TM	8½	6.68	30	96970	F- 3544TM	11	8.00
96968	F- 6344TM	18	8.40	60	96971	F- 6544TM	20	10.00
96969	F-10344TM	26	17.60	100	96972	F-10544TM	28	19.30

Hinge clips are front connected.

30 and 60-ampere switches will be furnished with straight handles.

For back connected hinge clips, add 8 cents each, list, for 30-ampere; 14 cents each, list, for 60-ampere; 24 cents each, list, for 100-ampere, for 250-volt switches. For 500-volt A. C. switches add 16 cents each, list, for 30-ampere, and 24 cents each for 60 and 100-ampere switches.

F. A. TYPE A MOTOR STARTING SWITCHES

250 AND 500 VOLTS A. C.

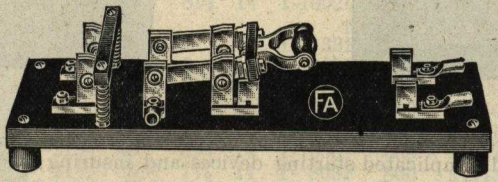
For alternating current motors having excessive starting current and therefore requiring fuses on switch to be temporarily cut out of circuit.

The knife blades at starting are held against a spring pressure bar, which is powerful enough to prevent knife blades being left in the starting position.

When motor has come up to speed, the knife blades are reversed to the fused end of switch and the fuses are then in position to protect motor.

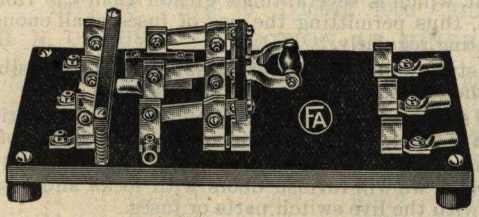
These switches will also be furnished for Star to Delta connected motors at same price.

DOUBLE-POLE, DOUBLE-THROW



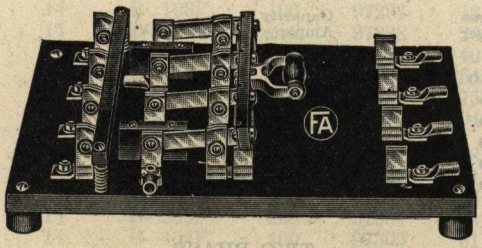
For 250 Volts A. C.					For 500 Volts A. C.			
Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each	Capacity Amperes	Trade No.	Mfrs. No.	Wt., Lbs. Boxed	Price Each
96277	A- 3322TM	5½	$4.12	30	96280	A- 3522TM	7½	$5.25
96278	A- 6322TM	11	5.50	60	96281	A- 6522TM	13	6.50
96279	A-10322TM	21	10.50	100	96282	A-10522TM	23	11.62

THREE-POLE, DOUBLE-THROW



96283	A- 3333TM	7½	5.50	30	96286	A- 3533TM	9½	7.00
96284	A- 6333TM	16	7.30	60	96287	A- 6533TM	17	8.60
96285	A-10333TM	23	14.00	100	96288	A-10533TM	25	15.50

FOUR-POLE, DOUBLE-THROW



96289	A- 3344TM	10	7.30	30	96292	A- 3544TM	12	9.30
96290	A- 6344TM	20	9.75	60	96293	A- 6544TM	22	11.50
96291	A-10344TM	28	18.66	100	96294	A-10544TM	30	20.70

For polished finish, 30 to 200-ampere, add 30 per cent; above 200-ampere, 20 per cent.

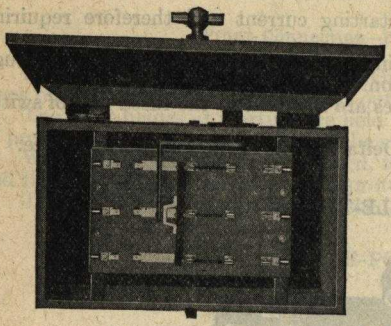
For double-break switches, add 50 per cent.

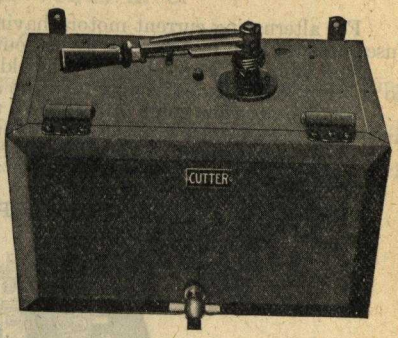
Hinge clips are front connected.

30 and 60-ampere switches will be furnished with straight handles.

For back connected hinge clips, add 8 cents each, list, for 30-ampere; 14 cents each, list, for 60-ampere; 24 cents each, list, for 100-ampere, for 250-volt switches. For 500-volt A. C. switches, add 16 cents each, list, for 30-ampere, and 24 cents each for 60 and 100-ampere switches.

CUTTER INDUCTION MOTOR SWITCHES





These switches are designed to start and operate alternating current induction motors, eliminating costly and complicated starting devices and insuring positive protection to both the motor and the operator.

It consists of a double throw knife switch, fused on one end, and actuated by a special handle, exterior to the steel cabinet containing the switch.

In starting the motor the handle is moved to the right, or unfused side of the switch, against the effort of a heavy coiled spring, which prevents the switch remaining in this position if the handle is released.

When the motor comes up to speed, a trigger is released, disengaging the handle from the switch, which, by the force of the coiled spring, is instantly thrown to the left, or fused side.

The starting current, which is several times greater than the running current, does not pass through the fuses, thus permitting the use of fuses small enough to protect the motor and its load when operating regularly.

By the peculiar construction of the operating handle it is impossible to throw the switch on the running side without first throwing it on the starting.

As the change from starting to running position is made automatically, by means of the coiled spring, the action is quick break, and the arcing and burning of contacts cannot occur.

All live parts are contained in the cabinet, thereby eliminating all possibility of injury to the operator; and if desired, we will furnish doors with locks and keys, so that unauthorized persons cannot tamper with the live switch parts or fuses.

The switches are manufactured in the following standard sizes, and in considering initial costs it must be born in mind that no starting compensators are required with the motors.

THREE-PHASE

Trade No.	Horse Power	Capacity Amperes	Volts	Shipping Wt., Lbs.	Price Each
22951	5	30	220	40	$20.00
22952	7½ to 15	60	220	40	31.00
22953	25	60	440	40	31.00
22954	20 to 25	100	220	50	37.00
22955	30 to 50	100	440	50	37.00
22956	30 to 60	200	220	60	56.00
22957	60 to 100	200	440	60	56.00

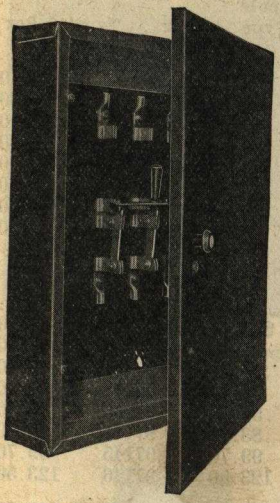
TWO-PHASE

22958	5	30	220	50	24.00
22959	7½ to 15	60	220	50	35.00
22960	30	60	440	50	35.00
22961	20 to 30	100	220	60	43.00
22962	35 to 60	100	440	60	43.00
22963	40 to 60	200	220	70	65.00
22964	80 to 120	200	440	70	65.00

In ordering, specify the voltage, number of phases and horse power.

F. A. SERVICE KNIFE SWITCHES

FOR 250 VOLTS, IN STANDARD PLAIN STEEL BOXES WITH FLANGED DOOR



WITH N. C. FUSE CONNECTION AT HANDLE END

Dimens, Inches Width	Height	Depth	Code Gauge	Mfrs. No.	Cap. Amps.	Type 140 Box Trade No.	Type 140 Box Price Each	Type 10 Box Trade No.	Type 10 Box Price Each
				Double-pole					
6½	13	4	14	T- 32F	30	97221	$6.90	97229	$ 8.30
8½	17½	5	14	T- 62F	60	97222	8.20	97230	10.30
10	22	5½	14	T- 102F	100	97223	11.00	97231	13.30
11	26	6	14	T- 202F	200	97224	14.90	97232	17.60
14	33½	7½	14	T- 402F	400	97225	28.00	97233	32.00
16½	40	8½	14	T- 602F	600	97226	37.30	97234	41.80
18½	38½	7½	14	T- 802F	800	97227	53.10	97235	57.80
20½	46	8½	14	T-1002F	1000	97228	62.20	97236	68.30
				Three-pole					
9	13	4	14	T- 33F	30	97237	7.50	97245	9.40
11½	17½	5	14	T- 63F	60	97238	9.50	97246	11.50
13½	22	5½	14	T- 103F	100	97239	13.30	97247	15.70
15	26	6	14	T- 203F	200	97240	19.00	97248	21.70
18½	33½	7½	14	T- 403F	400	97241	38.90	97249	43.20
21½	40	8½	14	T- 603F	600	97242	52.70	97250	58.10
24½	38½	7½	14	T- 803F	800	97243	75.00	97251	80.80
27½	46	8½	10	T-1003F	1000	97244	103.55	97252	103.55
				Four-pole					
11½	13	4	14	T- 34F	30	97253	8.20	97261	10.10
14½	17½	5	14	T- 64F	60	97254	10.80	97262	12.90
16½	22	5½	14	T- 104F	100	97255	15.60	97263	18.10
19	26	6	14	T- 204F	200	97256	23.90	97264	27.00
23	33½	7½	14	T- 404F	400	97257	51.00	97265	55.80
26½	40	9	14	T- 604F	600	97258	76.50	97266	82.80
30½	38½	8½	10	T- 804F	800	97259	113.10	97267	113.10
34½	46	8½	10	T-1004F	1000	97260	124.00	97268	124.00

WITH N. C. FUSE CONNECTION AT HINGE END

Outside Dimensions Inches Width	Height	Depth	Code Gauge	Mfrs. No.	Cap. Amps.	Type 140 Box Trade No.	Type 140 Box Price Each	Type 10 Box Trade No.	Type 10 Box Price Each
				Double-pole					
6½	14½	4	14	B- 32F	30	97269	$ 7.00	97277	$ 8.90
8½	19½	5	14	B- 62F	60	97270	8.50	97278	10.70
10	24	5½	14	B- 102F	100	97271	11.20	97279	13.60
11	28	6	14	B- 202F	200	97272	15.20	97280	18.00
14	36	7½	14	B- 402F	400	97273	28.40	97281	32.40
16½	42½	8½	14	B- 602F	600	97274	37.80	97282	42.50
18½	38½	8½	14	B- 802F	800	97275	53.90	97283	58.90
20½	46	9	14	B-1002F	1000	97276	62.60	97284	68.90
				Three-pole					
9	14½	4	14	B- 33F	30	97285	7.60	97293	9.50
11½	19½	5	14	B- 63F	60	97286	9.70	97294	11.90
13½	24	6	14	B- 103F	100	97287	13.70	97295	16.00
15	28	7½	14	B- 203F	200	97288	20.00	97296	23.20
18½	36	8½	14	B- 403F	400	97289	40.00	97297	43.80
21½	42½	9½	14	B- 603F	600	97290	54.00	97298	60.50
24½	38½	8½	14	B- 803F	800	97291	75.90	97299	82.10
27½	46	9½	10	B-1003F	1000	97292	104.95	97300	104.95
				Four-Pole					
11½	14½	4	14	B- 34F	30	97301	8.30	97309	10.20
14½	19½	5	14	B- 64F	60	97302	11.00	97310	13.30
16½	24	5½	14	B- 104F	100	97303	15.80	97311	18.40
19	28	6	14	B- 204F	200	97304	24.10	97312	27.50
23	36	7½	14	B- 404F	400	97305	51.50	97313	56.40
26½	42½	9	14	B- 604F	600	97306	77.10	97314	84.20
30½	38½	9	10	B- 804F	800	97307	114.00	97315	114.00
34½	46	9½	10	B-1004F	1000	97308	125.70	97316	125.70

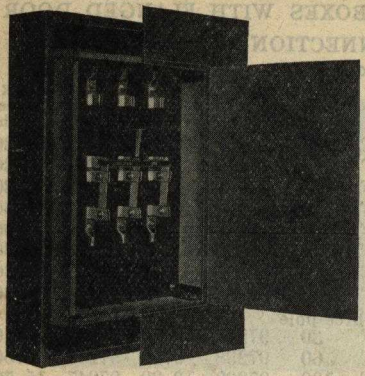
List prices given above include F. D. flanged doors with 2 thickness steel box and switch, mounted on black oiled slate base.

Cleared holes will be punched in top and bottom of standard plain steel boxes, provided drilling template is sent with order.

The above prices up to and including 200-ampere include Type F switch; 400-ampere and over, Type A.

Unless otherwise specified, code thickness steel boxes will be furnished.

F. A. SERVICE KNIFE SWITCHES



FOR 250 VOLTS, IN STANDARD GUTTER CABINETS

With Type 2-P-6 Steel Fronts

WITH N. C FUSE CONNECTIONS AT HANDLE END

Double-pole

Out. Dimens. Inches Width	Ht.	Dpth.	Code Gauge	Mfrs. No.	Cap. Amps.	Type 140 Box Trade No.	Type 140 Box Price Each	Type 10 Box Trade No.	Type 10 Box Price Each
13	19	4½	14	T- 32P	30	97115	$14.80	97123	$16.50
15	24	5½	14	T- 62P	60	97116	19 00	97124	21.30
15	27	5½	14	T- 102P	100	97117	21.90	97125	23.90
16	31	6	14	T- 202P	200	97118	27.10	97126	29.70
17	40	7½	10	T- 402P	400	97119	46.90	97127	46.90
19	47	8½	10	T- 602P	600	97120	66.20	97128	66.20
22	44	7	10	T- 802P	800	97121	75.00	97129	75.00
23	50	8½	10	T-1002P	1000	97122	91.00	97130	91.00

Three-pole

Outside Dimens., In. Width	Height	Depth	Code Gauge	Mfrs. No.	Cap. Amps.	Type 140 Box Trade No.	Type 140 Box Price Each	Type 10 Box Trade No.	Type 10 Box Price Each
15	19	4½	14	T- 33P	30	97131	$16.30	97139	$17.80
18	24	5½	14	T- 63P	60	97132	21.50	97140	23.60
19	27	5½	14	T- 103P	100	97133	25.90	97141	28.30
20	31	6	14	T- 203P	200	97134	34.10	97142	37.10
21	40	7½	10	T- 403P	400	97135	59.50	97143	59.50
24	47	8½	10	T- 603P	600	97136	83.00	97144	83.00
27	44	7	10	T- 803P	800	97137	99.70	97145	99.70
31	50	8½	10	T-1003P	1000	97138	123.50	97146	123.50
				Four-pole					
18	19	4½	14	T- 34P	30	97147	17.80	97155	19.50
21	24	5½	14	T- 64P	60	97148	23.60	97156	26.20
22	29	5½	14	T- 104P	100	97149	28.80	97157	31.40
24	31	6	14	T- 204P	200	97150	38.90	97158	41.80
26	40	7½	10	T- 404P	400	97151	74.50	97159	74.50
30	47	8½	10	T- 604P	600	97152	105.00	97160	105.00
34	44	7½	10	T- 804P	800	97153	130.90	97161	130.90
37	50	8½	10	T-1004P	1000	97154	160.00	97162	160.00

WITH N. C. FUSE CONNECTIONS AT HINGE END

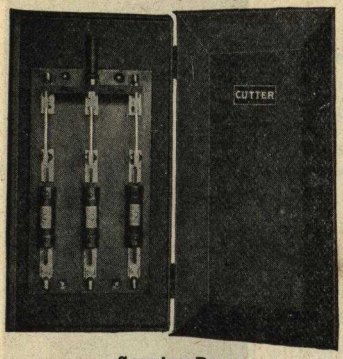
				Double-pole					
13	19	4½	14	B- 32F	30	97163	14.80	97171	16.50
15	24	5½	14	B- 62P	60	97164	19.00	97172	21.30
15	28	5½	14	B- 102P	100	97165	22.10	97173	24.50
16	33	6	14	B- 202P	200	97166	28.70	97174	31.40
17	43	8½	10	B- 402P	400	97167	51.00	97175	51.00
19	50	8½	10	B- 602P	600	97168	67.50	97176	67.50
22	46	7½	10	B- 802P	800	97169	77.50	97177	77.50
23	53	8½	10	B-1002P	1000	97170	94.00	97178	94.00
				Three-pole					
15	19	4½	14	B- 33P	30	97179	16.30	97187	17.80
18	24	5½	14	B- 63P	60	97180	21.50	97188	23.60
19	28	6½	14	B- 103P	100	97181	26.30	97189	29.00
20	33	7½	10	B- 203P	200	97182	36.30	97190	39.80
21	43	8½	10	B- 403P	400	97183	65.30	97191	65.30
24	50	9½	10	B- 603P	600	97184	86.90	97192	86.90
27	46	7½	10	B- 803P	800	97185	101.50	97193	101.50
31	53	8½	10	B-1003P	1000	97186	126.50	97194	126.50
				Four-pole					
18	19	4½	14	B- 34P	30	97195	17.80	97203	19.50
21	24	5½	14	B- 64P	60	97196	23.60	97204	26.20
22	28	5½	14	B- 104P	100	97197	29.00	97205	32.00
24	33	6	10	B- 204P	200	97198	39.80	97206	43.20
26	43	8½	10	B- 404P	400	97199	79.50	97207	79.50
30	50	8½	10	B- 604P	600	97200	107.30	97208	107.30
34	46	8½	10	B- 804P	800	97201	135.00	97209	135.00
37	53	8½	10	B-1004P	1000	97202	163.10	97210	163.10

List prices given above include Type 2-P-6 steel fronts with 2 thickness steel box, slate barriers and switch mounted on black oiled slate base.

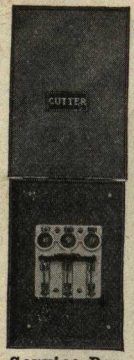
The above prices up to and including 200-ampere, include Type F switch; 400-ampere, and above, Type A. Cleared holes will be punched in standard gutter cabinets provided drilling template is sent with order.

Unless otherwise specified, code thickness steel boxes will be furnished.

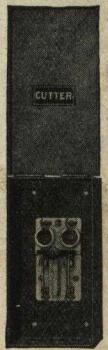
CUTTER SERVICE SWITCHES AND BOXES



Service Box
With Three-Pole Fused
Knife Switch



Service Box
With Three-Pole Porcelain
Plug Fuse Switch
No. 37571



Service Box
With Two-Pole Porcelain
Plug Fuse Switch
No. 37572

These boxes contain Cutter Paragon Knife Switches with New Code fuse terminals at hinge end of switch. Each box has three knock-outs in each end. Boxes are made so that door may be closed with switch open or closed. Prices do not include fuses.

FOR 250-VOLT SWITCHES

Trade No.	Capacity Amperes	Dimensions, Inches: Depth	Length	Width	Price Each
		Two-Pole			
37541	30	3½	12	5	$3.95
37542	60	3½	15	7	5.30
37543	100	5	20	8	8.35
37544	200	6	26	9	13.65
37545	400	7	32	11	24.70
		Three-Pole			
37546	30	3½	12	7	5.00
37547	60	3½	15	9	6.85
37548	100	5	20	10	11.55
37549	200	6	26	11	18.15
37550	400	7	32	15	36.00
		Four-Pole			
37551	30	3½	12	10	6.10
37552	60	3½	15	12	8.50
37553	100	5	20	13	14.90
37554	200	6	26	15	23.15
37555	400	7	32	21	50.00

FOR 600-VOLT SWITCHES

		Two-Pole			
37556	30	4	20	9	7.55
37557	60	6	20	10	8.65
37558	100	6	24	11	12.35
37559	200	7	32	13	20.15
37560	400	8	38	15	38.00
		Three-Pole			
37561	30	4	20	14	10.80
37562	60	6	20	15	12.10
37563	100	6	24	16	18.80
37564	200	6	32	20	30.00
37565	400	7	38	22	60.00
		Four-Pole			
37566	30	4	20	18	14.55
37567	60	6	20	20	16.90
37568	100	6	24	22	25.00
37569	200	7	32	26	40.00
37570	400	8	38	29	80.00

Add 10 per cent to list price for switches fused at handle end.

Boxes longer than 24 inches are No. 14 U. S. gauge.

Add for cylinder lock and key, 50 cents each, net.

The following service boxes are furnished complete, with 30-ampere porcelain plug fused switch mounted therein.

Trade No.	Description	Price Each
37571	Three-wire box, 3½x8x12 inches.....	$3.00
37572	Two-wire box, 3½x6x12 inches.....	2.20

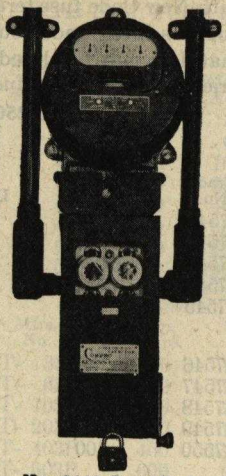
Standard package, 25 switches and boxes same size and kind.

WADSWORTH SAFETY-FIRST SWITCHES

Description and Prices Are Shown on the Following Page



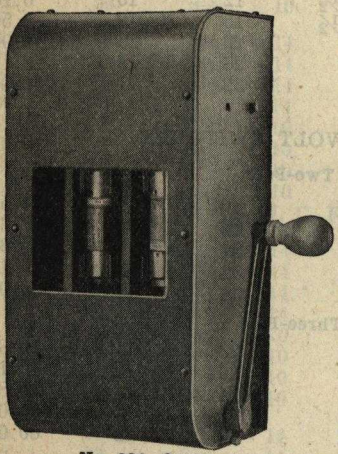
No. 2449, Open



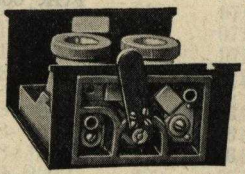
No. 2449 Installed with Meter Adapter



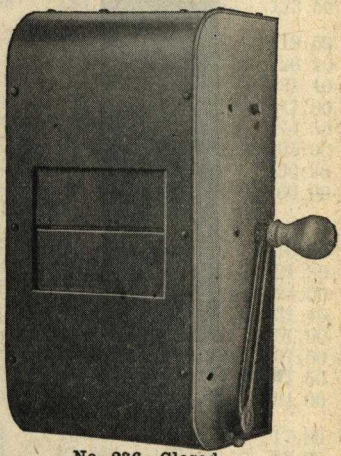
No. 2449, Closed



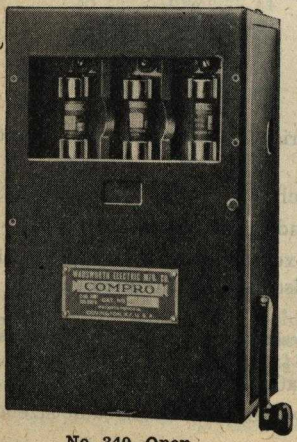
No. 236, Open



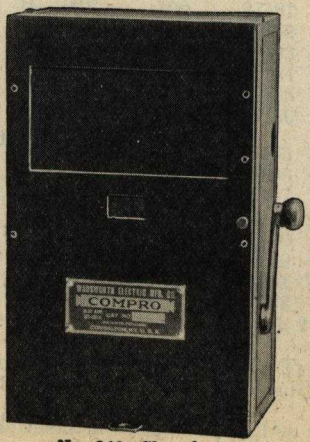
Meter Switch For Use With No. 2449



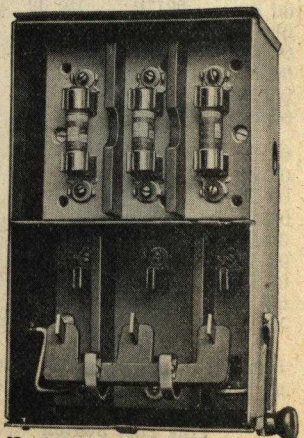
No. 236, Closed



No. 349, Open



No. 349, Closed



No. 349, with Cover Removed

COMPRO SAFETY FIRST SERVICE SWITCHES

For Illustrations See the Preceding Page

Compro is the highest achievement in externally operated switches. A more compact, adaptable or easily installed system is yet to be heard of by men who are well versed in the requirements of the electrical industry.

By removing the lid, both ends of the box and the fuse chamber may be removed, thus giving uninterrupted access to wire terminals and wall fastenings. After end plates, fuse chamber and lid are placed in position the box may be locked or sealed and remain in that position indefinitely so far as maintenance and operation are concerned.

Access may be had to the fuses at all times without exposing any live parts. The danger of shock, burn or short circuit is impossible. Current parts are completely enclosed. When fuse chamber is open, terminals are dead.

The box is assembled without screws or bolts and is 4x4x9 inches.

The same switch used as a meter protector and safety switch casts no reflection on the consumer, giving access to the switch and fuse the same as if there were no enclosure over either switch or fuses and at the same time affording him every possible protection while renewing fuses or operating switch. It would be impossible for him to reach current-carrying parts in this switch by any means without permanently defacing the enclosure. By this, the central station is given full protection against the misuse of their service and relieved of the fuse renewal service.

The switch is provided with a lug at bottom right-hand side for the purpose of locking the switch in position with the current off. For non-payment it is only necessary to lock the switch in the open position, not being necessary to remove the meter or cut the lines at the pole to discontinue the service.

Compro is convertible from commercial purposes to central station use by interchangeable ends.

These switches have been approved by the Underwriters' Laboratory for fire and casualty and are manufactured in all standard sizes.

Meter adapters can be furnished to fit all standard meters.

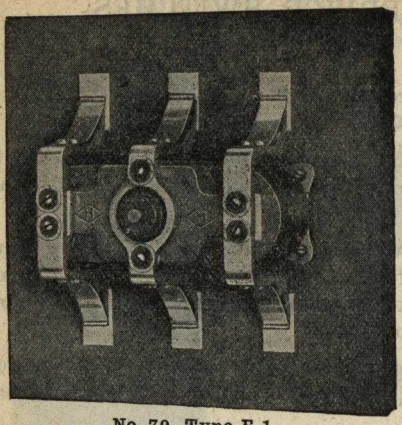
For Edison Plug Fuses

Trade No.	Mfrs. No.	Cap. Amps.	Volts	No. of Poles	Price Each
128250	2449	30	125	2	$5.50
128251	3549	30	125	3	7.00

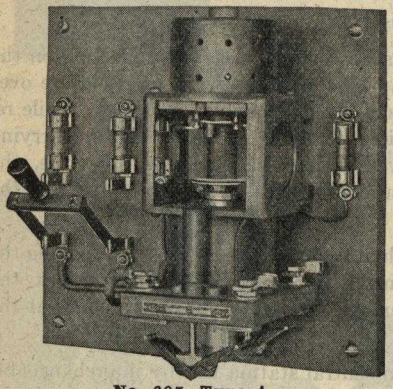
For N. E. C. Enclosed Fuses

128252	249	30	250	2	6.75
128253	349	30	250	3	8.00
128254	459	30	250	4	9.50
128255	226	60	250	2	12.50
128256	236	60	250	3	14.50
128257	246	60	250	4	17.50
128258	221	100	250	2	25.50
128259	231	100	250	3	27.50
128260	241	100	250	4	30.50

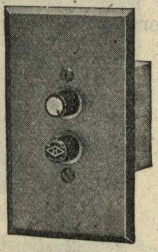
Prices on sizes over 100 amperes quoted upon application.



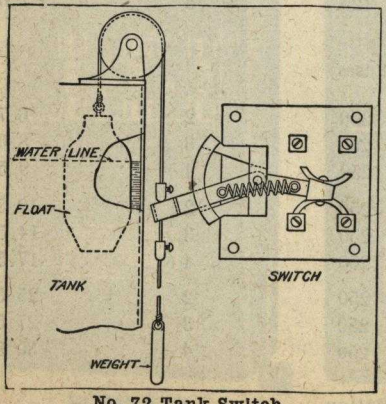
No. 79, Type F-1



No. 605, Type A



No. 9



No. 72 Tank Switch

REMOTE CONTROL SWITCHES

TYPE F-1

The Type F-1 remote control switches are for operation on direct or alternating current for potentials not exceeding 250 volts D. C. or 440 volts A. C.

This type of remote control switch is suited for all classes of service where it is expedient to install magnetically operated switches. The locking mechanism and magnets are entirely inclosed in an iron housing and its positive action, rigid construction, and compactness of design mark a very decided improvement in the manufacture of this class of apparatus.

The switch may be operated either by push button or automatic control circuit closers, operating at line potential or otherwise, its use permitting the instant control of lights or other electrical devices from any desired number of points.

Trade No.	Mfrs. No.	Cap. Amps.	Price Each
	Double-Pole—Single-Throw		
045481	730	5–25	$36.00
045482	740	50	48.00
045483	750	75	60.00
045484	760	100	93.60
045485	770	150	108.00
045486	780	200	122.40
	Triple-Pole—Single-Throw		
045490	790	5–25	43.20
045491	800	50	54.00
045492	810	75	67.20
045493	820	100	108.00
045494	830	150	124.80
045495	840	200	139.20
	Four-Pole—Single-Throw		
69164	610	25	54.00
69165	620	50	68.00
69166	630	75	112.00
69167	640	100	128.00

TYPE A

Continuous Current—No-Voltage Release

For the remote control of small motors, for vacuum cleaners, automatic elevators, etc.

	Double-Pole		
69168	605	30	48.00
69169	615	50	54.00
	Triple-Pole		
69170	625	30	60.00
69171	635	50	68.00

No. 9 MOMENTARY CONTACT SWITCHES

This switch is arranged so that when the button is pressed a snap contact is made and a snap break is obtained when button is released. It fits a standard wall case, uses a standard gang plate, and can be furnished either push button or key.

045623	9	...	3.18

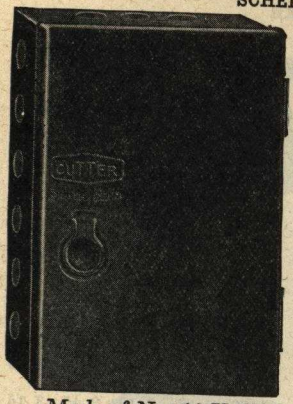
TANK SWITCHES

The tank switch has an earthenware float not affected by acids or alkalies. The switch is double-throw, having a capacity of 10 amperes at either 220 or 110 volts, and may be used as a high or low water alarm, to control motors within its capacity or control the remote control switch.

	With Float		
69172	72	...	25.00
	Without Float		
69173	72	...	10.00

CUTTER STEEL SERVICE AND CUT-OUT BOXES

SCHEDULE O—STANDARD PACKAGE, 5 OF ONE SIZE



Specifications

The following specifications apply to all Cutter Cut-out Boxes:

Cutter Steel Service and Cut-out Boxes are formed up from a single piece of sheet steel and electrically welded. There are no rivets to work loose.

Finished with high grade black enamel paint.

Underwriters' label on every box — approved by the National Board of Fire Underwriters.

Four 5/16-inch holes, one inch from each corner, for fastening cabinet in place.

Stock Cut-out Boxes

The following specifications apply only to stock cut-out boxes listed below and cannot be changed.

Made of No. 16 U. S. G. Steel.
Doors overlap boxes on all four sides and are hinged on right-hand side.
Furnished with 7/8-inch knock-outs for 1/2-inch conduit pipes.
Made for surface mounting.
Large quantities in stock for prompt shipment.

Price List of Stock Cut-out Boxes

Width Inches	Length Inches	List Price, Each 3 Inches Deep	4 Inches Deep
4	6	$0.55	*
4	8	.60	.80
4	10	*	.80
4½	10	*	.80
6	6	.65	.75
6	8	.70	.80
6	10	.80	.90
6	12	*	1.00
8	8	.80	.90
8	10	.85	1.00
8	12	.95	1.10
8	16	*	1.30
10	10	1.00	1.10
10	12	1.10	1.25
10	16	*	1.45
10	18	*	1.55
12	12	*	1.35
12	16	*	1.60
12	18	*	1.70

*Not carried in stock. See price list on following page.

Made to Order Cut-out Boxes

Boxes listed on the following page are not regularly carried in stock but are made to order. The following specifications apply:

Unless otherwise ordered, boxes will be furnished with standard 7/8-inch knock-outs for 1/2-inch conduit pipes. For knock-outs other than standard, add 10 cents list for each change in size of knock-out. Knock-outs for loom will be furnished when ordered, without additional charge, provided all knock-outs in the same box are of the same size.

Sketch with order, showing size and location of knock-outs, will avoid errors and delays.

Made for surface mounting unless otherwise specified. For flush mounted boxes add 50 per cent to list price.

For weatherproof boxes with overhanging and sloping roof, add 50 per cent to list price.

Prices of galvanized boxes will be quoted on application.

For brass commode catch, add 40 cents list.

For nickel plated vault handle, add $1.00 list.

For Yale cylinder lever lock, add 70 cents list.

For master keyed cylinder lever lock, add $1.00 list.

For master keys, add 75 cents list for each key.

For spring hinges on doors, add 60 cents list per pair.

Pull or junction boxes with covers take same list prices as surface type boxes.

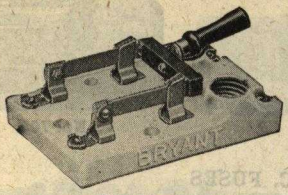
Unless otherwise ordered, boxes will be made with all four sides overlapping and hinged on right-hand side. Boxes will be made with doors hinged at top when so ordered, without additional charge.

CUTTER STEEL SERVICE AND CUT-OUT BOXES

		No. 16 U. S. GAUGE STEEL					No. 14 U. S. GAUGE STEEL					No. 12 U. S. GAUGE STEEL				
		No one dimension to exceed 24 inches					No one dimension to exceed 54 inches					For single dimensions exceeding 54 inches				
		No one surface to exceed 360 square inches					No one surface to exceed 1200 square inches					For surfaces exceeding 1200 square inches				
		Price, Each					Price, Each					Price, Each				
Width Inches	Length Inches	Depth, Inches 3	4	5	6	8	Depth, Inches 3	4	5	6	8	Depth, Inches 3	4	5	6	8
4	4	$0.95	$1.10	$1.30	$1.50	$1.95	$1.10	$1.25	$1.45	$1.70	$2.25	$1.30	$1.50	$1.75	$2.00	$2.65
4	6	1.05	1.25	1.40	1.65	2.15	1.20	1.40	1.60	1.85	2.40	1.45	1.65	1.90	2.20	2.90
4	8	1.15	1.35	1.55	1.75	2.30	1.30	1.50	1.75	2.00	2.60	1.60	1.80	2.10	2.40	3.10
4	10	1.25	1.45	1.65	1.90	2.45	1.40	1.65	1.90	2.15	2.80	1.70	1.95	2.25	2.60	3.35
6	6	1.20	1.35	1.55	1.80	2.30	1.35	1.55	1.75	2.05	2.65	1.60	1.85	2.10	2.45	3.15
6	8	1.30	1.50	1.70	1.95	2.50	1.50	1.70	1.95	2.20	2.85	1.80	2.05	2.35	2.65	3.40
6	10	1.45	1.65	1.85	2.15	2.70	1.65	1.85	2.10	2.40	3.10	1.95	2.25	2.55	2.90	3.65
6	12	1.55	1.80	2.05	2.30	2.90	1.80	2.00	2.30	2.60	3.30	2.15	2.40	2.75	3.10	3.95
6	15	1.75	2.00	2.25	2.55	3.20	2.00	2.25	2.55	2.90	3.65	2.40	2.70	3.05	3.45	4.35
8	8	1.45	1.65	1.90	2.15	2.75	1.65	1.90	2.15	2.45	3.10	2.00	2.25	2.55	2.90	3.70
8	10	1.65	1.85	2.10	2.35	2.95	1.85	2.10	2.35	2.65	3.40	2.20	2.50	2.80	3.20	4.00
8	12	1.80	2.00	2.25	2.55	3.20	2.00	2.25	2.55	2.90	3.65	2.40	2.70	3.05	3.45	4.30
8	14	1.95	2.15	2.45	2.75	3.40	2.20	2.45	2.80	3.10	3.90	2.60	2.95	3.30	3.70	4.60
8	16	2.10	2.35	2.60	2.90	3.60	2.35	2.65	3.00	3.35	4.15	2.80	3.15	3.55	3.95	4.90
8	18	2.25	2.50	2.80	3.10	3.85	2.55	2.85	3.20	3.55	4.40	3.05	3.40	3.80	4.20	5.20
10	10	1.80	2.05	2.30	2.55	3.20	2.05	2.30	2.60	2.90	3.65	2.45	2.75	3.10	3.45	4.35
10	12	2.00	2.20	2.50	2.80	3.45	2.25	2.55	2.85	3.20	3.95	2.70	3.00	3.40	3.75	4.70
10	14	2.15	2.40	2.70	3.00	3.70	2.45	2.75	3.10	3.45	4.25	2.95	3.30	3.65	4.05	5.00
10	16	2.35	2.60	2.90	3.20	3.95	2.65	3.00	3.30	3.70	4.50	3.20	3.55	3.95	4.35	5.35
10	18	2.50	2.80	3.10	3.45	4.20	2.90	3.20	3.55	3.95	4.80	3.40	3.80	4.20	4.65	5.70
10	20	3.00	3.30	3.65	4.05	4.85	3.40	3.80	4.20	4.60	5.55	4.05	4.50	4.95	5.45	6.60
10	22	3.20	3.50	3.90	4.25	5.10	3.65	4.05	4.45	4.90	5.85	4.30	4.80	5.25	5.80	6.95
10	24	3.40	3.75	4.10	4.50	5.40	3.85	4.25	4.70	5.15	6.15	4.60	5.05	5.55	6.10	7.30
10	30	....	....	....	....	....	4.55	5.00	5.45	5.95	7.05	5.35	5.90	6.45	7.05	8.35
10	36	....	....	....	....	....	5.20	5.50	6.20	6.75	7.95	6.15	6.75	7.35	8.00	9.40
12	12	2.20	2.45	2.70	3.05	3.70	2.50	2.80	3.10	3.45	4.25	2.90	3.30	3.70	4.10	5.05
12	14	2.40	2.65	2.95	3.30	4.00	2.75	3.05	3.40	3.75	4.55	3.25	3.60	4.00	4.45	5.40
12	16	2.60	2.90	3.20	3.50	4.25	2.95	3.30	3.65	4.05	4.90	3.55	3.90	4.30	4.80	5.80
12	18	2.80	3.10	3.40	3.75	4.55	3.20	3.55	3.90	4.30	5.20	3.80	4.20	4.65	5.10	6.15
12	20	3.30	3.65	4.00	4.40	5.25	3.80	4.20	4.60	5.05	6.05	4.50	4.95	5.45	5.95	7.15
12	22	3.55	3.90	4.25	4.65	5.55	4.05	4.45	4.90	5.35	6.35	4.80	5.25	5.80	6.30	7.50
12	24	3.75	4.10	4.50	4.90	5.80	4.30	4.70	5.15	5.65	6.70	5.10	5.60	6.10	6.65	7.90
12	30	....	....	....	....	....	5.05	5.55	6.00	6.55	7.70	6.00	6.55	7.10	7.75	9.05
12	36	....	....	....	....	....	5.85	6.35	6.85	7.45	8.65	6.90	7.50	8.10	8.80	10.25
12	42	....	....	....	....	....	6.60	7.15	7.70	8.35	9.65	7.80	8.45	9.10	9.85	11.40
12	48	....	....	....	....	....	7.35	7.95	8.60	9.25	10.65	8.70	9.40	10.15	10.90	12.55
15	16	3.00	3.30	3.60	3.95	4.75	3.40	3.75	4.15	4.55	5.45	4.05	4.45	4.90	5.40	6.45
15	18	3.25	3.55	3.90	4.25	5.05	3.70	4.05	4.45	4.85	5.80	4.40	4.80	5.30	5.70	6.90
15	20	3.80	4.15	4.55	4.95	5.85	4.35	4.75	5.20	5.70	6.70	5.15	5.65	6.15	6.70	7.95
15	22	4.05	4.45	4.85	5.25	6.15	4.65	5.10	5.55	6.00	7.10	5.50	6.00	6.55	7.10	8.35
15	24	4.35	4.70	5.10	5.55	6.50	4.95	5.40	5.85	6.35	7.45	5.85	6.40	6.95	7.55	8.80
15	30	....	....	....	....	....	5.85	6.35	6.85	7.40	8.60	6.95	7.50	8.10	8.75	10.15
15	36	....	....	....	....	....	6.75	7.30	7.85	8.45	9.70	8.00	8.60	9.25	9.95	11.45
15	42	....	....	....	....	....	7.65	8.25	8.85	9.50	10.85	9.05	9.70	10.45	11.20	12.80
15	48	....	....	....	....	....	8.55	9.20	9.85	10.50	11.95	10.10	10.85	11.60	12.40	15.00
18	18	3.65	4.00	4.35	4.75	5.60	4.20	4.60	5.00	5.45	6.45	5.00	5.45	5.90	6.45	7.60
18	21	....	....	....	....	....	5.10	5.55	6.00	6.50	7.60	6.05	6.55	7.10	7.70	9.00
18	24	....	....	....	....	....	5.60	6.10	6.55	7.10	8.25	6.65	7.20	7.75	8.40	9.70
18	30	....	....	....	....	....	6.65	7.15	7.70	8.25	9.50	7.85	8.45	9.10	9.75	11.20
18	36	....	....	....	....	....	7.70	8.25	8.85	9.45	10.75	9.10	9.75	10.45	11.15	12.70
18	42	....	....	....	....	....	8.75	9.35	9.95	10.60	12.05	10.30	11.00	11.75	12.55	14.20
18	48	....	....	....	....	....	9.75	10.40	11.10	11.80	13.30	11.55	12.30	13.10	13.90	15.70
21	21	....	....	....	....	....	5.70	6.15	6.65	7.15	8.30	6.75	7.25	7.85	8.45	9.80
21	24	....	....	....	....	....	6.30	6.75	7.25	7.85	9.00	7.40	8.00	8.60	9.25	10.65
21	30	....	....	....	....	....	7.45	8.00	8.55	9.15	10.40	8.80	9.45	10.10	10.80	12.30
21	36	....	....	....	....	....	8.65	9.20	9.80	10.45	11.70	10.20	10.85	11.60	12.35	13.95
21	42	....	....	....	....	....	9.80	10.40	11.10	11.75	13.20	11.55	12.30	13.05	13.90	15.60
21	48	....	....	....	....	....	11.00	11.65	12.35	13.05	14.60	12.85	13.75	14.55	15.40	17.25
24	24	....	....	....	....	....	6.95	7.45	8.00	8.55	9.75	8.20	8.80	9.40	10.10	11.55
24	30	....	....	....	....	....	8.25	8.80	9.40	10.00	11.30	9.75	10.40	11.10	11.80	13.35
24	36	....	....	....	....	....	9.55	10.15	10.80	11.45	12.85	11.30	12.00	12.75	13.50	15.15
24	42	....	....	....	....	....	10.85	11.50	12.20	12.90	14.40	12.85	13.60	14.40	15.20	17.00
24	48	....	....	....	....	....	12.20	12.90	13.60	14.35	15.95	14.40	15.20	16.05	16.95	18.80

BRYANT SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

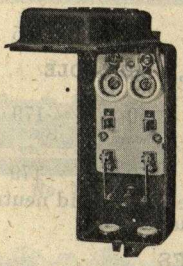


No. 1692

BRYANT ENTRANCE SWITCHES

SCHEDULE I

Trade No.	Mfrs. No.	Location Fuses	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
Double-pole, 30 Amperes, 125 Volts						
021085	1695	Top	1	100	170	$0.90
021086	1981	Bottom	1	100	170	.90
021087	*1692	Top	1	100	240	1.00
021088	*1985	Bottom	1	100	240	1.00
Triple-pole, 30 Amperes, 125 Volts						
021089	1693	Top	1	50	150	1.40
021090	1986	Bottom	1	50	150	1.40



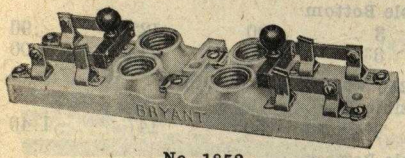
Nos. 358 and 1695

IRON BOXES FOR ENTRANCE SWITCHES

SCHEDULE H

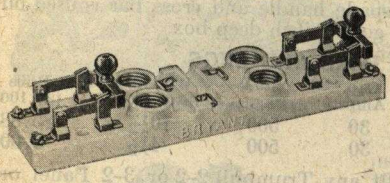
Cover cannot open beyond the point where gravity can close it. Latch holds cover open while connecting and wiring switch. Recesses in covers are deep enough to admit plug fuse casings. Cover is held shut by spring catch and can be padlocked or sealed. Cover can be closed when switch is open. Boxes are finished dull black japan finish.

Trade No.	Mfrs. No.	Style Pole	Takes Switches Mfrs. Nos.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
30 Amperes, Drilled for Open Work							
021102	358	Double	1695, 1981	1	10	70	$2.00
021103	359	Double	1692, 1985	1	10	110	2.35
021104	360	Triple	1693, 1986	1	10	130	2.45
30 Amperes, Drilled for Conduit Work							
021105	378	Double	1695, 1981	1	10	70	2.00
021106	379	Double	1692, 1985	1	10	110	2.35
021107	380	Triple	1693, 1986	1	10	134	2.45



No. 1852

Boxes for conduit work will be furnished with one hole for ½-inch conduit in each end, unless otherwise specified.

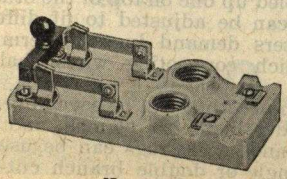


No. 1984

BRYANT PANEL SWITCHES

SCHEDULE I

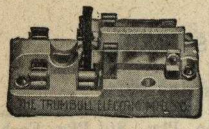
Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
30 Amperes, 125 Volts, Double-pole, Single Branch						
021091	1851	Top	1	100	210	$1.00
021092	1982	Bottom	1	100	210	1.00
021093	*1694	Top	1	50	130	1.10
021094	*1987	Bottom	1	50	130	1.10
30 Amperes, 125 Volts, Double-pole, Double Branch						
021095	1852	Vertical mains	1	50	180	2.00
021096	1983	Horizontal mains	1	50	180	2.00
30 Amperes, 125 Volts, Triple to Double-pole, Double Branch						
021097	1947	Vertical mains	1	50	220	2.10
021098	1984	Horizontal mains	1	50	220	2.10



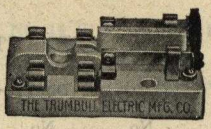
No. 1987

*These switches have 250-volt spacings but are approved for use only on 125 volts.

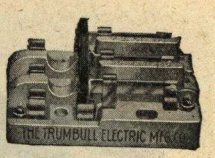
TRUMBULL COMBINATION SWITCHES



No. 704



No. 724



No. 705

FOR N. E. C. FUSES

30 AMPERES, 250 VOLTS, DOUBLE-POLE

Fusible Top

Trade No.	Mfrs. No.	Dimensions, Inches Length	Width	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
067162	704	6 1/16	3 3/8	50	115	$1.10

Fusible Bottom

067163	724	6 1/16	3 3/8	50	115	1.10

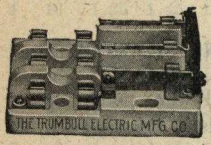
30 AMPERES, 125-250 VOLTS, THREE-POLE

Fusible Top

067164	705	6 1/16	4 1/2	50	179	1.56

Fusible Bottom

067165	725	6 1/16	4 1/2	50	179	1.56



No. 725

Any three-pole switches can be furnished with solid neutral at regular price, if ordered in standard package quantities.

FOR PLUG FUSES

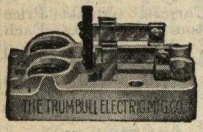
30 AMPERES, 125 VOLTS, DOUBLE-POLE

Fusible Top

067166	701	4 5/16	3	100	122	.90
76603	*702	6 5/16	3 3/8	100	245	1.00

Fusible Bottom

067167	721	4 5/16	3	100	122	.90
76604	*722	6 5/16	3 3/8	100	245	1.00



No. 701

30 AMPERES, 125-250 VOLTS, THREE-POLE

Fusible Top

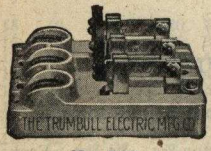
067170	703	4 5/16	4 3/4	50	147	1.40

Fusible Bottom

067171	723	4 5/16	4 3/4	50	147	1.40

*Nos. 702 and 722 were formerly approved for 250-volt work, now approved for only 125 volts. They, however, have larger spacings than the regular 125-V. switches Nos. 701 and 721 and may be preferred by some.

A combined one-piece fibre spade handle and cross bar is used on all the above switches. They will go in 3-inch deep box.



No. 703

CUT-OUT BUS BARS AND LUGS

Trade No.	Mfrs. No.	Description	Cap. Amps.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
057831	739	Bus bar	30	500	10 1/2	$5.88
057832	741	Lug	30	500	4 1/2	3.00

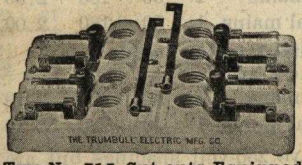
The bus bars (or straps) will fit any Trumbull 2-2 or 3-2 Panel or Plug Cut-out, as well as those of other make.

By connecting a series of panel or plug cut-outs with these bus bars you can make a very elastic and inexpensive substitute for panel boards.

Are all copper, rated to carry 30 amperes. For greater capacity they can be easily laminated (doubled up one on top of the other).

The lugs, also of copper, can be adjusted to fit different sizes of wire. The underwriters demand lugs on terminals above 30 amperes, into which connecting wires shall be soldered.

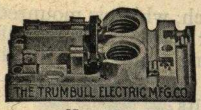
By using these bus bars much time can be saved over old method of skinning wires under fastening clamps, and they present a much neater appearance. The lugs can be used on large sized wire mains, on single or double branch cut-outs, where common wire clamps are too small.



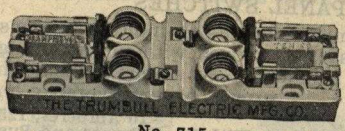
Two No. 715 Cut-outs Equipped with Bus Bars and Lugs

TRUMBULL PANEL CUT-OUTS

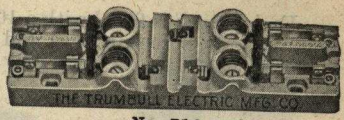
NATIONAL ELECTRICAL CODE STANDARD



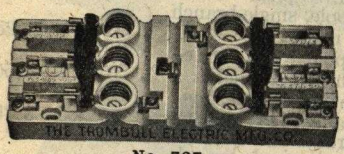
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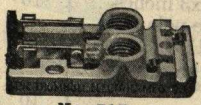
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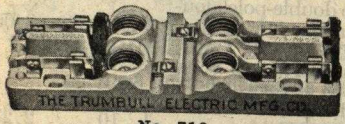
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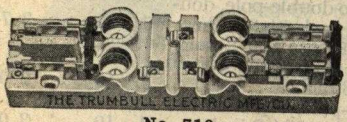
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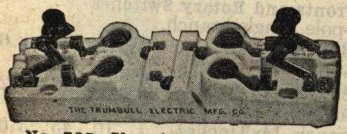
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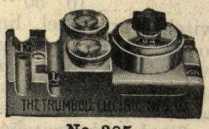
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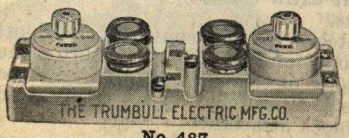
No. 719



No. 735, Showing Spool Handle



No. 385



No. 487

KNIFE SWITCH PANEL CUT-OUTS

30 Amperes, 125 Volts, for Plug Fuses

MAINS VERTICAL, BRANCHES HORIZONTAL

Two-wire, Single Branch, Fusible Top

Trade No.	Mfrs. No.	Size Inches	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
068924	714	3 x $6\frac{1}{16}$	100	200	$1.00
		Two-wire, Double Branch			
068925	715	$3\frac{1}{16}$x$10\frac{1}{4}$	50	210	2.00
		Three to Two-wire, Double Branch			
068926	716	$3\frac{1}{16}$x$11\frac{1}{4}$	50	224	2.10
		Three to Three-wire, Double Branch			
068927	727	$4\frac{1}{2}$x$11\frac{11}{32}$	25	156	4.00

MAINS HORIZONTAL, BRANCHES VERTICAL

Two-wire, Single Branch, Fusible Bottom

068928	717	3 x $6\frac{1}{16}$	100	200	1.00
		Two-wire, Double Branch			
068929	718	$3\frac{1}{16}$x$10\frac{1}{4}$	50	210	2.00
		Three to Two-wire, Double Branch			
068930	719	$3\frac{1}{16}$x$11\frac{1}{4}$	50	224	2.10
		Three to Three-wire, Double Branch			
068931	728	$4\frac{1}{2}$x$11\frac{11}{32}$	25	156	4.00

MAINS VERTICAL, BRANCHES HORIZONTAL, WITH SPOOL HANDLES

Two-wire, Single Branch

068932	733	3 x $6\frac{1}{16}$	100	225	1.10
		Two-wire, Double Branch			
068933	734	$3\frac{1}{16}$x$10\frac{1}{4}$	50	215	2.20
		Three to Two-wire, Double Branch			
068934	735	$3\frac{1}{16}$x$11\frac{1}{4}$	50	230	2.30

MAINS HORIZONTAL, BRANCHES VERTICAL, WITH SPOOL HANDLES

Two-wire, Single Branch

068935	736	3 x $6\frac{1}{16}$	100	225	1.10
		Two-wire, Double Branch			
068936	737	$3\frac{1}{16}$x$10\frac{1}{4}$	50	215	2.20
		Three to Two-wire, Double Branch			
068937	738	$3\frac{1}{16}$x$11\frac{1}{4}$	50	230	2.30

SNAP SWITCH PANEL CUT-OUTS

10 Amperes, for 125-volt Plug Fuses

With Nickel or Porcelain Covers

Each branch is equipped with a 10-ampere double-pole indicating snap switch, 250 volts, on removable base. Round or wing type handles can be furnished for both nickel and porcelain covers. Connections made without touching snap switch. Switch handle stands above plug fuse.

Two-wire, Single Branch

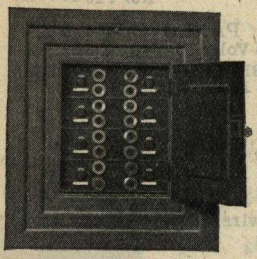
Nickel Cover, Wing Handle			Porcelain Cover, Round Handle				
Trade No.	Mfrs. No.	Price Each	Trade No.	Mfrs. No.	Price Each	Std. Pkg.	Wt., Lbs. Std. Pkg.
90475	385	$1.60	90479	485	$1.66	10	33
		Three to Two-wire, Single Branch					
90476	386	2.00	90480	486	2.08	10	36
		Two-wire, Double Branch					
90477	387	2.25	90481	487	2.30	10	55
		Three to Two-wire, Double Branch					
90478	388	3.00	90482	488	3.06	10	59

PERKINS PANEL SWITCHES

NATIONAL ELECTRICAL CODE STANDARD
SCHEDULE H

PANEL SWITCHES

Each branch is fitted with a 10-ampere double-pole indicating snap switch, which is mounted on a separate porcelain base and may be removed without disturbing either main or branch connections. These switches may be installed in any standard cabinet having a minimum depth of 3 inches.



Four No. 2599 Switches installed in a Gutter Cabinet



No. 2700



No. 2599



No. 2300



No. 2685



No. 2688



No. 2535

WITH CONNECTIONS FOR PLUG FUSES

10 Amperes, 125 Volts

***With Dead Fronts and Push Button Switches**

Trade No.	Mfrs. No.	Description	Std. Carton Pkg.	Wt. Lbs. Std. Pkg.		Price Each
19826	2698	Double-pole, single-branch, 6¼x3 inches	1	10	..	$2.25
19827	2699	Double-pole, double-branch, 10½x3 inches	1	10	..	3.50
19828	2700	Triple to double-pole, double-branch, 11⅝x3 inches	1	10	..	3.75

***With Dead Fronts and Rotary Switches**

19823	2598	Double-pole, single-branch, 6¼x3 inches	1	10	27	2.00
19824	2599	Double-pole, double-branch, 10½x3 inches	1	10	45	2.50
19825	2600	Triple to double-pole, double-branch, 11⅝x3 in.	1	10	45	3.25

With Open Fronts and Rotary Switches

021099	2400	Double-pole, single-branch, 6¼x3 inches	1	10	15	1.60
021100	2300	Double-pole, double-branch, 10½x3 inches	1	10	17	2.25
021101	2360	Triple to double-pole, double-branch, 11⅝x3 in.	1	10	20	3.00

WITH CONNECTIONS FOR CARTRIDGE FUSES

10 Amperes, 250 Volts

***With Dead Fronts and Push Button Switches**

19829	2684	Double-pole, single-branch, 7½x3 inches	1	10	..	2.25
19830	2685	Double-pole, double-branch, 12 13/16x3 inches	1	10	..	3.50
19831	2686	Triple to double-pole, double-branch 14x3 inches	1	10	..	3.75

***With Dead Fronts and Rotary Switches**

121361	2687	Double-pole, single-branch, 7½x3 inches	1	10	..	2.00
121362	2688	Double-pole, double-branch, 12 13/16x3 inches	1	10	..	3.00
121363	2689	Triple to double-pole, double-branch, 14x3 inches	1	10	..	3.25

With Open Fronts and Rotary Switches

19819	2534	Double-pole, single-branch, 7½x3 inches	1	10	27	1.60
19820	2535	Double-pole, double-branch, 12 13/16x3 inches	1	10	45	2.25
19821	2536	Triple to double-pole, double-branch, 14x3 inches	1	10	45	3.00

MECHANISMS

121364	2595	Rotary, without handle	10	100	..	.71
121365	2523	Push button	10	50	..	.80

*The covers of these switches are steel, lined with insulating material. Each cover has an overhanging edge which engages with the cover of the adjoining switch, thereby effectively preventing accidental contact with any live parts. Covers are the same length as the bases.

Orders will regularly be filled with switches having dull black covers. White enamel covers will be supplied, when specified without extra charge. All other finishes on covers, add 50 cents.

Push button switches can be converted into lock switches by substituting, for No. 2523 push button mechanisms, No. 2526 lock mechanisms. Rotary switches can be converted into lock switches by substituting, for the handles, No. 2384 lock attachment.

Illustrations are one-seventh actual size.

EDISON PLUG CUT-OUTS

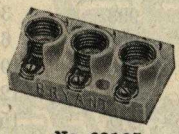
NATIONAL ELECTRICAL CODE STANDARD



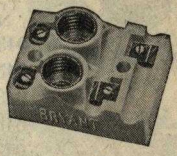
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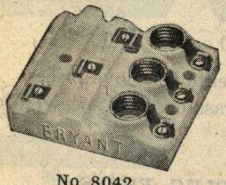
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No. 62165



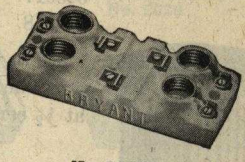
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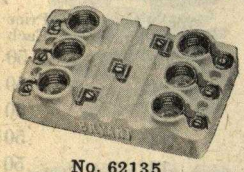
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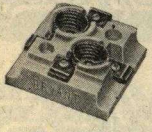


No. 62587



No. 62199


No. 62135


No. 8020


No. 1945

PLUG CUT-OUTS

SCHEDULE I

30 Amperes, 125 Volts

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043001	62569	Single-pole, main	10	150	70	$0.18
043002	62965	Double-pole, main	10	150	100	.30
043003	62165	Triple-pole, main	5	100	102	.44
043004	61935	Double-pole, single branch	5	100	95	.32
043005	8042	Triple-pole, single branch	1	75	195	.54
043006	62587	Double-pole, double branch	5	100	160	.62
043007	62199	Three to two-wire, double branch	5	100	170	.64
043008	62135	Triple-pole, double branch	1	50	150	.90
043009	8020	Double-pole, single or double crossover branch	5	150	165	.36

PLUG FUSE CASINGS

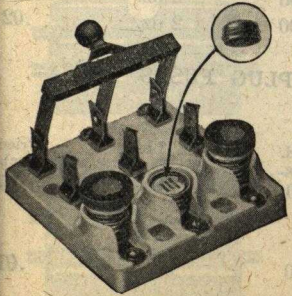
SCHEDULE E

043010	1945	0–30 amps., 125 volts	10	100	17	.18

Fuses are not included with the above casings; they should be ordered separately according to the carrying capacity desired.

SHORT CIRCUITING PLUGS

SCHEDULE H


No. 559

Designed to make possible compliance with the specifications of the National Electrical Code which prohibits the placing of fuses in any permanently grounded wire except in the cut-out just preceding lamp sockets or other translating devices. This ruling necessitates a special cut-out or else the bridging of the cut-out in the grounded wire. This plug can be readily soldered into any plug cut-out and makes a safe and reliable connection. Its appearance is such that its improper use as a substitute for a fuse can readily be detected.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Price Each
92471	559	For service cut-outs and entrance switches	75	300	$0.05

PLUG FUSES

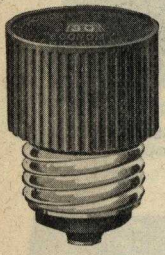


Union Plug Fuse

UNION EDISON PLUG FUSES

Mica Cap—125 Volts

Trade No.	Mfrs. No.	Size Amps.	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
043011	993	3	100	500	45	$0.07
043012	906	6	100	500	45	.07
043013	910	10	100	500	45	.07
043014	912	12	100	500	45	.07
043015	915	15	100	500	45	.07
043016	920	20	100	500	45	.07
043017	925	25	100	500	45	.07
043018	930	30	100	500	45	.07



For plug fuses with special finish caps, add 3 cents to above prices.

The above fuses can be furnished with solid brass caps on special order at ½ cent each in addition to above prices.

ECONOMY RENEWABLE EDISON PLUG FUSES

National Electrical Code Standard, 125 Volts



Economy Plug Fuse

Trade No.	Mfrs. No.	Carrying Cap Amps.	Std. Pkg.	Wt., Lbs Std. Pkg	Price Each
148452	PF368	3	100	14	$0.50
148453	PF468	4	100	14	.50
148454	PF568	5	100	14	.50
148455	PF668	6	100	14	.50
148456	PF868	8	100	14	.50
148457	PF1068	10	100	14	.50
148458	PF1268	12	100	14	.50
148459	PF1668	15	100	14	.50
148460	PF2068	20	100	14	.50
148461	PF2568	25	100	14	.50
148462	PF3068	30	100	14	.50

Renewal Links For Plug Fuses



Renewal Link For Economy Plug Fuse

148463	PR6803	3	100	2 oz.	.02
148464	PR6804	4	100	2 oz.	.02
148465	PR6805	5	100	2 oz.	.02
148466	PR6806	6	100	2 oz.	.02
148467	PR6808	8	100	2 oz.	.02
148468	PR6810	10	100	2 oz.	.02
148469	PR6812	12	100	2 oz.	.02
148470	PR6815	15	100	2 oz.	.02
148471	PR6820	20	100	2 oz.	.02
148472	PR6825	25	100	2 oz.	.02
148473	PR6830	30	100	2 oz.	.02

J. C. REFILLABLE EDISON PLUG FUSES

No screws or tools necessary to refill.



J. C. Plug Fuse

Trade No.	Size Amps.	Volts	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
46537	3–30	125	100	10	$0.15
		Renewal Links			
46538	3–30	125	50	..	.01

In ordering, specify capacity in amperes desired.

UNION ENCLOSED FUSE CUT-OUTS

NATIONAL ELECTRICAL CODE STANDARD



No. 2003



No. 2010



No. 2012



No. 2022



No. 2020



No. 2025



No. 2027



No. 2030



No. 2004



No. 2011



No. 2023



No. 2021



No. 2013

250 VOLTS

Trade No.	Mfrs. No.	Cap. Amp.	Material	Base Length	Inches Width	Std. Pkg.	Price Each
			Single-pole, Main Line				
27333	2003	0–30	Porcelain	3 5/8	1 1/2	50	$0.40
29205	2003	0–30	Slate	3 5/8	1 1/2	50	.30
			Double-pole Main Line				
27334	2010	0–30	Porcelain	3 5/8	2 13/16	50	.55
29206	2010	0–30	Slate	3 5/8	2 13/16	50	.60
			Triple-pole, Main Line				
27335	2012	0–30	Porcelain	3 5/8	4 1/16	50	.80
29207	2012	0–30	Slate	3 5/8	4 1/16	50	.90
			Two Wire, Double-pole, Single Branch				
27336	2020	0–30	Porcelain	5 1/4	2 13/16	50	.70
			Three Wire, Triple-pole, Single Branch				
27340	2022	0–30	Porcelain	6 1/4	4	50	1.35
			Two Wire, Double-pole, Double Branch				
27337	2025	0–30	Porcelain	7 7/8	2 13/16	25	1.30
			Three Wire, Double-pole, Double Branch				
27338	2027	0–30	Porcelain	9	2 13/16	25	1.50
			Three Wire, Triple-pole, Double Branch				
27339	2029	0–30	Porcelain	9 1/4	4	25	2.25
			Single-pole, Main Line				
27341	2004	31–60	Porcelain	5 1/4	2	50	.65
29208	2004	31–60	Slate	5 1/4	2	50	.56
			Double-pole, Main Line				
27342	2011	31–60	Porcelain	5 1/4	3 5/16	50	1.40
29209	2011	31–60	Slate	5 1/4	3 5/16	50	1.12
			Triple-pole, Main Line				
27343	2013	31–60	Porcelain	5 1/4	4 13/16	50	2.00
29210	2013	31–60	Slate	5 1/4	4 13/16	50	1.68
			Two Wire, Double-pole, Single Branch				
27344	2021	31–60	Porcelain	7 1/4	3 5/16	50	1.75
			Three Wire, Triple-pole, Single Branch				
27348	2023	31–60	Porcelain	8 3/8	4 13/16	50	3.00
			Two Wire, Double-pole, Double Branch				
27345	2026	31–60	Porcelain	11 1/8	3 3/8	25	3.50
			Three Wire Double-pole, Double Branch				
27346	2028	31–60	Porcelain	12 1/4	3 5/16	25	4.20
			Three Wire, Triple-pole, Double Branch				
27347	2030	31–60	Porcelain	12 1/4	4 13/16	10	6.00
			Single-pole, Main Line				
27349	2005	61–100	Porcelain	7 7/8	2	50	1.40
29213	2005	61–100	Slate	7 7/8	2	50	.90
			Double-pole, Main Line				
27350	2014	61–100	Porcelain	8	3 7/8	50	2.80
29211	2014	61–100	Slate	8	3 7/8	50	1.80
			Triple-pole, Main Line				
27351	2015	61–100	Porcelain	8	5 5/8	25	4.00
29212	2015	61–100	Slate	8	5 5/8	25	2.70



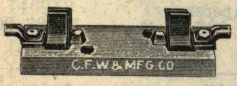
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No. 2028



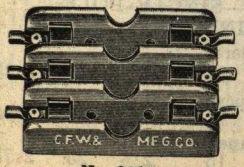
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No. 2005



No. 2014



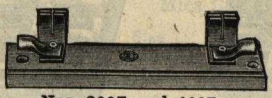
No. 2015

UNION ENCLOSED FUSE CUT-OUTS

NATIONAL ELECTRICAL CODE STANDARD



Nos. 2006 and 4006



Nos. 2007 and 4007



Nos. 2008 and 4008



No. 4003



No. 4004



No. 4009

250 VOLTS—SINGLE-POLE, MAIN LINE

Trade No.	Mfrs. No.	Material	Base, Inches Length	Width	Std. Pkg.	Price Each
		101-200 Amperes				
27352	2006	Slate	9 3/16	2 1/4	25	$2.10
		201-400 Amperes				
27353	2007	Slate	11 3/4	3	25	5.25
		401-600 Amperes				
27354	2008	Slate	14	3 1/2	10	7.20
		601-800 Amperes				
132372	2009	Slate	16 3/8	5	5	20.00
		801-1000 Amperes				
132373	2019	Slate	17 5/8	5 3/4	5	25.00



No. 4050

600 VOLTS—SINGLE-POLE, MAIN LINE

		0-30 Amperes				
27355	4003	Porcelain	6 9/16	2 1/16	50	.60
132374	4003	Slate	6 9/16	2 1/16	50	.46
		31-60 Amperes				
27356	4004	Porcelain	7 5/16	2 1/8	50	.90
132375	4004	Slate	7 5/16	2 1/8	50	.68
		61-100 Amperes				
27357	4005	Slate	10 1/4	2	50	1.32
		101-200 Amperes				
27358	4006	Slate	12 1/4	2 1/8	25	2.30
		201-400 Amperes				
27359	4007	Slate	14 7/8	3 5/8	25	6.00
		401-600 Amperes				
27360	4008	Slate	17	4	10	7.80
		601-800 Amperes				
132376	4009	Slate	19 3/8	5 1/4	5	21.00
		801-1000 Amperes				
132377	4019	Slate	20 5/8	6	5	26.00



No. 4051

1500 VOLTS—TYPE B—SINGLE-POLE, MAIN LINE

		0-15 Amperes				
49166	4050	Slate	8	2	50	.92
		16-30 Amperes				
49167	4051	Slate	9 3/4	2 1/4	50	.96
		31-60 Amperes				
49168	4052	Slate	10 1/4	2	50	1.40

2500 VOLTS—TYPE E—SINGLE-POLE, MAIN LINE

		0-30 Amperes				
49169	4055	Slate	14	2	25	2.25
		31-60 Amperes				
49170	4060	Slate	14 1/2	2 1/4	25	2.50
		61-100 Amperes				
49171	4070	Slate	15	2 1/2	25	2.75



No. 4055

F. A. STANDARD FUSE BLOCKS

NATIONAL ELECTRICAL CODE STANDARD

Mounted on Black Slate Oil Finish Base, Metal Parts Plain Dipped Finish



Type F331



Type F332

250 VOLTS, D. C. OR A. C.

600 VOLTS, D. C. OR A. C.

SINGLE-POLE

Trade No.	Mfrs. No.	Price Each	Capacity Amperes	Trade No.	Mfrs. No.	Price Each
146895	Type F- 331	$0.30	30	146927	Type F- 361	$0.46
146896	Type F- 631	.56	60	146928	Type F- 661	.68
146897	Type F- 1031	.90	100	146929	Type F-1061	1.32
146898	Type A- 2031	2.10	200	146930	Type A-2061	2.30
146899	Type A- 4031	5.25	400	146931	Type A-4061	6.00
146900	Type A- 6031	7.20	600	146932	Type A-6061	7.80
146901	*Type A- 8031	11.40	800	.....	.....	....
146902	*Type A-10031	14.70	1000	.....	.....	....

DOUBLE-POLE

146903	Type F- 332	.60	30	146933	Type F- 362	.92
146904	Type F- 632	1.12	60	146934	Type F- 662	1.36
146905	Type F- 1032	1.80	100	146935	Type F-1062	2.64
146906	Type A- 2032	4.20	200	146936	Type A-2062	4.60
146907	Type A- 4032	10.25	400	146937	Type A-4062	12.00
146908	Type A- 6032	13.75	600	146938	Type A-6062	15.60
146909	*Type A- 8032	21.80	800	.....	.....	....
146910	*Type A-10032	28.40	1000	.....	.....	....



Type F333



Type F334

THREE-POLE

146911	Type F- 333	.90	30	146939	Type F- 363	1.42
146912	Type F- 633	1.68	60	146940	Type F- 663	2.12
146913	Type F- 1033	2.70	100	146941	Type F-1063	4.00
146914	Type A- 2033	6.30	200	146942	Type A-2063	7.00
146915	Type A- 4033	15.50	400	146943	Type A-4063	18.00
146916	Type A- 6033	21.00	600	146944	Type A-6063	23.40
146917	*Type A- 8033	33.00	800	.....	.....	....
146918	*Type A-10033	42.50	1000	.....	.....	....

FOUR-POLE

146919	Type F- 334	1.20	30	146945	Type F- 364	1.84
146920	Type F- 634	2.24	60	146946	Type F- 664	2.72
146921	Type F- 1034	3.60	100	146947	Type F-1064	5.28
146922	Type A- 2034	8.40	200	146948	Type A-2064	9.20
146923	Type A- 4034	20.50	400	146949	Type A-4064	24.00
146924	Type A- 6034	27.50	600	146950	Type A-6064	31.20
146925	*Type A- 8034	43.60	800	.....	.....	....
146926	*Type A-10034	56.80	1000	.....	.....	....

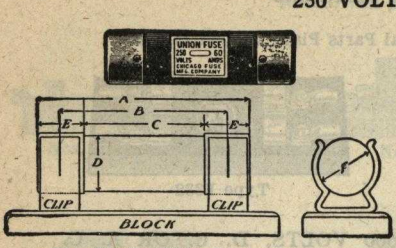
*Send size wire used so that the proper lugs can be furnished.

NOTE.—Fuse blocks over 600 amperes are made with multiple parts for each pole.

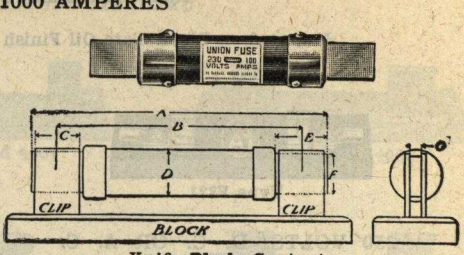
UNION NON-ARCING ENCLOSED FUSES

NATIONAL ELECTRICAL CODE STANDARD

250 VOLTS, 3 TO 1000 AMPERES



Spring Clip Contact
3–60 Amperes



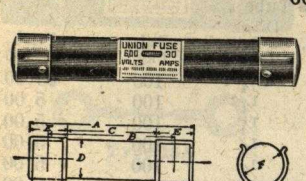
Knife-Blade Contact
65–1000 Amperes

Trade No.	Mfrs. No.	Size Amps.	Dimensions, Inches A	B	C	D	E	F	G	Carton Qty.	Std. Pkg.	Price Each	Refilling Price
020628	1003	3	2	1 1/2	1	1/2	1/2	9/16	..	10	100	$0.25	....
020629	1004	4	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020630	1005	5	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020631	1006	6	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020632	1007	7	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020633	1008	8	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020634	1009	9	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020635	1010	10	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020636	1011	12	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020637	1012	15	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020638	1013	20	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020639	1014	25	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020640	1015	30	2	1 1/2	1	1/2	1/2	9/16	..	10	100	.25	....
020641	1016	35	3	2 3/8	1 3/4	3/4	5/8	13/16	..	10	100	.35	....
020642	1017	40	3	2 3/8	1 3/4	3/4	5/8	13/16	..	10	100	.35	....
020643	1018	45	3	2 3/8	1 3/4	3/4	5/8	13/16	..	10	100	.35	....
020644	1019	50	3	2 3/8	1 3/4	3/4	5/8	13/16	..	10	100	.35	....
020645	1020	55	3	2 3/8	1 3/4	3/4	5/8	13/16	..	10	100	.35	....
020646	1021	60	3	2 3/8	1 3/4	3/4	5/8	13/16	..	10	100	.35	....
020666	1022	65	5 7/8	4 7/8	7/8	1	1	3/4	1/8	10	50	.90	.60
49111	1023	70	5 7/8	4 7/8	7/8	1	1	3/4	1/8	10	50	.90	.60
020667	1024	75	5 7/8	4 7/8	7/8	1	1	3/4	1/8	10	50	.90	.60
020668	1025	80	5 7/8	4 7/8	7/8	1	1	3/4	1/8	10	50	.90	.60
49112	1026	85	5 7/8	4 7/8	7/8	1	1	3/4	1/8	10	50	.90	.60
020669	1027	90	5 7/8	4 7/8	7/8	1	1	3/4	1/8	10	50	.90	.60
49113	1028	95	5 7/8	4 7/8	7/8	1	1	3/4	1/8	10	50	.90	.60
020670	1029	100	5 7/8	4 7/8	7/8	1	1	3/4	1/8	10	50	.90	.60
49114	1030	110	7 1/8	5 3/4	1 1/4	1 1/2	1 3/8	1 1/8	3/16	1	25	2.00	.90
020671	1031	120	7 1/8	5 3/4	1 1/4	1 1/2	1 3/8	1 1/8	3/16	1	25	2.00	.90
020672	1032	125	7 1/8	5 3/4	1 1/4	1 1/2	1 3/8	1 1/8	3/16	1	25	2.00	.90
020673	1033	150	7 1/8	5 3/4	1 1/4	1 1/2	1 3/8	1 1/8	3/16	1	25	2.00	.90
020674	1034	175	7 1/8	5 3/4	1 1/4	1 1/2	1 3/8	1 1/8	3/16	1	25	2.00	.90
020675	1035	200	7 1/8	5 3/4	1 1/4	1 1/2	1 3/8	1 1/8	3/16	1	25	2.00	.90
020676	1036	225	8 5/8	6 3/4	1 3/4	2	1 7/8	1 5/8	1/4	1	25	3.60	1.50
020677	1037	250	8 5/8	6 3/4	1 3/4	2	1 7/8	1 5/8	1/4	1	25	3.60	1.50
49115	1038	275	8 5/8	6 3/4	1 3/4	2	1 7/8	1 5/8	1/4	1	25	3.60	1.50
020678	1039	300	8 5/8	6 3/4	1 3/4	2	1 7/8	1 5/8	1/4	1	25	3.60	1.50
49116	1040	325	8 5/8	6 3/4	1 3/4	2	1 7/8	1 5/8	1/4	1	25	3.60	1.50
020679	1041	350	8 5/8	6 3/4	1 3/4	2	1 7/8	1 5/8	1/4	1	25	3.60	1.50
49117	1042	375	8 5/8	6 3/4	1 3/4	2	1 7/8	1 5/8	1/4	1	25	3.60	1.50
020680	1043	400	8 5/8	6 3/4	1 3/4	2	1 7/8	1 5/8	1/4	1	25	3.60	1.50
020681	1044	450	10 3/8	8 1/8	2 1/8	2 1/2	2 1/4	2	1/4	1	10	5.50	2.00
020682	1045	500	10 3/8	8 1/8	2 1/8	2 1/2	2 1/4	2	1/4	1	10	5.50	2.00
020683	1046	550	10 3/8	8 1/8	2 1/8	2 1/2	2 1/4	2	1/4	1	10	5.50	2.00
020684	1047	600	10 3/8	8 1/8	2 1/8	2 1/2	2 1/4	2	1/4	1	10	5.50	2.00
49118	1048	650	11 1/2	8 7/8	2 7/16	3	2 5/8	2 3/8	3/8	1	10	12.00	4.00
49119	1049	700	11 1/2	8 7/8	2 7/16	3	2 5/8	2 3/8	3/8	1	10	12.00	4.00
49120	1050	750	11 1/2	8 7/8	2 7/16	3	2 5/8	2 3/8	3/8	1	10	12.00	4.00
49121	1051	800	11 1/2	8 7/8	2 7/16	3	2 5/8	2 3/8	3/8	1	10	12.00	4.00
49122	1052	850	12 5/8	9 1/2	2 3/4	3 1/2	2 15/16	2 5/8	3/8	1	10	15.00	5.00
49123	1053	900	12 5/8	9 1/2	2 3/4	3 1/2	2 15/16	2 5/8	3/8	1	10	15.00	5.00
49124	1054	950	12 5/8	9 1/2	2 3/4	3 1/2	2 15/16	2 5/8	3/8	1	10	15.00	5.00
49125	1055	1000	12 5/8	9 1/2	2 3/4	3 1/2	2 15/16	2 5/8	3/8	1	10	15.00	5.00

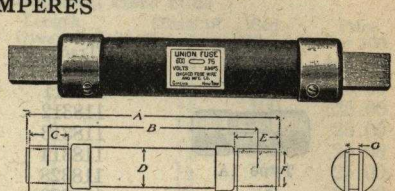
UNION NON-ARCING ENCLOSED FUSES

NATIONAL ELECTRICAL CODE STANDARD

600 VOLTS, 3 TO 1000 AMPERES



Spring Clip Contact
3–60 Amperes



Knife-Blade Contact
65–1000 Amperes

Trade No.	Mfrs. No.	Size Amps.	Dimensions, Inches A	B	C	D	E	F	G	Carton Qty.	Std. Pkg.	Price Each	Refilling Price
020647	3003	3	5	4 1/2	4	3/4	1/2	13/16	..	10	100	$0.40	....
020648	3004	4	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020649	3005	5	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020650	3006	6	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020651	3007	7	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020652	3008	8	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020653	3009	9	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020654	3010	10	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020655	3011	12	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020656	3012	15	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020657	3013	20	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020658	3014	25	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020659	3015	30	5	4 1/2	4	3/4	1/2	13/16	..	10	100	.40	....
020660	3016	35	5 1/2	4 7/8	4 1/4	1	5/8	1 1/16	..	10	100	.40	....
020661	3017	40	5 1/2	4 7/8	4 1/4	1	5/8	1 1/16	..	10	100	.60	....
020662	3018	45	5 1/2	4 7/8	4 1/4	1	5/8	1 1/16	..	10	100	.60	....
020663	3019	50	5 1/2	4 7/8	4 1/4	1	5/8	1 1/16	..	10	100	.60	....
020664	3020	55	5 1/2	4 7/8	4 1/4	1	5/8	1 1/16	..	10	100	.60	....
020665	3021	60	5 1/2	4 7/8	4 1/4	1	5/8	1 1/16	..	10	100	.60	....
020685	3022	65	7 7/8	6 7/8	7/8	1 1/4	1	3/4	1/8	2	50	1.50	.80
49138	3023	70	7 7/8	6 7/8	7/8	1 1/4	1	3/4	1/8	2	50	1.50	.80
020686	3024	75	7 7/8	6 7/8	7/8	1 1/4	1	3/4	1/8	2	50	1.50	.80
020687	3025	80	7 7/8	6 7/8	7/8	1 1/4	1	3/4	1/8	2	50	1.50	.80
49139	3026	85	7 7/8	6 7/8	7/8	1 1/4	1	3/4	1/8	2	50	1.50	.80
020688	3027	90	7 7/8	6 7/8	7/8	1 1/4	1	3/4	1/8	2	50	1.50	.80
49140	3028	95	7 7/8	6 7/8	7/8	1 1/4	1	3/4	1/8	2	50	1.50	.80
020689	3029	100	7 7/8	6 7/8	7/8	1 1/4	1	3/4	1/8	2	50	1.50	.80
49141	3030	110	9 5/8	8 1/4	1 1/4	1 3/4	1 3/8	1 1/8	3/16	1	25	2.50	1.20
020690	3031	120	9 5/8	8 1/4	1 1/4	1 3/4	1 3/8	1 1/8	3/16	1	25	2.50	1.20
020691	3032	125	9 5/8	8 1/4	1 1/4	1 3/4	1 3/8	1 1/8	3/16	1	25	2.50	1.20
020692	3033	150	9 5/8	8 1/4	1 1/4	1 3/4	1 3/8	1 1/8	3/16	1	25	2.50	1.20
020693	3034	175	9 5/8	8 1/4	1 1/4	1 3/4	1 3/8	1 1/8	3/16	1	25	2.50	1.20
020694	3035	200	9 5/8	8 1/4	1 1/4	1 3/4	1 3/8	1 1/8	3/16	1	25	2.50	1.20
020695	3036	225	11 5/8	9 3/4	1 3/4	2 1/2	1 7/8	1 5/8	1/4	1	25	5.50	2.00
020696	3037	250	11 5/8	9 3/4	1 3/4	2 1/2	1 7/8	1 5/8	1/4	1	25	5.50	2.00
49142	3038	275	11 5/8	9 3/4	1 3/4	2 1/2	1 7/8	1 5/8	1/4	1	25	5.50	2.00
020697	3039	300	11 5/8	9 3/4	1 3/4	2 1/2	1 7/8	1 5/8	1/4	1	25	5.50	2.00
49143	3040	325	11 5/8	9 3/4	1 3/4	2 1/2	1 7/8	1 5/8	1/4	1	25	5.50	2.00
020698	3041	350	11 5/8	9 3/4	1 3/4	2 1/2	1 7/8	1 5/8	1/4	1	25	5.50	2.00
49144	3042	375	11 5/8	9 3/4	1 3/4	2 1/2	1 7/8	1 5/8	1/4	1	25	5.50	2.00
020699	3043	400	11 5/8	9 3/4	1 3/4	2 1/2	1 7/8	1 5/8	1/4	1	25	5.50	2.00
020700	3044	450	13 3/8	11 1/8	2 1/8	3	2 1/4	2	1/4	1	10	8.00	3.00
020701	3045	500	13 3/8	11 1/8	2 1/8	3	2 1/4	2	1/4	1	10	8.00	3.00
020702	3046	550	13 3/8	11 1/8	2 1/8	3	2 1/4	2	1/4	1	10	8.00	3.00
020703	3047	600	13 3/8	11 1/8	2 1/8	3	2 1/4	2	1/4	1	10	8.00	3.00
49145	3048	650	14 1/2	11 7/8	2 7/16	3 1/2	2 5/8	2 3/8	3/8	1	10	15.00	5.00
49146	3049	700	14 1/2	11 7/8	2 7/16	3 1/2	2 5/8	2 3/8	3/8	1	10	15.00	5.00
49147	3050	750	14 1/2	11 7/8	2 7/16	3 1/2	2 5/8	2 3/8	3/8	1	10	15.00	5.00
49148	3051	800	14 1/2	11 7/8	2 7/16	3 1/2	2 5/8	2 3/8	3/8	1	10	15.00	5.00
49149	3052	850	15 5/8	12 1/2	2 3/4	4	2 15/16	2 5/8	3/8	1	10	18.00	6.00
49150	3053	900	15 5/8	12 1/2	2 3/4	4	2 15/16	2 5/8	3/8	1	10	18.00	6.00
49151	3054	950	15 5/8	12 1/2	2 3/4	4	2 15/16	2 5/8	3/8	1	10	18.00	6.00
49152	3055	1000	15 5/8	12 1/2	2 3/4	4	2 15/16	2 5/8	3/8	1	10	18.00	6.00

UNION NON-ARCING ENCLOSED FUSES

AUTO FUSES, 1—50 VOLTS



Type 1A

Type 1A, Glass Tube

Trade No.	Mfrs. No.	Cap. Amps.	Length Over All, Inches	Diam. of Tube, Inches	Std. Pkg.	Price per 100
118311	5303	3	5/8	1/4	100	$5.00
118312	5305	5	5/8	1/4	100	5.00
118313	5306	6	5/8	1/4	100	5.00
118314	5310	10	5/8	1/4	100	5.00
118328	5312	12	5/8	1/4	100	5.00
118329	5315	15	5/8	1/4	100	5.00
118330	5320	20	5/8	1/4	100	5.00



Type 2A

Type 2A, Glass Tube

118315	5323	3	1 3/16	1/4	100	5.00
118316	5325	5	1 3/16	1/4	100	5.00
118317	5326	6	1 3/16	1/4	100	5.00
118318	5330	10	1 3/16	1/4	100	5.00
118331	5332	12	1 3/16	1/4	100	5.00
118332	5335	15	1 3/16	1/4	100	5.00
118333	5340	20	1 3/16	1/4	100	5.00



Type 3A

Type 3A, Glass Tube

118319	5343	3	1 1/4	1/4	100	5.00
118320	5345	5	1 1/4	1/4	100	5.00
118321	5346	6	1 1/4	1/4	100	5.00
118322	5350	10	1 1/4	1/4	100	5.00
118334	5352	12	1 1/4	1/4	100	5.00
118335	5355	15	1 1/4	1/4	100	5.00
118336	5360	20	1 1/4	1/4	100	5.00



Type 4A

Type 4A, Fiber Tube

59903	5203	3	1 1/4	1/4	100	18.00
59904	5205	5	1 1/4	1/4	100	18.00
59905	5206	6	1 1/4	1/4	100	18.00
59906	5210	10	1 1/4	1/4	100	18.00
59907	5212	12	1 1/4	1/4	100	18.00
59908	5215	15	1 1/4	1/4	100	18.00



Type 4AG

Type 4AG, Glass Tube

131848	5503	3	1 1/4	1/4	100	10.00
131849	5505	5	1 1/4	1/4	100	10.00
131850	5506	6	1 1/4	1/4	100	10.00
131851	5510	10	1 1/4	1/4	100	10.00
131852	5512	12	1 1/4	1/4	100	10.00
131853	5515	15	1 1/4	1/4	100	10.00
131863	5520	20	1 1/4	1/4	100	10.00

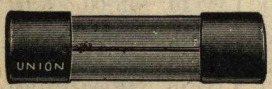
AUTO FUSES, 1—250 VOLTS



Type 5A

Type 5A, Fiber Tube

59915	5243	3	1 1/2	3/8	100	18.00
59916	5245	5	1 1/2	3/8	100	18.00
59917	5246	6	1 1/2	3/8	100	18.00
59918	5250	10	1 1/2	3/8	100	18.00
59919	5252	12	1 1/2	3/8	100	18.00
59920	5255	15	1 1/2	3/8	100	18.00
118337	5260	20	1 1/2	3/8	100	18.00



Type 5AG

Type 5AG, Glass Tube

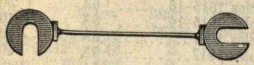
131854	5523	3	1 1/2	3/8	100	10.00
131855	5525	5	1 1/2	3/8	100	10.00
131856	5526	6	1 1/2	3/8	100	10.00
131857	5530	10	1 1/2	3/8	100	10.00
131858	5532	12	1 1/2	3/8	100	10.00
131859	5555	15	1 1/2	3/8	100	10.00
131860	5560	20	1 1/2	3/8	100	10.00
131861	5565	25	1 1/2	3/8	100	10.00
131862	5570	30	1 1/2	3/8	100	10.00

UNION NON-ARCING FUSES



Type 6A

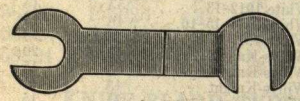

Type 15A


Type 16A


Type 17A

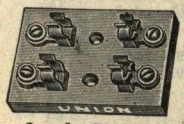


Type 18A


Type 20A

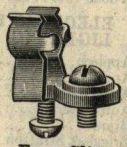


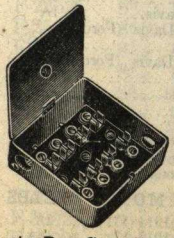
1-pole Cut-out



2-pole Cut-out


Fuse Clip


Fuse Clip and Base


Auto Box Complete with Four-wire Cut-out

AUTO FUSES, 1-250 VOLTS

Type 6A, Enclosed, Fiber Tube

Trade No.	Mfrs. No.	Cap. Amps.	Length Over All, In.	Diam. of Tube, ins.	Std. Pkg.	Price Per 100
118323	5403	3	2	½	100	$25.00
131845	5404	4	2	½	100	25.00
118324	5405	5	2	½	100	25.00
118325	5406	6	2	½	100	25.00
131846	5407	7	2	½	100	25.00
118326	5408	8	2	½	100	25.00
131847	5409	9	2	½	100	25.00
118327	5410	10	2	½	100	25.00
118338	5412	12	2	½	100	25.00
118339	5415	15	2	½	100	25.00
118340	5420	20	2	½	100	25.00
118341	5425	25	2	½	100	25.00
118342	5430	30	2	½	100	25.00

Type 15A, Open Link

Trade No.	Cap. Amps.	Description	Price per 100
145843	..	Velie Car, Special	$18.00

Type 16A, Open Link

145844	10	Auburn Car	18.00
145845	10	Excelsior Car	18.00

Type 17A, Open Link, Length 1½ Inches Center to Center

145846	10	Splitdorf Starter	18.00
145847	25	Apleco Starter	18.00
145848	10	Hollier Eight	18.00
145849	25	Mitchell	18.00
145850	25	Pullman	18.00

Type 18A, Enclosed, Length 2½ Inches Center to Center

145851	50	Apleco Starter, 110 Volts	35.00

Type 20A, Open Link

145852	..	Buick Car, Special	18.00

FIBER BASE CUT-OUTS

Trade No.	For Fuses	Price, Each 1-pole	2-pole	3-pole	4-pole
118344	1A	$0.40	$0.60	$0.80	$1.00
118345	2A, 3A, 4A	.50	.75	1.00	1.25
118346	5A, 7A	.50	.75	1.00	1.25
118347	6A	.55	.80	1.10	1.35

AUTO FUSE CLIPS

Cap. Amps.	Height Inches	Takes Fuses	Clips only Trade No.	Mfrs. No.	Price per 100	Clips and Bases Trade No.	Mfrs. No.	Price per 100
20	27/64	5303–60	118348	4549	$2.00	118353	4559	$7.50
20	23/32	5203–20	118349	4550	3.00	118354	4560	10.00
20	23/32	5223–60	118350	4551	3.00	118355	4561	10.00
20	1	5223–60	118351	4552	3.00	118356	4562	10.00
30	13/16	5412–30	118352	4510	3.00	118357	4520	10.00

AUTO BOXES

No. 14 B. & S. gauge steel finished in black insulating enamel with a hinged cover and spring catch, brass holding bushings for non-metallic conduit. The bushings may be removed and wires may be cabled before being put into the box. Insulating bushings can be substituted or standard knock-outs can be provided. Size of box, 4x4x1⅝ inches.

Trade No.	Mfrs. No.	Description	Price, Each
131842	370	With 3-wire fiber base cut-out.....	$2.25
59902	704	" 4 " " " "	2.50
131843	705	" 5 " " " "	2.75
131844	706	" 6 " " " "	3.00

"UNION" AUTOMOBILE FUSES

Below are listed "Union" Automobile Fuses, both glass and fiber tube, used in connection with the electric starting and lighting systems on both gasoline and electric cars.

Types 1A, 2A, 3A, 4A and 4AG can be used for any voltage up to 50 volts.

Types 5A, 5AG, 6A and 6AG can be used for any voltage up to 100 volts.

GASOLINE CARS

Make of Car	*Uses Fuse No.*	*Amp.*
Allen	5AG	15
Allen 1918	3A	15
American 1917	3A	15
Anderson 1917–18	5A	5–15
Apperson	3A	10
Arbenz	4A	10
Auburn 1915	5A	15
Auburn 1917	16A	Special
Austin	5A	5–15
Bartholomew 1917–18	5AG	15
Ben Hur 1917	3A	20
Biddle 1917	5AG	10
Bour Davis 1917	2A	20
Brisco 1915	3A	15–20
Brisco 1916–17–18	1A	20
Buick	20A	Special
Cadillac 1914	6A	25
Cartercar	Fuse Plug	15
Cartercar, Model 9	4A	15
Cartercar 1915	5A	10
Case	5A	5–15
Case 1917	1A	20
Chadwick	4A	5
Chadwick	5A	15
Chalmers 1914	6A	15
Chalmers 1915	6A	20
Chalmers, Model 32	1A	20
Chalmers, Model 35 1917–18	3A	15
Chalmers, Model 35 1917–18	5AG	30
Chandler	5A	5–15
Chandler 1916	1A	20
Chandler 1917–18	2A	20
Chevrolet 1915–16	6A	20
Chevrolet, Model 490	1A	20
Chevrolet 1917	1A	20
Chicago 1917	3A	20
Cole 1913–14	4A	15
Crawford 1915	5A	5–15
Crawford 1916–17	5AG	5–15
Crow 1917	1A	20
Crow 1918	1A	10
Cunningham J. 1914	4A	15
Cunningham J. 1915	1A	20
Cunningham J. 1916–17	5A	20
Daniels 8 1917	5A	5–15
Detroiter	5A	15
Detroiter 1917–18	1A	20
Dispatch	4A	10
Dispatch 1917–18	3A	15
Dixie	2A	10
Dixie 1917	3A	10
Dodge	4A	10
Dodge 1918	3A	15
Dorris	5AG	15
Dort	3A	5–15–25
Dort 1916–17	1A	20
Drexel 1917	3A	20
Elcar	2A	15
Elgin Six 1917	1A	20
Empire 1914	3A	5–15
Empire 1915	6A	20
Empire 1916–17–18	1A	20
Empire 1916–17	6A	20
Enger	1A	20
Fiat	5A	5–15
Fiat 1916–17	6A	30
Franklin 1915–16	3A	15
Franklin 1917–18	2A	10
Glide 1916–17	5A	5–15
Grant Six 1916	5A	Special
Grant 1917–18	3A	20
Hal 1917	5AG	15
Harroun	3A	20
Hassler 1917	5AG	5–15
Haynes 1917	1A	5
Hollier Eight	17A	Special
Hudson 1914–15	4A	15

GASOLINE CARS

Make of Car	*Uses Fuse No.*	*Amp.*
Hupmobile 1914	5A	5–10–15
Hupmobile 1915–16	4A	15
Hupmobile 1917	4AG	10
Imperial, Model 56	4A	5
Imperial, Model 64	1A	20
Imperial, Models 66F and 66, 1916	5AG	15
Jackson 1916–17–18	1A	20
Jeffery 1916–17	3A	20
Jordon 1917	3A	20
King	5AG	30
King 1917	3A	10
Kissell Kar 1915	5A	15
Kissell Kar 1916–17–1918	3A	20
Knox	4A	10–15
Lexington 1915–16–17	5A	15
Lexington 1915–16–17	3A	15
Locomobile 1914	6A	30
Locomobile 1915	5A	15
Locomobile 1916–17	5AG	10
Lozier	6A	10
Lozier 4-cyl 1917	6A	20
Lyons-Knight 1913–14	4A	10
Madison	3A	5–15
Marion-Handley	5A	30
Marmon	4A	20
Master	5A	15
Maxwell 1915–16–17	3A	20
McFarlan-76	5A	5–15
McFarlan 1917	5AG	10–30
Mercer 1915–16–17	2A	10
Mercer 1917	Special	5
Mercer 1915–16–17–18	5AG	30
Metz	1A	20
Mitchell 1913–14	4A	15
Mitchell 1915	3A	15
Mitchell 1916	17A	Special
Mitchell 1917	3A	20
Moline 1916–17	6A	20
Monroe	6A	20
Monroe 1916–17	1A	20
Nash, Model 681–1918	3A	20
National 1914	4A	15
National 1916	1A	20
Nelson 1917–18	5AG	30
Nelson 1917–18	Special	5
Norwalk 6	5A	15
Oakland, Models 32 and 32B	4A	15
Olympian	1A	20
Overland, Models 79 and 83	1 A	20
Overland Coupe 1914	6A	20
Overland 1916–17–18	1A	20
Owen Magnetic 1917	5A	10
Packard	2A	10
Packard Trucks	2A	10
Paige	1A	20
Pan American	2A	20
Pathfinder 1915	5A	5–10–15
Peerless 1914	3A	20
Peerless 1915	1A	20
Peerless 1916–17	1A	10
Peerless 1916–17	6A	20
Pierce-Arrow	5AG	5–10–30
Pope-Hartford	4A	10
Pratt	1A	20
Premier 1915	3A	10
Premier 1916	4A	10
Princess 1917	6A	20
Pullman	17A	Special
Pullman 1917	1A	20
Regal 1914–15	5A	5
Roamer	3A	10
Ross 8, 1917	Fuse Plug	20
Saxon Six	1A	20
Saxon 4–6, 1916–17	5AG	15–20
Saxon 4–6, 1916–17	2A	20

GASOLINE CARS

Make of Car	*Uses Fuse No.*	*Amp.*
Simplex 1915–16	6A	30
Simplex 1915–16	5A	10
Simplex 1917	6A	20
Simplex 1917	5A	10
Spaulding	5A	1–2–3
Stageman Trucks	5A	15
Standard 1916–17	5AG	20
Standard 1917	3A	20
Standard 1918	3A	15
Stearns 4 1916–17–18	1A	20
Stearns 8 1916–17–18	3A	20
Stephens 1917	1A	20
Stevens Duryea 1915–16	5A	5–15
Studebaker 1914	4A	15
Studebaker 1915	2A	15
Studebaker 1916–17	3A	10
Stutz	3A	15
Sun 1917	2A	20
Velie, Models 15–27–28–37	1A	20
Velie, Models 15–27–28–37	15A	Special
White 1912–13	5A	15
White 1914–15–16	4A	15
White 1917–18	1A	10
Willys-Knight	6A	20
Willys-Knight	5A	15
Willys-Knight	4A	15
Willys-Knight	2A	15
Winton	3A	10
Winton, Model 21A	5A	5–20
Winton 1916–17–18	3A	20
Zimmerman	3A	15

ELECTRIC CARS

American	5A	10
Anderson 1914–15–16	6A	10
Anderson 1917–18	5A	5–15
Baker 1915–16–17	5A	10
Baker 1918	3A	10
Chicago	5A	15
Dayton	6A	10
Detroit 1914	6A	10
Detroit 1915	5A	15
G. V. C	6A	5
Grinnell	6A	15
Ohio 1916–17	6A	15
Ward	3A	5
Woods	5A	5
Woods 1917	3A	10

ELECTRIC STARTING AND LIGHTING SYSTEM FUSES

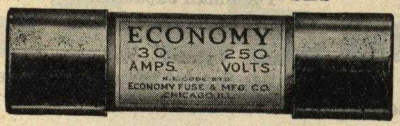
Appleco	18A	50
Appleco	17A	Special
Apperson	3A	10
Auto Lite	1A	20
Bijou	3A	10
Briggs & Stratton	3A	20
Dean	3A	15
Electric Auto Lite	1A	20
Esterline	4A	15
Gray & Davis	1A	20
Gray & Davis (Ford) 1915	5AG	30
Gray & Davis (Ford) 1916	5AG	20
North East	4A	10
Remy	3A	5 & 15
Splitdorf	17A	Special
Westinghouse	4A	15
Westinghouse Special	5A	20
Westinghouse (Ford)	3A	15

MOTOR CYCLES

Excelsior 1914–15	2A	15
Excelsior 1916–17	16A	Special
Harley Davidson	2A	6
Indian	4AG	15

ECONOMY RENEWABLE CARTRIDGE FUSES

FERRULE TYPE FUSES



FERRULE TYPE RENEWAL LINKS



For Small Capacities



For Capacities Greater than 15 Amperes

3-30 Amperes, 250 Volts

Trade No.	Mfrs. No.	Length Inches	Diam. of Ferrule Inches	Diam. of Tube Inches	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each	Cap. Amps.	Trade No.	Mfrs. No.	Std. Pkg.	Wt., Oz. Std. Pkg.	Price Each
58808	F- 325	2	9/16	1/2	100	5 1/4	$0.50	3	58825	R-203	100	3	$0.03
58809	F- 425	2	9/16	1/2	100	5 1/4	.50	4	58826	R-204	100	3	.03
58810	F- 525	2	9/16	1/2	100	5 1/4	.50	5	58827	R-205	100	3	.03
58811	F- 625	2	9/16	1/2	100	5 1/4	.50	6	58828	R-206	100	3	.03
58812	F- 825	2	9/16	1/2	100	5 1/4	.50	8	58829	R-208	100	3	.03
58813	F-1025	2	9/16	1/2	100	5 1/4	.50	10	58830	R-210	100	3	.03
58814	F-1225	2	9/16	1/2	100	5 1/4	.50	12	58831	R-212	100	3	.03
58815	F-1525	2	9/16	1/2	100	5 1/4	.50	15	58832	R-215	100	3	.03
58816	F-2025	2	9/16	1/2	100	5 1/4	.50	20	58833	R-220	100	3	.03
58817	F-2525	2	9/16	1/2	100	5 1/4	.50	25	58834	R-225	100	3	.03
58818	F-3025	2	9/16	1/2	100	5 1/4	.50	30	58835	R-230	100	3	.03
					31-60 Amperes, 250 Volts								
58819	F-3525	3	13/16	3/4	100	13 1/2	1.00	35	58836	R-235	100	10	.05
58820	F-4025	3	13/16	3/4	100	13 1/2	1.00	40	58837	R-240	100	10	.05
58821	F-4525	3	13/16	3/4	100	13 1/2	1.00	45	58838	R-245	100	10	.05
58822	F-5025	3	13/16	3/4	100	13 1/2	1.00	50	58839	R-250	100	10	.05
58823	F-5525	3	13/16	3/4	100	13 1/2	1.00	55	58840	R-255	100	10	.05
58824	F-6025	3	13/16	3/4	100	13 1/2	1.00	60	58841	R-260	100	10	.05

KNIFE-BLADE TYPE FUSES



KNIFE-BLADE TYPE RENEWAL LINKS



61-100 Amperes, 250 Volts

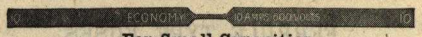
Trade No.	Mfrs. No.	Length Inches	Width of Blade Inches	Thickness of Blade Inches	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each	Cap. Amps.	Trade No.	Mfrs. No.	Std. Pkg.	Wt., Oz. Std. Pkg.	Price Each
58842	F- 6525	5 7/8	3/4	1/8	50	18	$2.00	65	58868	R- 265	50	6	$0.10
58843	F- 7025	5 7/8	3/4	1/8	50	18	2.00	70	58869	R- 270	50	6	.10
58844	F- 7525	5 7/8	3/4	1/8	50	18	2.00	75	58870	R- 275	50	6	.10
58845	F- 8025	5 7/8	3/4	1/8	50	18	2.00	80	58871	R- 280	50	6	.10
58846	F- 8525	5 7/8	3/4	1/8	50	18	2.00	85	58872	R- 285	50	6	.10
58847	F- 9025	5 7/8	3/4	1/8	50	18	2.00	90	58873	R- 290	50	6	.10
58848	F- 9525	5 7/8	3/4	1/8	50	18	2.00	95	58874	R- 295	50	6	.10
58849	F-10025	5 7/8	3/4	1/8	50	18	2.00	100	58875	R-2100	50	6	.10
					101-200 Amperes, 250 Volts								
58850	F-11025	7 1/8	1 1/8	3/16	25	22	4.00	110	58876	R-2110	25	7	.15
58851	F-12025	7 1/8	1 1/8	3/16	25	22	4.00	120	58877	R-2120	25	7	.15
58852	F-12525	7 1/8	1 1/8	3/16	25	22	4.00	125	58878	R-2125	25	7	.15
58853	F-15025	7 1/8	1 1/8	3/16	25	22	4.00	150	58879	R-2150	25	7	.15
58854	F-17525	7 1/8	1 1/8	3/16	25	22	4.00	175	58880	R-2175	25	7	.15
58855	F-20025	7 1/8	1 1/8	3/16	25	22	4.00	200	58881	R-2200	25	7	.15
					201-400 Amperes, 250 Volts								
58856	F-22525	8 5/8	1 5/8	1/4	25	48	7.50	225	58882	R-2225	25	14	.30
58857	F-25025	8 5/8	1 5/8	1/4	25	48	7.50	250	58883	R-2250	25	14	.30
58858	F-27525	8 5/8	1 5/8	1/4	25	48	7.50	275	58884	R-2275	25	14	.30
58859	F-30025	8 5/8	1 5/8	1/4	25	48	7.50	300	58885	R-2300	25	14	.30
58860	F-32525	8 5/8	1 5/8	1/4	25	48	7.50	325	58886	R-2325	25	14	.30
58861	F-35025	8 5/8	1 5/8	1/4	25	48	7.50	350	58887	R-2350	25	14	.30
58862	F-37525	8 5/8	1 5/8	1/4	25	48	7.50	375	58888	R-2375	25	14	.30
58863	F-40025	8 5/8	1 5/8	1/4	25	48	7.50	400	58889	R-2400	25	14	.30
					401-600 Amperes, 250 Volts								
58864	F-45025	10 3/8	2	1/4	10	30	11.00	450	58890	R-2450	10	11	.60
58865	F-50025	10 3/8	2	1/4	10	30	11.00	500	58891	R-2500	10	11	.60
58866	F-55025	10 3/8	2	1/4	10	30	11.00	550	58892	R-2550	10	11	.60
58867	F-60025	10 3/8	2	1/4	10	30	11.00	600	58893	R-2600	10	11	.60

ECONOMY RENEWABLE CARTRIDGE FUSES

FERRULE TYPE FUSES



FERRULE TYPE RENEWAL LINKS



For Small Capacities



For Capacities Greater than 10 Amperes

3-30 Amperes, 600 Volts

Trade No.	Mfrs. No.	Length Inches	Diam. of Ferrule Inches	Diam. of Tube Inches	Std. Pkg.	Wt., Lbs., Std. Pkg.	Price Each	Cap. Amps.	Trade No.	Mfrs. No.	Std. Pkg.	Wt. 0z. Std. Pkg.	Price Each
58915	F- 305	5	13/16	3/4	100	16	$1.10	3	58932	R-603	100	9	$0.05
58916	F- 405	5	13/16	3/4	100	16	1.10	4	58933	R-604	100	9	.05
58917	F- 505	5	13/16	3/4	100	16	1.10	5	58934	R-605	100	9	.05
58918	F- 605	5	13/16	3/4	100	16	1.10	6	58935	R-606	100	9	.05
58919	F- 805	5	13/16	3/4	100	16	1.10	8	58936	R-608	100	9	.05
58920	F-1005	5	13/16	3/4	100	16	1.10	10	58937	R-610	100	9	.05
58921	F-1205	5	13/16	3/4	100	16	1.10	12	58938	R-612	100	9	.05
58922	F-1505	5	13/16	3/4	100	16	1.10	15	58939	R-615	100	9	.05
58923	F-2005	5	13/16	3/4	100	16	1.10	20	58940	R-620	100	9	.05
58924	F-2505	5	13/16	3/4	100	16	1.10	25	58941	R-625	100	9	.05
58925	F-3005	5	13/16	3/4	100	16	1.10	30	58942	R-630	100	9	.05
						31-60 Amperes, 600 Volts							
58926	F-3505	5 1/2	1 1/16	1	100	30	1.25	35	58943	R-635	100	18	.06
58927	F-4005	5 1/2	1 1/16	1	100	30	1.25	40	58944	R-640	100	18	.06
58928	F-4505	5 1/2	1 1/16	1	100	30	1.25	45	58945	R-645	100	18	.06
58929	F-5005	5 1/2	1 1/16	1	100	30	1.25	50	58946	R-650	100	18	.06
58930	F-5505	5 1/2	1 1/16	1	100	30	1.25	55	58947	R-655	100	18	.06
58931	F-6005	5 1/2	1 1/16	1	100	30	1.25	60	58948	R-660	100	18	.06

KNIFE-BLADE TYPE FUSES



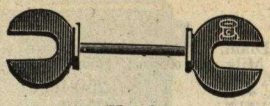
KNIFE-BLADE TYPE RENEWAL LINKS



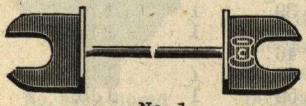
61-100 Amperes, 600 Volts

Trade No.	Mfrs. No.	Length Inches	Width of Blade Inches	Thickness of Blade Inches	Std. Pkg.	Wt., Lbs., Std. Pkg.	Price Each	Cap. Amps.	Trade No.	Mfrs. No.	Std. Pkg.	Wt., 0z. Std. Pkg.	Price Each
58949	F- 6505	7 7/8	3/4	1/8	50	31	$3.00	65	58982	R- 665	50	10	$0.10
58950	F- 7005	7 7/8	3/4	1/8	50	31	3.00	70	58983	R- 670	50	10	.10
58952	F- 7505	7 7/8	3/4	1/8	50	31	3.00	75	58984	R- 675	50	10	.10
58953	F- 8005	7 7/8	3/4	1/8	50	31	3.00	80	58985	R- 680	50	10	.10
58954	F- 8505	7 7/8	3/4	1/8	50	31	3.00	85	58986	R- 685	50	10	.10
58955	F- 9005	7 7/8	3/4	1/8	50	31	3.00	90	58987	R- 690	50	10	.10
58956	F- 9505	7 7/8	3/4	1/8	50	31	3.00	95	58988	R- 695	50	10	.10
58958	F-10005	7 7/8	3/4	1/8	50	31	3.00	100	58989	R-6100	50	10	.10
						101-200 Amperes, 600 Volts							
58959	F-11005	9 5/8	1 1/8	3/16	25	35	5.00	110	58990	R-6110	25	12	.15
58960	F-12005	9 5/8	1 1/8	3/16	25	35	5.00	120	58991	R-6120	25	12	.15
58961	F-12505	9 5/8	1 1/8	3/16	25	35	5.00	125	58992	R-6125	25	12	.15
58962	F-15005	9 5/8	1 1/8	3/16	25	35	5.00	150	58993	R-6150	25	12	.15
58963	F-17505	9 5/8	1 1/8	3/16	25	35	5.00	175	58994	R-6175	25	12	.15
58964	F-20005	9 5/8	1 1/8	3/16	25	35	5.00	200	58995	R-6200	25	12	.15
						201-400 Amperes, 600 Volts							
58965	F-22505	11 5/8	1 5/8	1/4	25	75	11.00	225	58996	R-6225	25	24	.30
58966	F-25005	11 5/8	1 5/8	1/4	25	75	11.00	250	58997	R-6250	25	24	.30
58967	F-27505	11 5/8	1 5/8	1/4	25	75	11.00	275	58998	R-6275	25	24	.30
58968	F-30005	11 5/8	1 5/8	1/4	25	75	11.00	300	58999	R-6300	25	24	.30
58969	F-32505	11 5/8	1 5/8	1/4	25	75	11.00	325	59000	R-6325	25	24	.30
58970	F-35005	11 5/8	1 5/8	1/4	25	75	11.00	350	59001	R-6350	25	24	.30
58976	F-37505	11 5/8	1 5/8	1/4	25	75	11.00	375	59002	R-6375	25	24	.30
58977	F-40005	11 5/8	1 5/8	1/4	25	75	11.00	400	59003	R-6400	25	24	.30
						401-600 Amperes, 600 Volts							
58978	F-45005	13 3/8	2	1/4	10	48	16.00	450	59004	R-6450	10	20	.60
58979	F-50005	13 3/8	2	1/4	10	48	16.00	500	59005	R-6500	10	20	.60
58980	F-55005	13 3/8	2	1/4	10	48	16.00	550	59006	R-6550	10	20	.60
58981	F-60005	13 3/8	2	1/4	10	48	16.00	600	59007	R-6600	10	20	.60

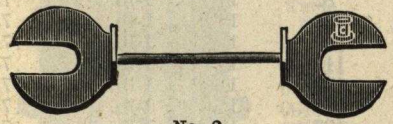
OPEN FUSE LINKS



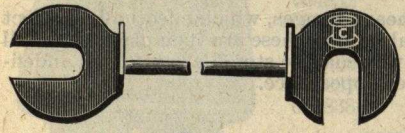
No. 0



No. 1



No. 2



No. 3

Size of Terminals

Terminal No.	Size of Slot Inches	Width of Terminal Inches	Style of Fuse	Terminal No.	Size of Slot Inches	Width of Terminal Inches	Style of Fuse
00	7/16	1/4	Wire	16	7/16	1 1/32	Strip
0	1/8	5/16	Wire	10 or 18	1/2	1 3/8	Strip
1	3/16	3/8	Wire	25	9/16	1 1/2	Strip
2	3/16	1/2	Wire	28	5/8	2 1/8	Strip
3	3/16	9/16	Wire	30	3/4 or 1	2 1/8	Strip
5	1/4	11/16	Wire	30 Wide	3/4 or 1	3 1/8	Strip
7	3/8	3/4	Strip	40	3/4 or 1	2 1/16	Strip
12	7/16	1 1/32	Strip	50	Special	3	Strip

FUSE LINKS

Small Terminals—Wire Fuse

Trade No.	Terminal No.	Amperes	Std. Pkg.	Price, per 100 Up to 1½ Inches C. to C.	1⅝ to 3½ Inches C. to C.	3⅝ to 5 Inches C. to C.	5¼ to 8 Inches C. to C.
089023	00	½– 5	100	$2.00	$3.00	$4.00	$5.00
057615	0	1– 10	100	2.00	3.00	4.00	5.00
057616	1	1– 30	100	3.00	4.00	5.00	6.00
057617	2	10– 50	100	3.00	4.50	5.50	6.00
057618	3	10– 50	100	3.00	5.00	6.00	8.00
089030	5	25–100	100	4.00	6.00	8.00	10.00

Large Terminals—Strip Fuse

Trade No.	Terminal No.	Amperes	Std. Pkg.	Price, per 100 Up to 2½ Inches C. to C.	2⅝ to 5 Inches C. to C.	5¼ to 8 Inches C. to C.
057619	7	25– 150	100	$10.00	$15.00	$20.00
057620	12	100– 200	100	12.00	18.00	24.00
057621	12	200– 400	100	15.00	22.50	30.00
057622	16	100– 200	100	12.00	18.00	24.00
057623	16	200– 400	100	15.00	22.50	30.00
057624	10 or 18	200– 400	100	.....	25.00	40.00
057625	10 or 18	400– 600	100	.....	40.00	60.00
057626	25	400– 600	100	.....	50.00	65.00
057627	25	600– 800	100	.....	60.00	90.00
057628	28	600– 800	100	.....	65.00	95.00
089024	28	800–1000	100	.....	75.00	100.00
089025	30	800–1000	100	.....	80.00	110.00
089026	30 Wide	1000–1200	100	.....	150.00	175.00
089027	40	800–1000	100	.....	300.00	325.00
089028	40	1000–1500	100	.....	400.00	500.00
089029	50	1500–2000	100	.....	Special	Special

Fuses larger than 1000 amperes will be charged at a proportionate advance in price.
In ordering, give amperage, terminal number and length.

STANDARD RAILWAY FUSES



Trade No.	Amperes	2¼ Inches C. to C. Price per 1000
057791	50 to 100 Flat	$42.00
057792	110 to 150 Flat	50.00

ASBESTOS COVERED LINKS



For prices on asbestos covered fuse links, add 100 per cent to standard open link prices.

STAMPED FUSE LINKS



Write for special prices on stamped fuse links of all styles.

TESTED FUSE WIRE

Trade No.	Safe Carrying Capacity Amperes	Best Lengths for Use and Fusing Currents for Such Lengths: Inches	Amperes	Length per Lb. Feet	Diam. Mils	Standard Package: No. of Spools	Size Spool	Price per Lb.
010047	1/8	1	1/2	40725	2 1/2	1	250 feet	....
010048	1/4	1	3/4	12550	4 1/2	1	250 feet	....
010049	1/2	1	1 1/2	2550	10	2	4-oz.	2.75
010050	3/4	1	2 1/4	1516	13	2	8-oz.	2.75
010051	1	1 1/4	3	993	16	2	8-oz.	1.10
010052	2	1 1/2	5	407	25	2	8-oz.	1.05
010053	3	1 1/2	7	265	31	2	8-oz.	1.00
010054	4	1 3/4	9	207	35	1	1-lb.	1.00
010055	5	1 3/4	10	167	39	1	1-lb.	1.00
010056	6	2	12	144	42	1	1-lb.	.85
010057	7	2	13	120	46	1	1-lb.	.85
010058	8	2	15	106	49	1	1-lb.	.80
010059	9	2	16	94	52	1	1-lb.	.80
010060	10	2 1/4	17	84	55	1	1-lb.	.80
010061	12	2 1/4	20	68	61	1	1-lb.	.80
010062	14	2 1/4	23	58	66	1	1-lb.	.80
010063	15	2 1/4	24	55	68	1	1-lb.	.75
010064	16	2 1/2	25	49	72	1	1-lb.	.75
010065	18	2 1/2	28	43	77	1	1-lb.	.75
010066	20	2 1/2	30	37 5/6	82	1	1-lb.	.75
010067	25	2 3/4	37	28 3/4	94	1	1-lb.	.75
010068	30	2 3/4	43	24	103	1	1-lb.	.75
010069	35	3	49	20	113	1	1-lb.	.75
010070	40	3	56	17 1/6	122	1	1-lb.	.75
010071	45	3	62	15 1/3	129	1	1-lb.	.75
010072	50	3	69	13 1/2	137	1	1-lb.	.75
010073	60	3 1/4	81	10 1/4	158	1	5-lb.	.70
010074	70	3 1/4	93	8 5/6	170	1	5-lb.	.70
010075	75	3 1/2	99	7 3/4	182	1	5-lb.	.70
010076	80	3 1/2	106	7 1/6	189	1	5-lb.	.70
010077	90	3 1/2	118	5 2/3	212	1	5-lb.	.70
064678	100	4	129	5	226	1	5-lb.	.70

All fuse wire is carefully wound on spools having heavy flanges, which effectually protect the soft fusible metal from abrasion or other mechanical injury; these are then placed in small cans that are properly labeled and sealed, so that fuse wire may be stored away for an indefinite time without the slightest depreciation in quality or appearance.

TESTED FUSE STRIP

Trade No.	Safe Carrying Capacity Amperes	Best Lengths for Use and Fusing Currents for Such Lengths: Inches	Amperes	Wt., Oz. per Foot	Price per Lb.	Price per Foot
010079	50	3	69	1 1/8	$0.60	$0.08
010080	60	3 1/4	81	1 3/8	.60	.09
010081	70	3 1/4	93	1 3/4	.60	.10
010082	75	3 1/2	99	1 7/8	.60	.10
010083	80	3 1/2	106	2 1/8	.60	.12
010084	90	3 3/4	118	2 1/2	.60	.15
010085	100	4	129	3	.50	.18
010086	125	4 1/4	158	3 7/8	.50	.20
010087	150	4 1/2	187	4 7/8	.50	.25
010088	175	4 1/2	215	6	.50	.25
010089	200	4 3/4	243	6 7/8	.50	.30
010090	225	4 3/4	270	7 7/8	.50	.35
010091	250	4 3/4	298	8 7/8	.50	.40
010092	275	4 3/4	325	9 3/4	.50	.50
010093	300	5	351	10 3/4	.50	.60
010094	350	5 1/4	402	12 3/4	.50	.70
010095	400	5 1/4	450	14 5/8	.50	.80
010096	450	5 1/2	500	17	.50	.90
010097	500	6	550	20 1/2	.50	1.00
064679	600	6 1/2	675	35	.50	1.10

Orders for fuse strip smaller than 50 amperes or larger than 500 amperes, will be filled at a slight advance from prices quoted above. Fuse strip is packed in 5-pound and 10-pound tin boxes, unless otherwise ordered. Foot rates will be charged for less than one package.

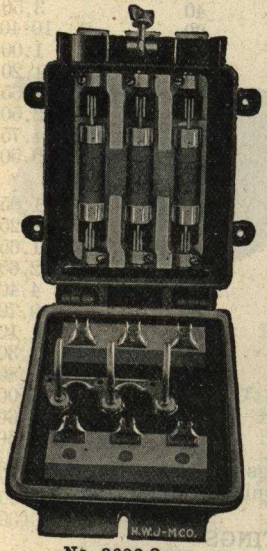


No. 3682 Closed

NOARK FUSE AND SERVICE BOXES

NATIONAL ELECTRICAL CODE STANDARD

Noark Service Boxes were designed for use with open wiring, or wiring in conduit. Each end of the box is provided with a large oval boss, the surface of which is planed, jig drilled and tapped. The wire holes are provided with porcelain bushings. In cases where it is desired to use the box in conduit work the various conduit fittings may be employed, the desired fittings being attached to the box by means of screws which are furnished with it. Ordinarily these fittings are attached to the box without the use of gasket; but where it is necessary or expedient to secure an absolutely water or gas-tight device, a small rubber gasket may be inserted between the planed surfaces of the fitting and the box.



No. 3682 Open

WATER-TIGHT FUSE BOXES

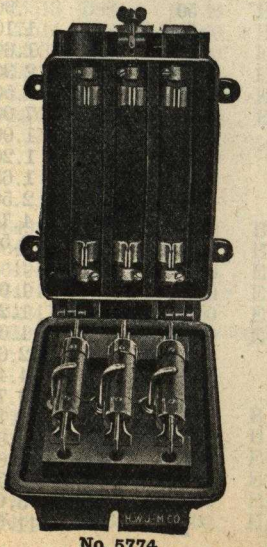
WITHOUT LOBSTER CLAWS

For 250-Volt Fuses

Trade No.	Mfrs. No.	Amperes	Type	No. Poles	Std. Pkg.	Price Each
064823	3670	61–100	E	2	25	$ 8.40
064824	3671	101–200	E	2	20	17.50
064825	3672	201–400	E	2	20	35.00
064826	3673	401–600	E	2	10	52.50
064827	3674	61–100	E	3	25	11.00
064828	3675	101–200	E	3	20	24.00
064829	3676	201–400	E	3	20	47.50

For 600-Volt Fuses

064831	5760	61–100	E	2	25	16.00
064832	5761	101–200	E	2	20	32.00
064833	5762	201–400	E	2	20	63.00
064835	5764	61–100	E	3	25	20.00
064836	5765	101–200	E	3	20	42.00
064837	5766	201–400	E	3	20	84.00
064838	5767	401–600	E	3	10	137.00



No. 5774

WATER-TIGHT SERVICE BOXES

WITH LOBSTER CLAWS

For 250-Volt Fuses

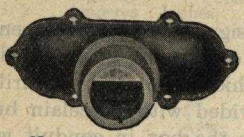
064839	3828	0– 30	B	2	25	7.25
064840	3829	31– 60	B	2	25	8.25
064841	3678	61–100	E	2	25	12.50
064842	3679	101–200	E	2	20	20.50
064843	3680	201–400	E	2	20	42.00
064844	3681	401–600	E	2	10	70.00
064847	3682	0–100	E	3	25	15.00
064848	3683	101–200	E	3	20	26.00
064849	3684	201–400	E	3	20	56.00
064850	3685	401–600	E	3	10	96.00

For 600-Volt Fuses

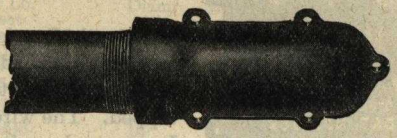
064851	5868	0– 30	B	2	25	8.25
064852	5869	31– 60	B	2	25	10.00
064853	5770	61–100	E	2	25	17.50
064854	5771	101–200	E	2	20	35.00
064855	5772	201–400	E	2	20	80.00
064857	5870	0– 30	B	3	25	10.00
064858	5871	31– 60	B	3	25	12.00
064859	5774	61–100	E	3	25	23.00
064860	5775	101–200	E	3	20	42.00
064861	5776	201–400	E	3	20	116.00
064862	5777	401–600	E	3	10	175.00

NOARK FITTINGS

NATIONAL ELECTRICAL CODE STANDARD
FOR WATER-TIGHT FUSE AND SERVICE BOXES



Nos. 3832 and 5872



Nos. 3836 and 5876

STRAIGHT-AWAY CONDUIT FITTINGS

For 250-Volt Boxes

Trade No.	Mfrs. No.	Amperes	Type	Poles	Std. Pkg.	Price Each
064863	3832	0– 30	B	2	50	$0.90
064864	3833	31– 60	B	2	50	1.10
064865	3702	61–100	E	2	50	1.60
064866	3703	101–200	E	2	40	2.30
064867	3704	201–400	E	2	40	3.50
064868	3705	401–600	E	2	20	10.40
064869	3834	0– 30	B	3	50	1.00
064870	3835	31– 60	B	3	50	1.20
064871	3706	61–100	E	3	50	1.65
064872	3707	101–200	E	3	40	2.50
064873	3708	201–400	E	3	40	4.75
064874	3709	401–600	E	3	20	9.50
		For 600-Volt Boxes				
064875	5872	0– 30	B	2	50	1.05
064876	5873	31– 60	B	2	50	1.25
064877	5780	61–100	E	2	50	1.65
064878	5781	101–200	E	2	40	2.65
064879	5782	201–400	E	2	40	4.40
064880	5783	401–600	E	2	20	9.70
064881	5874	0– 30	B	3	50	1.10
064882	5875	31– 60	B	3	50	1.30
064883	5784	61–100	E	3	50	1.80
064884	5785	101–200	E	3	40	3.00
064885	5786	201–400	E	3	40	5.60
064886	5787	401–600	E	3	20	11.50

NOTE.—Unless otherwise specified, straight-away conduit fittings will be furnished with a tapped hole to thread onto the conduit. If desired, they will be furnished to slip over conduit, and lock with a set screw.

RIGHT AND LEFT-HAND CONDUIT FITTINGS

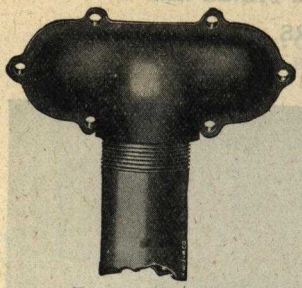
For 250-Volt Boxes

064887	3836	0– 30	B	2	50	.90
064888	3837	31– 60	B	2	50	1.10
064889	3710	61–100	E	2	50	1.60
064890	3711	101–200	E	2	40	2.30
064891	3712	201–400	E	2	40	3.50
064892	3713	401–600	E	2	20	7.00
064893	3838	0– 30	B	3	50	1.00
064894	3839	31– 60	B	3	50	1.20
064895	3714	61–100	E	3	50	1.65
064896	3715	101–200	E	3	40	2.50
064897	3716	201–400	E	3	40	4.75
064898	3717	401–600	E	3	20	9.50
		For 600-Volt Boxes				
064899	5876	0– 30	B	2	50	1.05
064900	5877	31– 60	B	2	50	1.25
064901	5790	61–100	E	2	50	1.65
064902	5791	101–200	E	2	40	2.65
064903	5792	201–400	E	2	40	4.40
064904	5793	401–600	E	2	20	9.70
064905	5878	0– 30	B	3	50	1.10
064906	5879	31– 60	B	3	50	1.30
064907	5794	61–100	E	3	50	1.80
064908	5795	101–200	E	3	40	3.50
064909	5796	201–400	E	3	40	5.60
064910	5797	401–600	E	3	20	11.50

NOARK FITTINGS

FOR WATER-TIGHT FUSE AND SERVICE BOXES

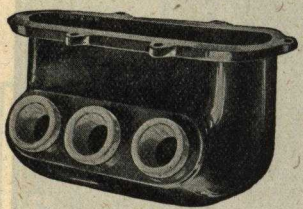
BACK ENTRANCE CONDUIT FITTINGS



Nos. 3718, 5800

For 250-volt Boxes

Trade No.	Mfrs. No.	Amperes	Type	No. Poles	Std. Pkg.	Price Each
25501	3780	0– 30	B	2	50	$0.90
25502	3781	31– 60	B	2	50	1.10
064911	3718	61–100	E	2	50	1.60
064912	3719	101–200	E	2	40	2.30
064913	3720	201–400	E	2	40	3.50
25503	3782	0– 30	B	3	50	1.00
25504	3783	31– 60	B	3	50	1.20
064915	3722	61–100	E	3	50	1.65
064916	3723	101–200	E	3	40	2.50
064917	3724	201–400	E	3	40	4.75



Nos. 3740, 5820

For 600-volt Boxes

25505	5880	0– 30	B	2	50	1.05
25506	5881	31– 60	B	2	50	1.25
064919	5800	61–100	E	2	50	1.65
064920	5801	101–200	E	2	40	2.65
064921	5802	201–400	E	2	40	4.40
25507	5882	0– 30	B	3	50	1.10
25508	5883	31– 60	B	3	50	1.30
064923	5804	61–100	E	3	50	1.80
064924	5805	101–200	E	3	40	3.00
064925	5806	201–400	E	3	40	5.60

ENTRANCE HOODS FOR POLE WORK

For 250-volt Boxes

Trade No.	Mfrs. No.	Amperes	Type	No. Poles	Std. Pkg.	Price Each	Trade No.	Mfrs. No.	Amperes	Type	No. Poles	Std. Pkg.	Price Each
25509	3784	0– 30	B	2	50	$1.65	25511	3786	0– 30	B	3	50	$1.90
25510	3785	31– 60	B	2	50	2.10	25512	3787	31– 60	B	3	50	2.40
064927	3740	61–100	E	2	50	2.80	064931	3744	61–100	E	3	50	3.20
064928	3741	101–200	E	2	40	5.80	064932	3745	101–200	E	3	40	6.30
064929	3742	201–400	E	2	40	11.50	064933	3746	201–400	E	3	40	12.60
064930	3743	401–600	E	2	20	21.00	064934	3747	401–600	E	3	20	24.50

For 600-volt Boxes

25513	5884	0– 30	B	2	50	2.40	25515	5886	0– 30	B	3	50	2.65
25514	5885	31– 60	B	2	50	2.85	25516	5887	31– 60	B	3	50	3.20
064935	5820	61–100	E	2	50	3.50	064939	5824	61–100	E	3	50	4.00
064936	5821	101–200	E	2	40	7.00	064940	5825	101–200	E	3	40	9.00
064937	5822	201–400	E	2	40	14.00	064941	5826	201–400	E	3	40	18.00
064938	5823	401–600	E	2	20	26.50	064942	5827	401–600	E	3	20	30.00

GASKETS FOR CONDUIT FITTINGS

For 250-volt Boxes

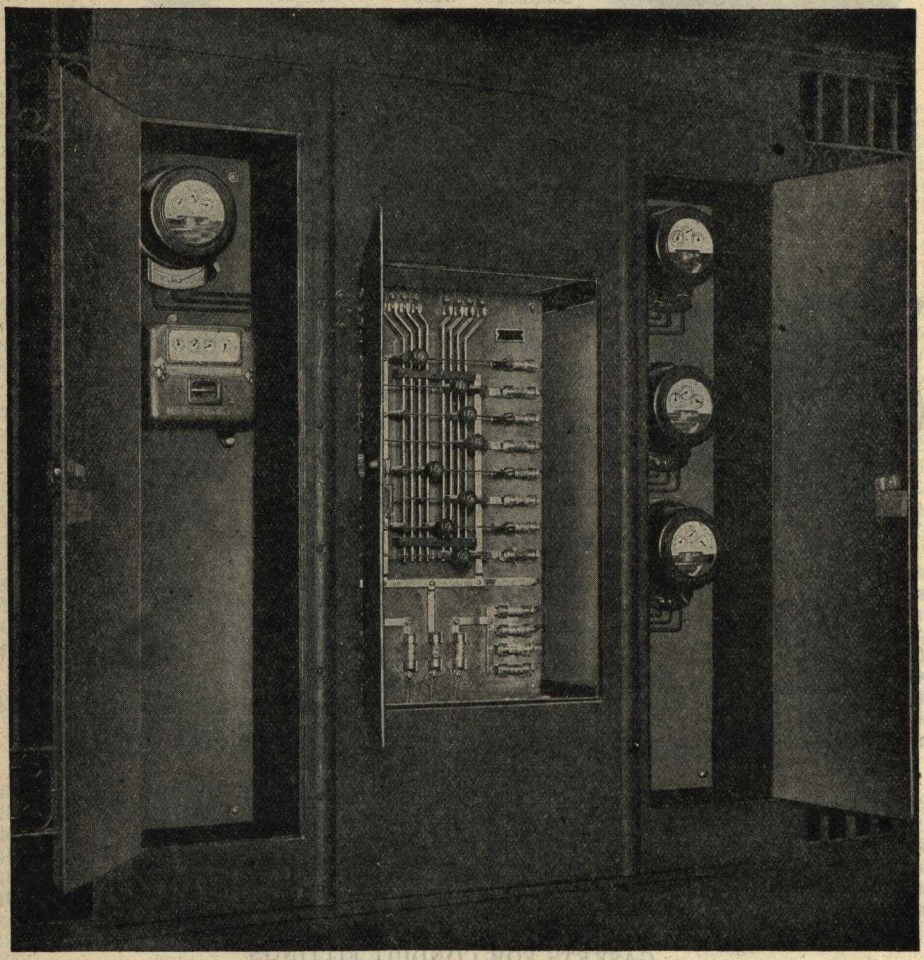
064943	3765	0– 30	B	2	50	.18	064949	3767	0– 30	B	3	50	.20
064944	3766	31– 60	B	2	50	.20	064950	3768	31– 60	B	3	50	.24
064945	3731	61–100	E	2	50	.24	064951	3735	61–100	E	3	50	.28
064946	3732	101–200	E	2	40	.35	064952	3736	101–200	E	3	40	.42
064947	3733	201–400	E	2	40	.65	064953	3737	201–400	E	3	40	.75
064948	3734	401–600	E	2	20	1.25	064954	3738	401–600	E	3	20	1.40

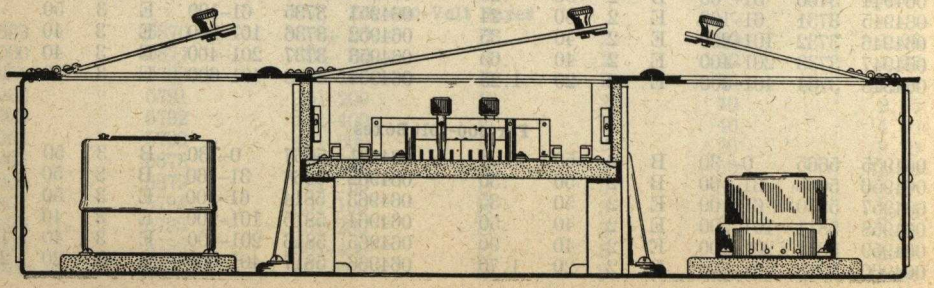
For 600-volt Boxes

064955	5665	0– 30	B	2	50	.24	064961	5667	0– 30	B	3	50	.32
064956	5666	31– 60	B	2	50	.30	064962	5668	31– 60	B	3	50	.38
064957	5810	61–100	E	2	50	.35	064963	5814	61–100	E	3	50	.42
064958	5811	101–200	E	2	40	.50	064964	5815	101–200	E	3	40	.58
064959	5812	201–400	E	2	40	.90	064965	5816	201–400	E	3	40	1.05
064960	5813	401–600	E	2	20	1.70	064966	5817	401–600	E	3	20	2.00

F. A. METER CONTROL PANEL AND CABINET

HAVING ONE COMPARTMENT FOR METER CONTROL PANEL AND SEPARATE COMPARTMENTS FOR METERS





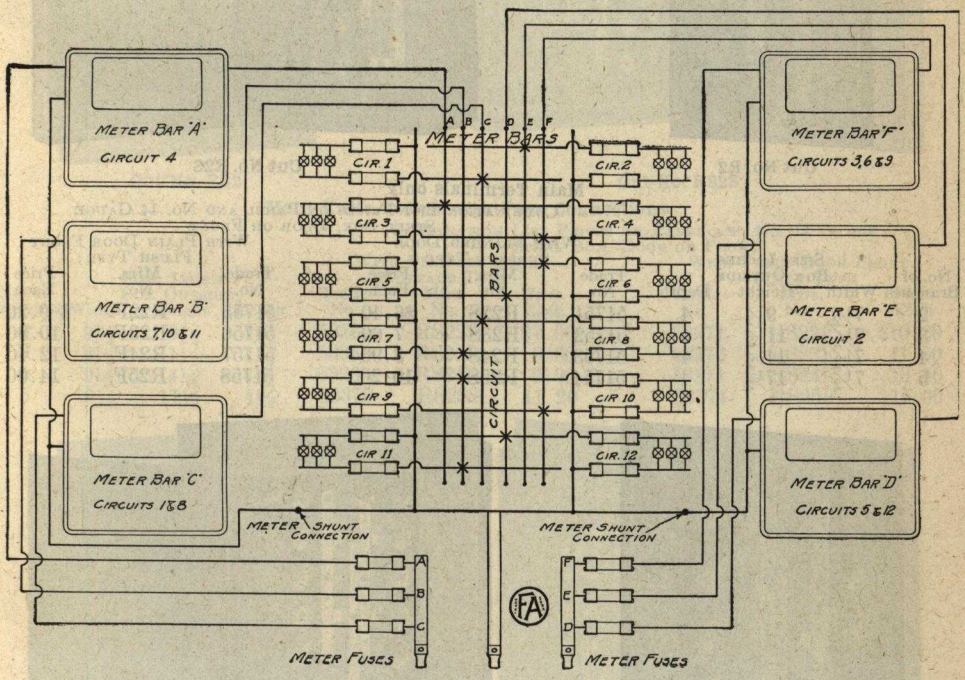
F. A. METER CONTROL PANEL AND CABINET

DIAGRAM OF CONNECTIONS

For a Twelve-tenant Circuit, Six-meter Fuse and Six-meter Bar, Meter Control, Panel Board Installation, Showing Two-wire Meters

For Three-wire Meters Connect to One-meter Fuse and One-meter Bar On Both Sides of Panel With Shunt Connection

NOTE—At all points of crossing of the meter bars and circuit bars connection can be readily made with a special connector according to the type of Meter Control Panel Boards specified.

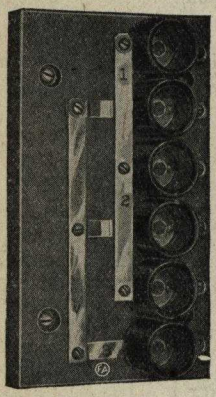


WIRING

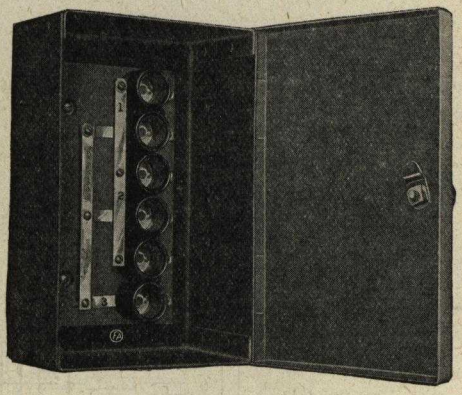
The proper circuit wiring for a Meter Control Panel Board installation is to provide for a separate circuit to the outlets in each section or space that can be rented either separate or in combination with other sections or space to meet the requirements of any tenant, in an office, store or warehouse building.

F. A. RESIDENCE TYPE PANELS

BASE.—Black slate, oiled finish, 7/8 inch thick.
MAINS.—30-ampere.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—Double pole Edison plug fuse connections.
BOX.—No. 14 gauge steel, 1 inch larger all around than panel, with knockout holes opposite terminals for mains and branches.
DOOR.—Flanged door, No. 14 gauge steel, for surface installation.
FRONT.—Made of No. 14 gauge steel, 3/4 inch larger all around than box for flush installations. All doors fitted with F. A. latch.



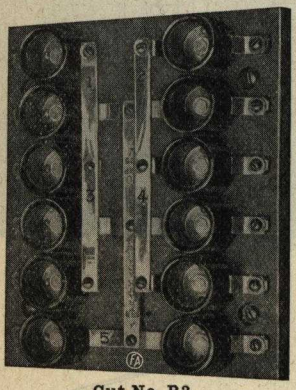
Cut No. R2



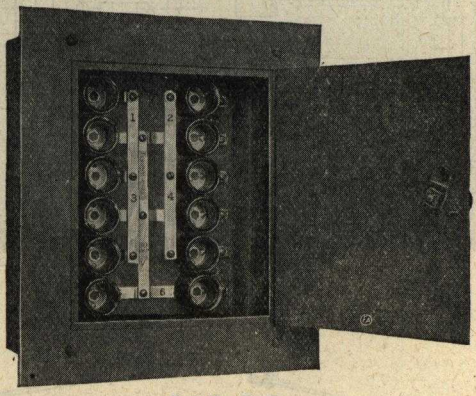
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Main Terminals only

No. of Branches	Size, Inches Box Outside Width	Height	Depth	With Flanged Door Surface Type Trade No.	Mfrs. No.	Price Each	With Plain Door Front Flush Type Trade No.	Mfrs. No.	Price Each
2	7½	9½	4	51751	R22S	$6.40	51755	R22F	$ 9.20
3	7½	11½	4	51752	R23S	7.60	51756	R23F	10.80
4	7½	14½	4	51753	R24S	8.90	51757	R24F	12.40
5	7½	17½	4	51754	R25S	10.20	51758	R25F	14.00



Cut No. R3



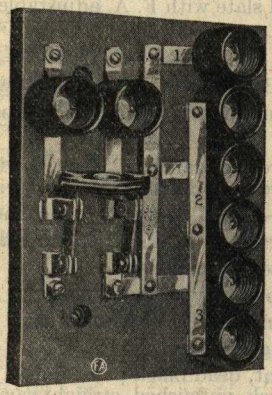
Cut No. R3F

Main Terminals only

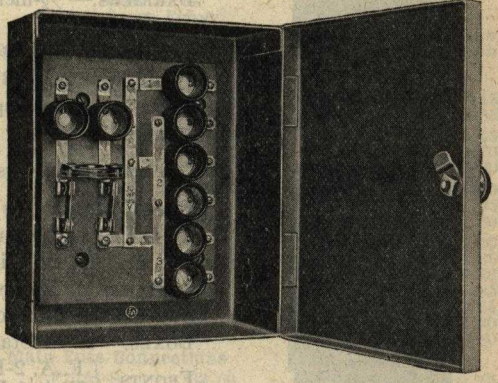
No. of Branches	Size, Inches Box Outside Width	Height	Depth	With Flanged Door Surface Type Trade No.	Mfrs. No.	Price Each	With Plain Door Front Flush Type Trade No.	Mfrs. No.	Price Each
4	8½	10½	4	51759	R34S	$ 9.30	51748	R34F	$13.30
6	10½	11½	4	51760	R36S	11.00	51747	R36F	15.00
8	10½	14½	4	51750	R38S	13.10	51746	R38F	17.30
10	10½	17½	4	51749	R310S	15.20	51145	R310F	19.60

F. A. RESIDENCE TYPE PANELS

BASE—Black slate, oiled finish, 7/8 inch thick.
MAINS.—30-ampere.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—Double pole Edison plug fuse connections.
BOX.—No. 14 gauge steel, 1 inch larger all around than panel, with knockout holes opposite terminals for mains, meter loops and branches.
DOOR:—Flanged door, No. 14 gauge steel, for surface installation.
FRONT.—Made of No. 14 gauge steel, 3/4 inch larger all around than box for flush installation. All doors fitted with F. A. latch.



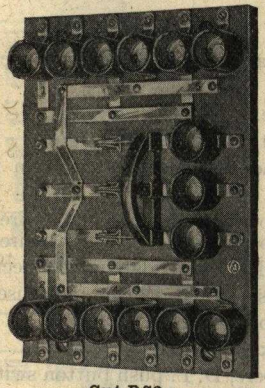
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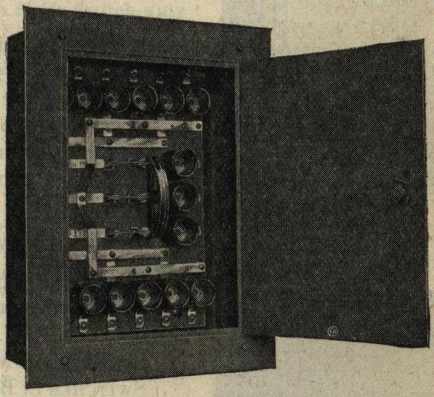
Cut No. RS2S

Main Knife Switch with Fuse Connections

No. of Branches	Size, Inches Box Outside Width	Height	Depth	Combination List Prices on Panel and No. 14 Gauge Steel Box, Door or Front: With Flanged Door Surface Type Trade No.	Mfrs. No.	Price Each	With Plain Door Front Flush Type Trade No.	Mfrs. No.	Price Each
2	9½	9½	4½	53367	RS22S	$7.00	53371	RS22F	$10.20
3	9½	11½	4½	53368	RS23S	8.60	53372	RS23F	11.80
4	9½	14½	4½	53369	RS24S	9.90	53373	RS24F	13.40
5	9½	17½	4½	53370	RS25S	11.20	53374	RS25F	15.00



Cut RS3

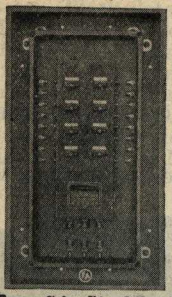


Cut RS3F

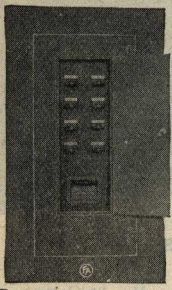
Main Knife Switch with Fuse Connections

No. of Branches	Size, Inches Box Outside Width	Height	Depth	Combination List Prices on Panel and No. 14 Gauge Steel Box, Door or Front: With Flanged Door Surface, Type Trade No.	Mfrs. No.	Price Each	With Plain Door Front Flush Type Trade No.	Mfrs. No.	Price Each
4	9½	14½	4½	53375	RS34S	$11.50	53379	RS34F	$15.50
6	11½	14½	4½	53376	RS36S	13.20	53380	RS36F	17.20
8	14½	14½	4½	53377	RS38S	15.30	53381	RS38F	19.50
10	17½	14½	4½	53378	RS310S	17.40	53382	RS310F	21.80

F. A. SAFETY FOOL-PROOF PANELS AND CABINETS



Type S in Steel Box without Front



Type S in Steel Box with Front

TYPE S

Manufactured under Krantz Patents

30-AMPERE KRANTZ ROTARY BRANCH SWITCHES

General Specifications

BASE.— 7/8-inch black oiled slate.

BARRIERS.— 1/2-inch black oiled slate with F. A. adjustable corner supports.

SAFETY COVER.— 3/8-inch black oiled slate.

CARD HOLDER.— Brass Bauer-Barff finish, one for each switch.

GUTTER.— 3-inch space all around panel, separated from panel by the barriers.

CAPACITY OF MAINS. { 6-ampere per branch, 125-volt, 2-wire. / 3-ampere per branch, 125-volt, 3-wire.

FUSE CONNECTIONS FOR MAINS.— N. C. cartridge fuse connections.

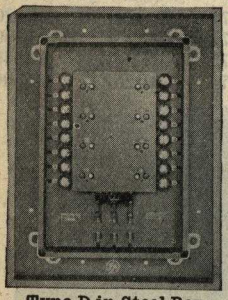
FUSE CONNECTIONS FOR BRANCHES.— D. P. N. C. cartridge fuse connections. D. P. Edison plug fuse connections.

SWITCHES IN MAINS.— Safety brush type, quick break.

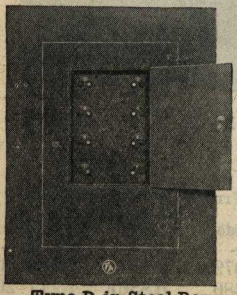
SWITCHES IN BRANCHES.— 30-ampere, D. P. Krantz snap switch.

BOXES.— F. A. Standard code gauge steel.

FRONTS. { F. A. 2-P-6 steel front, dead black paint finish. / F. A. 1-P-6 7/8 in. thick, unfinished, straight sawed oak.



Type D in Steel Box without Front



Type D in Steel Box with Front

TYPE D

Competition Type

10-AMPERE PUSH BUTTON BRANCH SWITCHES

General Specifications

BASE.— 7/8-inch black oiled slate.

BARRIERS.— 1/2-inch black oiled slate with F. A. adjustable corner supports.

SAFETY COVER.— 3/32-inch micanite.

NUMBER PLATE.— Black fiber, with white letters.

GUTTER.— 3-inch space all around panel, separated from panel by the barriers.

CAPACITY OF MAINS. { 6-ampere per branch, 125-volt, 2-wire. / 3-ampere per branch, 125-volt, 3-wire.

FUSE CONNECTIONS FOR MAINS.— N. C. cartridge fuse connections.

FUSE CONNECTIONS FOR BRANCHES.— D. P. Edison plug fuse connections. D. P. N. C. cartridge fuse connections.

SWITCHES IN MAINS.— Standard knife switch.

SWITCHES IN BRANCHES.— 10-ampere, D. P. push button switches.

BOXES.— F. A. Standard code gauge steel.

FRONTS. { F. A. 2-P-6 steel front dead black paint finish. / F. A. 1-P-6 7/8 in. thick, unfinished, straight sawed oak.

Door over fuse compartment equipped with F. A. combination Yale lock spring catch; door over switch compartment having catch only.

F. A. SAFETY FOOL-PROOF PANEL BOARDS AND CABINETS

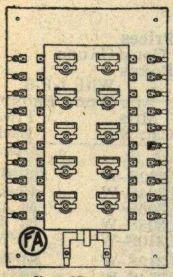
TYPE S—MAINS, TWO-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

Manufactured under Krantz Patents

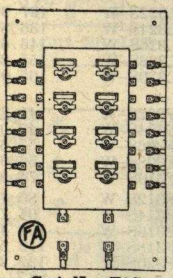
BASE.— Black slate, oiled finish, 7/8 inch thick.

BRANCHES.— 30-amp. D. P. Krantz snap switch with D. P. enclosed cartridge or Edison plug fuse connections.

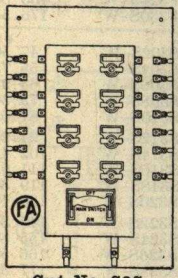
FRONTS.— 2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



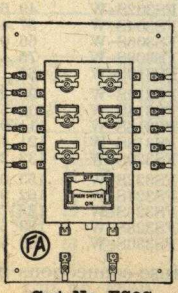
Cut No. L2S



Cut No. F2S



Cut No. S2S



Cut No. FS2S

No. Cir.	Size Box Outside, Inches Width	Height	Depth	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Mfrs. Cat. No.	Price Each	With 1-P-6 All Wood Front Mfrs. Cat. No.	Price Each
Main Cable Lugs only							
2	21	16	5	L202S–S	$30.40	L202S–W	$37.15
4	21	19	5	L204S–S	38.65	L204S–W	45.85
6	21	22	5	L206S–S	46.65	L206S–W	53.65
8	21	25	5	L208S–S	55.45	L208S–W	62.70
10	21	28	5	L210S–S	62.85	L210S–W	70.20
12	21	31	5	L212S–S	72.20	L212S–W	79.70
14	21	34	5	L214S–S	81.10	L214S–W	89.15
16	21	37	5	L216S–S	88.75	L216S–W	97.50
18	21	40	5	L218S–S	98.60	L218S–W	108.10
20	21	43	5	L220S–S	107.00	L220S–W	115.35
22	21	46	5	L222S–S	118.80	L222S–W	126.20
24	23	51	5	L224S–S	126.90	L224S–W	134.85
26	23	54	5	L226S–S	136.00	L226S–W	144.65
28	23	57	5	L228S–S	144.10	L228S–W	153.20
30	23	60	5	L230S–S	152.90	L230S–W	163.80
Main Fuse Connections							
2	21	17	5	F202S–S	32.60	F202S–W	39.55
4	21	20	5	F204S–S	40.95	F204S–W	48.25
6	21	25	5	F206S–S	50.05	F206S–W	57.55
8	21	28	5	F208S–S	57.95	F208S–W	65.30
10	21	31	5	F210S–S	66.25	F210S–W	74.20
12	21	37	5	F212S–S	76.00	F212S–W	86.10
14	21	40	5	F214S–S	85.90	F214S–W	96.20
16	21	43	5	F216S–S	93.65	F216S–W	103.90
18	21	47	5	F218S–S	108.50	F218S–W	116.80
20	23	52	5	F220S–S	117.00	F220S–W	126.25
22	23	55	5	F222S–S	126.50	F222S–W	136.30
24	23	58	5	F224S–S	134.70	F224S–W	145.00
26	23	61	5	F226S–S	143.80	F226S–W	156.65
28	23	64	5	F228S–S	151.80	F228S–W	165.75
30	23	67	5	F230S–S	160.70	F230S–W	176.45
Main Knife Switch only							
2	21	21	5	S202S–S	37.00	S202S–W	44.40
4	21	24	5	S204S–S	45.35	S204S–W	53.15
6	21	28	5	S206S–S	54.95	S206S–W	62.70
8	21	31	5	S208S–S	63.65	S208S–W	72.20
10	21	34	5	S210S–S	71.05	S210S–W	80.20
12	21	37	5	S212S–S	83.70	S212S–W	94.00
14	21	40	5	S214S–S	92.00	S214S–W	102.60
16	21	43	5	S216S–S	103.05	S216S–W	111.70
18	21	48	5	S218S–S	120.30	S218S–W	130.90
20	23	53	5	S220S–S	129.90	S220S–W	140.30
22	23	56	5	S222S–S	138.60	S222S–W	149.35
24	23	59	5	S224S–S	147.90	S224S–W	161.00
26	23	62	5	S226S–S	156.40	S226S–W	170.30
28	23	65	5	S228S–S	165.40	S228S–W	181.40
30	23	68	5	S230S–S	173.70	S230S–W	193.25
Main Knife Switch with Fuse Connections							
2	21	24	5	FS202S–S	38.40	FS202S–W	45.80
4	21	27	5	FS204S–S	46.75	FS204S–W	54.55
6	21	30	5	FS206S–S	56.35	FS206S–W	64.10
8	21	33	5	FS208S–S	65.05	FS208S–W	73.60
10	21	36	5	FS210S–S	72.45	FS210S–W	81.60
12	21	43	5	FS212S–S	87.70	FS212S–W	98.00
14	21	46	5	FS214S–S	99.30	FS214S–W	107.20
16	23	51	5	FS216S–S	106.95	FS216S–W	115.90
18	23	58	5	FS218S–S	126.80	FS218S–W	137.80
20	23	61	5	FS220S–S	136.20	FS220S–W	147.40
22	23	64	5	FS222S–S	145.00	FS222S–W	156.55
24	23	67	5	FS224S–S	154.20	FS224S–W	168.20
26	23	70	5	FS226S–S	162.80	FS226S–W	177.60
28	23	73	5	FS228S–S	171.90	FS228S–W	188.70
30	23	76	5	FS230S–S	179.30	FS230S–W	200.85

Unless otherwise specified, panels having cartridge fuse connections in the circuit branches will be furnished.

F. A. SAFETY FOOL-PROOF PANEL BOARDS AND CABINETS

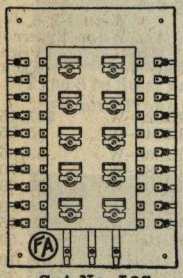
TYPE S—MAINS, THREE-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 3 AMPERES

Manufactured under Krantz Patents

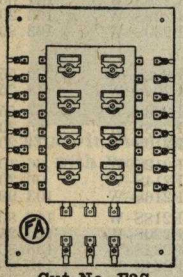
BASE.— Black slate, oil finish, 7/8-inch thick.

BRANCHES.— 30-amp. D. P. Krantz snap switch with D. P. enclosed cartridge or Edison plug fuse connections.

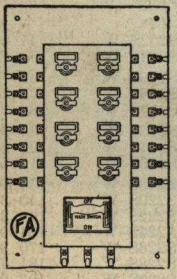
FRONTS.— 2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



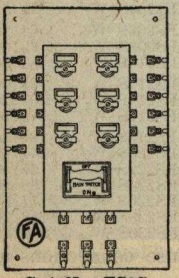
Cut No. L3S



Cut No. F3S



Cut No. S3S



Cut No. FS3S

No. Cir.	Size Box Outside, Inches Width	Height	Depth	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Mfrs. Cat. No.	Price Each	With 1-P-6 All Wood Front Mfrs. Cat. No.	Price Each
Main Cable Lugs only							
2	21	16	5	L302S–S	$31.30	L302S–W	$38.05
4	21	19	5	L304S–S	38.65	L304S–W	45.85
6	21	22	5	L306S–S	47.45	L306S–W	54.45
8	21	25	5	L308S–S	56.55	L308S–W	63.80
10	21	28	5	L310S–S	64.35	L310S–W	71.70
12	21	32	5	L312S–S	73.50	L312S–W	81.00
14	21	35	5	L314S–S	81.50	L314S–W	89.45
16	21	38	5	L316S–S	90.35	L316S–W	99.10
18	21	41	5	L318S–S	98.00	L318S–W	107.50
20	21	44	5	L320S–S	107.20	L320S–W	115.55
22	21	47	5	L322S–S	120.50	L322S–W	127.90
24	23	52	5	L324S–S	128.90	L324S–W	136.85
26	23	55	5	L326S–S	138.00	L326S–W	146.65
28	23	58	5	L328S–S	146.10	L328S–W	155.20
30	23	61	5	L330S–S	155.00	L330S–W	165.90
Main Fuse Connections							
2	21	19	5	F302S–S	34.30	F302S–W	41.25
4	21	22	5	F304S–S	41.75	F304S–W	49.05
6	21	25	5	F306S–S	48.45	F306S–W	55.65
8	21	28	5	F308S–S	59.55	F308S–W	66.90
10	21	31	5	F310S–S	67.45	F310S–W	74.95
12	21	36	5	F312S–S	77.90	F312S–W	85.70
14	21	39	5	F314S–S	85.70	F314S–W	94.70
16	21	42	5	F316S–S	94.45	F316S–W	104.40
18	21	45	5	F318S–S	102.10	F318S–W	112.50
20	23	50	5	F320S–S	114.10	F320S–W	122.20
22	23	56	5	F322S–S	127.00	F322S–W	136.40
24	23	59	5	F324S–S	135.70	F324S–W	145.15
26	23	62	5	F326S–S	144.00	F326S–W	155.95
28	23	65	5	F328S–S	152.70	F328S–W	165.50
30	23	68	5	F330S–S	161.70	F330S–W	176.55
Main Knife Switch only							
2	21	22	5	S302S–S	40.10	S302S–W	47.50
4	21	25	5	S304S–S	47.55	S304S–W	55.75
6	21	28	5	S306S–S	56.25	S306S–W	63.95
8	21	31	5	S308S–S	65.35	S308S–W	73.30
10	21	34	5	S310S–S	73.05	S310S–W	81.65
12	21	38	5	S312S–S	84.40	S312S–W	94.20
14	21	41	5	S314S–S	92.20	S314S–W	102.45
16	21	44	5	S316S–S	101.05	S316S–W	111.95
18	21	47	5	S318S–S	111.40	S318S–W	119.30
20	23	52	5	S320S–S	120.80	S320S–W	130.10
22	23	55	5	S322S–S	135.90	S322S–W	145.80
24	23	58	5	S324S–S	145.20	S324S–W	155.80
26	23	61	5	S326S–S	153.10	S326S–W	166.50
28	23	64	5	S328S–S	162.30	S328S–W	177.30
30	23	67	5	S330S–S	170.50	S330S–W	186.25
Main Knife Switch with Fuse Connections							
2	21	25	5	FS302S–S	42.20	FS302S–W	49.60
4	21	28	5	FS304S–S	49.65	FS304S–W	57.45
6	21	31	5	FS306S–S	58.35	FS306S–W	66.05
8	21	34	5	FS308S–S	67.45	FS308S–W	75.40
10	21	37	5	FS310S–S	75.15	FS310S–W	84.15
12	21	40	5	FS312S–S	86.50	FS312S–W	96.30
14	21	43	5	FS314S–S	94.30	FS314S–W	104.55
16	21	46	5	FS316S–S	103.15	FS316S–W	114.00
18	23	51	5	FS318S–S	113.50	FS318S–W	121.40
20	23	54	5	FS320S–S	123.90	FS320S–W	132.20
22	23	61	5	FS322S–S	133.30	FS322S–W	153.00
24	23	64	5	FS324S–S	150.90	FS324S–W	162.90
26	23	67	5	FS326S–S	159.60	FS326S–W	173.70
28	23	70	5	FS328S–S	168.00	FS328S–W	183.50
30	23	73	5	FS330S–S	176.90	FS330S–W	193.45

Unless otherwise specified, panels having cartridge fuse connections in the circuit branches will be furnished.

F. A. SAFETY PANEL BOARDS AND CABINETS

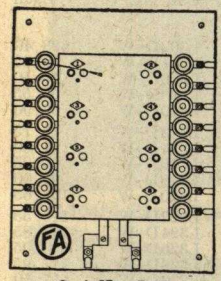
TYPE D—MAINS, 2-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

Competition Type

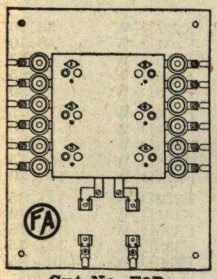
BASE.— Black slate, oil finish, 7/8 inch thick.

BRANCHES.— 10-amp. D. P. push button switches with D. P. Edison plug or cartridge fuse connections.

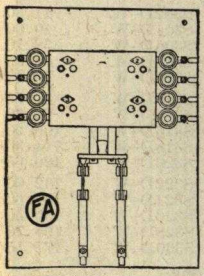
FRONTS.— 2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



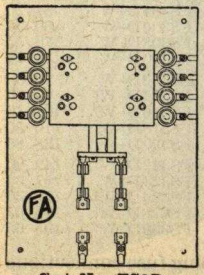
Cut No. L2D



Cut No. F2D



Cut No. S2D



Cut No. FS2D

No. Cir.	Size Box Outside, Inches Width	Height	Depth	Combination Prices: Panel Barriers and Code Gauge Steel Gutter Boxes — With 2-P-6 All Steel Front Mfrs. Cat. No.	Price Each	With 1-P-6 All Wood Front Mfrs. Cat. No.	Price Each
Main Cable Lugs only							
2	21	16	4½	L202D–S	$24.50	L202D–W	$27.45
4	21	19	4½	L204D–S	32.05	L204D–W	36.35
6	21	22	4½	L206D–S	39.45	L206D–W	44.70
8	21	25	4½	L208D–S	47.45	L208D–W	54.40
10	21	28	4½	L210D–S	54.50	L210D–W	62.35
12	21	31	4½	L212D–S	62.75	L212D–W	72.05
14	21	34	4½	L214D–S	70.80	L214D–W	81.20
16	21	37	4½	L216D–S	78.10	L216D–W	89.30
18	21	40	4½	L218D–S	87.45	L218D–W	100.40
20	21	43	4½	L220D–S	95.05	L220D–W	108.85
22	21	46	4½	L222D–S	102.75	L222D–W	117.75
24	23	51	4½	L224D–S	115.55	L224D–W	129.10
26	23	54	4½	L226D–S	123.15	L226D–W	137.95
28	23	57	4½	L228D–S	131.20	L228D–W	147.15
30	23	60	4½	L230D–S	138.60	L230D–W	155.30
Main Fuse Connections							
2	21	18	4½	F202D–S	27.15	F202D–W	31.45
4	21	21	4½	F204D–S	34.85	F204D–W	40.50
6	21	25	4½	F206D–S	42.80	F206D–W	49.75
8	21	28	4½	F208D–S	50.20	F208D–W	58.05
10	21	31	4½	F210D–S	57.70	F210D–W	67.00
12	21	37	4½	F212D–S	67.90	F212D–W	79.85
14	21	40	4½	F214D–S	75.90	F214D–W	88.85
16	21	43	4½	F216D–S	83.30	F216D–W	97.10
18	23	51	4½	F218D–S	97.60	F218D–W	110.75
20	23	54	4½	F220D–S	107.85	F220D–W	122.75
22	23	56	4½	F222D–S	115.50	F222D–W	130.85
24	23	59	4½	F224D–S	123.35	F224D–W	140.05
26	23	62	4½	F226D–S	131.05	F226D–W	148.25
28	23	65	4½	F228D–S	139.00	F228D–W	157.25
30	23	68	4½	F230D–S	146.45	F230D–W	165.20
Main Knife Switch only							
2	21	19	4½	S202D–S	31.75	S202D–W	38.05
4	21	22	4½	S204D–S	39.25	S204D–W	46.70
6	21	29	4½	S206D–S	48.40	S206D–W	57.70
8	21	32	4½	S208D–S	56.10	S208D–W	66.50
10	21	35	4½	S210D–S	63.20	S210D–W	74.40
12	21	41	4½	S212D–S	75.05	S212D–W	88.80
14	21	44	4½	S214D–S	82.80	S214D–W	96.90
16	21	47	4½	S216D–S	90.15	S216D–W	105.55
18	23	54	6	S218D–S	112.00	S218D–W	127.95
20	23	57	6	S220D–S	119.50	S220D–W	136.20
22	23	59	6	S222D–S	127.75	S222D–W	145.45
24	23	62	6	S224D–S	135.30	S224D–W	153.55
26	23	65	6	S226D–S	143.20	S226D–W	163.15
28	23	68	6	S228D–S	151.15	S228D–W	172.00
30	23	71	6	S230D–S	158.80	S230D–W	181.90
Main Knife Switch with Fuse Connections							
2	21	20	4½	FS202D–S	33.20	FS202D–W	39.50
4	21	23	4½	FS204D–S	40.70	FS204D–W	48.15
6	21	29	4½	FS206D–S	49.85	FS206D–W	59.15
8	21	32	4½	FS208D–S	57.55	FS208D–W	67.95
10	21	35	4½	FS210D–S	64.65	FS210D–W	75.85
12	21	43	4½	FS212D–S	79.20	FS212D–W	93.30
14	21	46	4½	FS214D–S	87.20	FS214D–W	102.60
16	23	51	4½	FS216D–S	99.70	FS216D–W	113.30
18	23	59	6	FS218D–S	117.80	FS218D–W	134.50
20	23	62	6	FS220D–S	125.45	FS220D–W	142.65
22	23	65	6	FS222D–S	133.65	FS222D–W	151.90
24	23	68	6	FS224D–S	141.30	FS224D–W	160.05
26	23	70	6	FS226D–S	149.05	FS226D–W	170.05
28	23	73	6	FS228D–S	157.05	FS228D–W	178.95
30	23	76	6	FS230D–S	164.70	FS230D–W	188.85

Unless otherwise specified panels having Edison plug fuse connections in the circuit branches will be furnished.

F. A. SAFETY PANEL BOARDS AND CABINETS

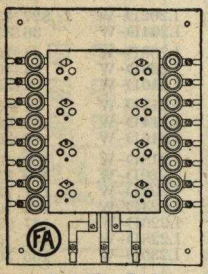
TYPE D—MAINS, THREE-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 3 AMPERES

Competition Type

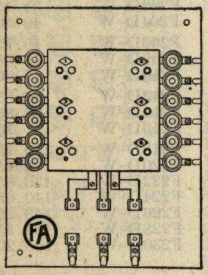
BASE.— Black slate, oiled finish, 7/8 inch thick.

BRANCHES.— 10-amp. D. P. push button switches with D. P. Edison plug or cartridge fuse connections.

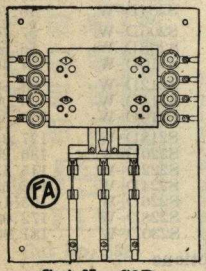
FRONTS.— 2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



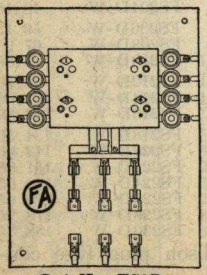
Cut No. L3D



Cut No. F3D



Cut No. S3D

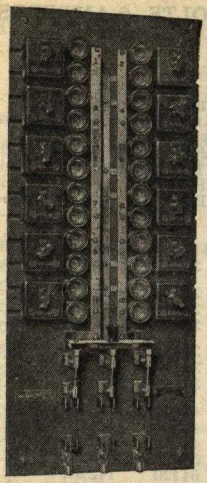


Cut No. FS3D

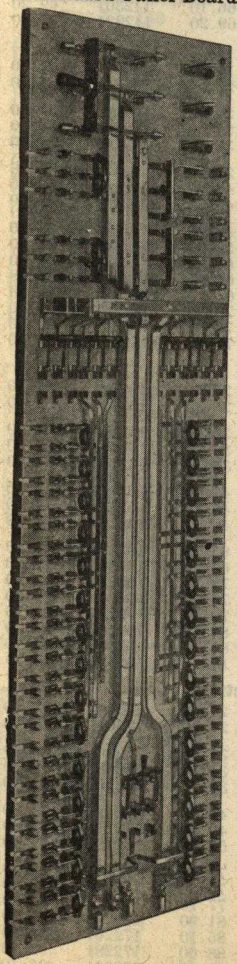
No. Cir.	Size Box Outside, Inches Width	Height	Depth	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Mfrs. Cat. No.	Price Each	With 1-P-6 All Wood Front Mfrs. Cat. No.	Price Each
Main Cable Lugs only							
2	21	16	4½	L302D–S	$25.45	L302D–W	$28.40
4	21	19	4½	L304D–S	32.05	L304D–W	36.35
6	21	22	4½	L306D–S	40.25	L306D–W	45.50
8	21	25	4½	L308D–S	48.60	L308D–W	55.55
10	21	28	4½	L310D–S	56.05	L310D–W	63.90
12	21	31	4½	L312D–S	64.15	L312D–W	72.75
14	21	34	4½	L314D–S	71.60	L314D–W	81.80
16	21	37	4½	L316D–S	79.75	L316D–W	90.95
18	21	40	4½	L318D–S	86.85	L318D–W	99.00
20	21	43	4½	L320D–S	94.90	L320D–W	108.65
22	23	45	4½	L322D–S	104.55	L322D–W	119.55
24	25	50	4½	L324D–S	114.70	L324D–W	127.85
26	25	53	4½	L326D–S	125.25	L326D–W	140.05
28	25	56	4½	L328D–S	132.60	L328D–W	147.95
30	25	59	4½	L330D–S	140.80	L330D–W	157.50
Main Fuse Connections							
2	21	18	4½	F302D–S	28.90	F302D–W	33.20
4	21	21	4½	F304D–S	35.10	F304D–W	40.10
6	21	24	4½	F306D–S	41.25	F306D–W	47.55
8	21	27	4½	F308D–S	51.40	F308D–W	58.85
10	21	30	4½	F310D–S	58.95	F310D–W	67.30
12	21	35	4½	F312D–S	68.35	F312D–W	78.75
14	21	38	4½	F314D–S	75.90	F314D–W	87.10
16	21	40	4½	F316D–S	83.55	F316D–W	95.85
18	21	43	4½	F318D–S	91.00	F318D–W	104.75
20	21	46	4½	F320D–S	99.30	F320D–W	114.30
22	25	54	4½	F322D–S	116.25	F322D–W	131.05
24	25	57	4½	F324D–S	124.45	F324D–W	140.40
26	25	60	4½	F326D–S	132.05	F326D–W	148.75
28	25	63	4½	F328D–S	140.05	F328D–W	157.75
30	25	66	4½	F330D–S	147.60	F330D–W	165.85
Main Knife Switch only							
2	21	20	4½	S302D–S	35.00	S302D–W	41.30
4	21	22	4½	S304D–S	44.55	S304D–W	49.00
6	21	25	4½	S306D–S	49.75	S306D–W	58.10
8	21	28	4½	S308D–S	58.15	S308D–W	68.35
10	21	31	4½	S310D–S	65.35	S310D–W	76.45
12	21	37	4½	S312D–S	75.45	S312D–W	87.75
14	21	40	4½	S314D–S	83.05	S314D–W	96.80
16	21	43	4½	S316D–S	91.20	S316D–W	106.20
18	21	46	4½	S318D–S	101.15	S318D–W	114.30
20	23	51	4½	S320D–S	111.85	S320D–W	126.65
22	25	59	4½	S322D–S	126.05	S322D–W	142.00
24	25	62	4½	S324D–S	134.40	S324D–W	151.60
26	25	65	4½	S326D–S	141.80	S326D–W	159.50
28	25	68	4½	S328D–S	150.00	S328D–W	168.75
30	25	71	4½	S330D–S	157.35	S330D–W	177.15
Main Knife Switch with Fuse Connections							
2	21	20	4½	FS302D–S	37.20	FS302D–W	43.50
4	21	23	4½	FS304D–S	43.75	FS304D–W	51.20
6	21	26	4½	FS306D–S	51.95	FS306D–W	60.30
8	21	29	4½	FS308D–S	60.35	FS308D–W	70.55
10	21	32	4½	FS310D–S	67.70	FS310D–W	78.70
12	21	38	4½	FS312D–S	77.70	FS312D–W	90.00
14	21	41	4½	FS314D–S	85.25	FS314D–W	99.00
16	21	44	4½	FS316D–S	93.40	FS316D–W	108.40
18	21	47	4½	FS318D–S	103.35	FS318D–W	116.50
20	23	51	4½	FS320D–S	114.05	FS320D–W	128.85
22	25	61	4½	FS322D–S	132.70	FS322D–W	149.90
24	25	64	4½	FS324D–S	140.25	FS324D–W	157.95
26	25	67	4½	FS326D–S	148.55	FS326D–W	167.30
28	25	70	4½	FS328D–S	155.85	FS328D–W	175.65
30	25	72	4½	FS330D–S	163.60	FS330D–W	195.65

Unless otherwise specified panels having Edison plug fuse connections in the circuit branches will be furnished.

F. A. STANDARD PANEL BOARDS



Standard Panel Board



Special Panel Board

STANDARD PANEL BOARDS

BASE.—Black slate, oil finish. Black enameled slate. Marble, as specified.

FINISH.—Main and branch bus bars polished and lacquered. Deduct 5 per cent for all plain finish.

VOLTAGE.—Spaced for 125, special 250 volts.

CAPACITY OF BUS BAR PER CIRCUIT.—6-ampere, for 125-volt, two-wire. 3-ampere, for 125-250-volt, three-wire.

FUSE CONNECTIONS.—For New Code enclosed fuses. Edison plug fuses. Open link fuse connections, same price as enclosed.

MAIN FUSE.—With or without main fuses, as above.

MAIN SWITCH.—With or without main knife switch.

BRANCH SWITCHES.—With or without branch switches either 10-ampere push button, 10-ampere indicating snap or 30-ampere knife switches.

KNIFE SWITCHES.—The use of knife switches on panels are advocated for disconnecting circuits.

SNAP OR PUSH BUTTON SWITCHES.—The use of either push button or indicating snap switches are advocated for controlling lights from panel.

MAIN TERMINALS.—Main terminals will always be placed at bottom of board unless specified at top.

SPECIAL PANEL BOARDS

Special panels are built for any voltage, capacity or number of circuits, and bus bars for any system, all in accordance with specifications furnished by customers.

For 250 volts, two-wire, prices on application.

For 250 volts, three-wire, prices on application.

METER CONTROL PANEL BOARDS

No office building, large or small, is complete without a system of meter control panel boards. Send specifications to figure.

A plain meter panel is made with sectional bus bar connected together with wire from meter, and is reasonable in price.

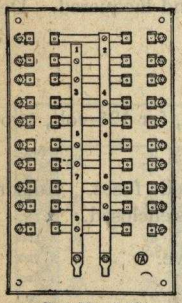
Patented F. A. Meter Control Panel Boards with separate meter bar for the number of tenant meters desired is also made; with these panels changes can be made in tenant circuits from one meter to another without wire connections.

F. A. PANEL BOARDS

TYPE 1—MAINS, TWO-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

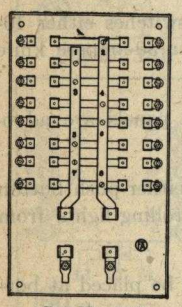
BASE.—Black slate, oiled finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—D. P. New Code enclosed fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.

No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
				Main Cable Lugs only					
2	10	6	14202	$4.10	$2.80	142022	$17.60	142021	$22.10
4	10	9	14204	6.30	3.00	142042	20.40	142041	25.00
6	10	12	14206	8.40	3.20	142062	23.10	142061	27.80
8	10	15	14208	10.30	3.60	142082	26.20	142081	31.20
10	10	17	14210	12.30	3.80	142102	28.70	142101	33.80
12	10	20	14212	14.90	4.00	142122	32.00	142121	37.20
14	10	22	14214	17.20	4.20	142142	34.80	142141	40.10
16	10	24	14216	19.50	4.40	142162	37.70	142161	43.10
18	10	28	14218	22.90	4.80	142182	42.40	142181	48.00
20	10	30	14220	25.00	5.00	142202	45.10	142201	50.80
22	10	33	14222	27.10	5.30	142222	48.20	142221	54.10
24	10	35	14224	29.50	5.50	142242	51.30	142241	57.20
26	10	38	14226	31.70	5.70	142262	54.20	142261	60.00
28	10	40	14228	33.80	5.90	142282	60.10	142281	62.90
30	10	43	14230	35.80	6.20	142302	66.10	142301	69.20
32	10	45	14232	38.10	6.40	142322	69.20	142321	72.40



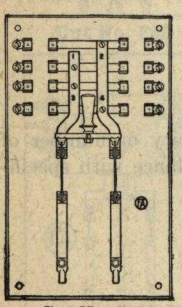
Cut No. 142

				Main Fuse Connections					
2	10	9	15202	5.60	3.00	152022	19.70	152021	24.30
4	10	11	15204	7.80	3.20	152042	22.50	152041	27.20
6	10	16	15206	10.20	3.60	152062	26.10	152061	31.10
8	10	18	15208	12.10	3.80	152082	28.50	152081	33.60
10	10	21	15210	14.10	4.20	152102	31.70	152101	37.00
12	10	26	15212	17.60	4.60	152122	36.40	152121	41.90
14	10	29	15214	19.90	5.00	152142	40.00	152141	45.70
16	10	31	15216	22.20	5.10	152162	42.80	152161	48.60
18	10	36	15218	27.20	5.50	152182	49.00	152181	54.90
20	10	39	15220	29.30	5.90	152202	55.60	152201	58.40
22	10	41	15222	31.40	6.00	152222	60.90	152221	63.90
24	10	44	15224	33.80	6.20	152242	64.10	152241	67.20
26	10	46	15226	36.00	6.40	152262	67.10	152261	70.30
28	10	48	15228	38.10	6.60	152282	70.00	152281	73.40
30	10	51	15230	40.10	7.00	152302	73.60	152301	77.60
32	10	53	15232	42.40	7.20	152322	76.60	152321	81.00



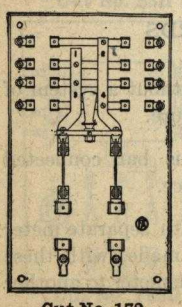
Cut No. 152

				Main Knife Switch only					
2	10	10	16202	8.40	3.00	162022	22.50	162021	27.10
4	10	12	16204	10.60	3.20	162042	25.30	162041	30.10
6	10	18	16206	13.60	3.80	162062	30.00	162061	35.10
8	10	20	16208	15.50	4.00	162082	32.60	162081	37.80
10	10	23	16210	17.50	4.40	162102	35.70	162101	41.10
12	10	28	16212	22.90	4.80	162122	42.40	162121	48.00
14	10	31	16214	25.20	5.10	162142	45.80	162141	51.60
16	10	33	16216	27.50	5.30	162162	48.60	162161	54.50
18	10	40	16218	34.10	7.70	162182	63.30	162181	66.10
20	10	42	16220	36.20	7.80	162202	69.20	162201	72.20
22	10	45	16222	38.30	8.30	162222	73.20	162221	76.40
24	10	47	16224	40.70	8.60	162242	76.50	162241	79.90
26	10	50	16226	42.90	8.80	162262	79.60	162261	83.20
28	10	52	16228	45.00	9.10	162282	82.70	162281	86.70
30	10	55	16230	47.00	9.60	162302	86.30	162301	91.20
32	10	57	16232	49.30	9.90	162322	89.40	162321	94.80



Cut No. 162

				Main Knife Switch with Fuse Connections					
2	10	11	17202	9.80	3.20	172022	24.50	172021	29.20
4	10	13	17204	12.00	3.40	172042	27.30	172041	32.20
6	10	18	17206	15.00	3.80	172062	31.40	172061	36.50
8	10	21	17208	16.90	4.20	172082	34.50	172081	39.80
10	10	23	17210	18.90	4.40	172102	37.10	172101	42.50
12	10	30	17212	26.10	5.00	172122	46.20	172121	51.90
14	10	32	17214	28.40	5.10	172142	49.00	172141	54.80
16	10	35	17216	30.70	5.50	172162	52.50	172161	58.40
18	10	41	17218	38.60	7.80	172182	71.60	172181	74.60
20	10	44	17220	40.70	8.10	172202	74.70	172201	77.80
22	10	46	17222	42.80	8.30	172222	77.70	172221	80.90
24	10	49	17224	45.20	8.80	172242	81.90	172241	85.50
26	10	51	17226	47.40	9.10	172262	85.10	172261	89.10
28	10	54	17228	49.50	9.40	172282	88.00	172281	92.40
30	10	56	17230	51.50	9.60	172302	90.80	172301	95.70
32	10	58	17232	53.80	9.90	172322	93.90	172321	99.30

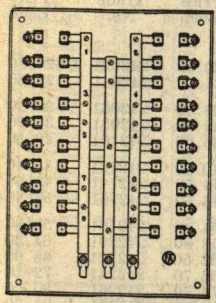


Cut No. 172

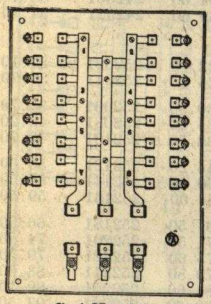
F. A. PANEL BOARDS

TYPE 1—MAINS, THREE-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

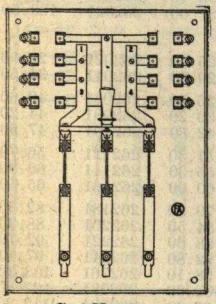
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—D. P. New Code enclosed fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



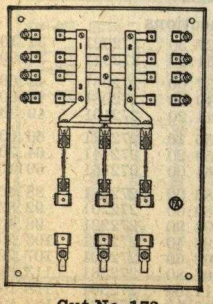
Cut No. 143



Cut No. 153



Cut No. 163



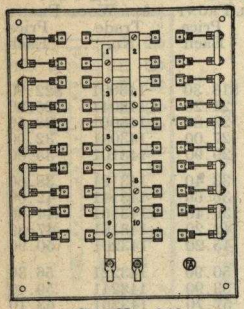
Cut No. 173

No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
Main Cable Lugs only									
2	10	7	14302	$4.80	$2.80	143022	$18.30	143021	$22.80
4	10	10	14304	7.10	3.00	143042	21.20	143041	25.80
6	10	12	14306	9.10	3.20	143062	23.80	143061	28.50
8	10	15	14308	11.10	3.60	143082	27.00	143081	32.00
10	10	17	14310	13.50	3.80	143102	29.90	143101	35.00
12	10	20	14312	16.30	4.00	143122	33.40	143121	38.60
14	10	23	14314	18.40	4.40	143142	36.60	143141	42.00
16	10	25	14316	20.60	4.60	143162	39.40	143161	44.90
18	10	28	14318	22.70	4.80	143182	42.20	143181	47.80
20	10	30	14320	25.10	5.00	143202	45.20	143201	50.90
22	12	32	14322	28.60	5.30	143222	50.90	143221	56.30
24	12	34	14324	31.00	5.50	143242	53.90	143241	59.40
26	12	37	14326	33.30	5.90	143262	57.70	143261	63.10
28	12	39	14328	35.50	6.10	143282	63.30	143281	66.10
30	12	42	14330	37.70	6.20	143302	69.00	143301	72.10
32	12	44	14332	40.10	6.40	143322	72.30	143321	75.50
Main Fuse Connections									
2	10	10	15302	7.10	3.00	153022	21.20	153021	25.80
4	10	12	15304	9.40	3.20	153042	24.10	153041	28.80
6	10	14	15306	11.40	3.40	153062	26.70	153061	31.60
8	10	17	15308	13.40	3.80	153082	29.80	153081	34.90
10	10	19	15310	15.80	4.00	153102	32.90	153101	38.10
12	10	24	15312	19.00	4.40	153122	37.20	153121	42.60
14	10	26	15314	21.10	4.60	153142	39.90	153141	45.40
16	10	28	15316	23.30	4.80	153162	42.80	153161	48.40
18	10	31	15318	25.40	5.10	153182	46.00	153181	51.80
20	10	33	15320	27.80	5.30	153202	48.90	153201	54.80
22	12	39	15322	32.70	6.10	153222	60.50	153221	63.30
24	12	41	15324	35.10	6.20	153242	66.40	153241	69.50
26	12	43	15326	37.40	6.40	153262	69.60	153261	72.80
28	12	46	15328	39.60	6.60	153282	72.70	153281	76.20
30	12	48	15330	41.80	6.80	153302	75.80	153301	79.60
32	12	51	15332	44.20	7.20	153322	79.90	153321	84.50
Main Knife Switch only									
2	10	11	16302	11.30	3.20	163022	26.00	163021	30.70
4	10	13	16304	13.60	3.40	163042	28.90	163041	33.80
6	10	16	16306	15.60	3.60	163062	31.50	163061	36.50
8	10	18	16308	17.60	3.80	163082	34.00	163081	39.10
10	10	21	16310	20.00	4.20	163102	37.60	163101	42.90
12	10	26	16312	24.10	4.60	163122	42.90	163121	48.40
14	10	28	16314	26.20	4.80	163142	45.70	163141	51.30
16	10	31	16316	28.40	5.10	163162	49.00	163161	54.80
18	10	33	16318	30.50	5.30	163182	51.60	163181	57.50
20	10	36	16320	32.90	5.50	163202	54.70	163201	60.60
22	12	40	16322	40.60	6.10	163222	68.40	163221	71.20
24	12	43	16324	43.00	6.40	163242	75.20	163241	78.40
26	12	45	16326	45.30	6.60	163262	78.40	163261	81.90
28	12	48	16328	47.50	6.80	163282	81.50	163281	85.30
30	12	50	16330	49.70	7.00	163302	84.50	163301	88.70
32	12	52	16332	52.10	7.20	163322	87.80	163321	92.40
Main Knife Switch with Fuse Connections									
2	10	12	17302	13.40	3.20	173022	28.10	173021	32.80
4	10	14	17304	15.70	3.40	173042	31.00	173041	35.90
6	10	16	17306	17.70	3.60	173062	33.60	173061	38.60
8	10	19	17308	19.70	4.00	173082	36.80	173081	43.00
10	10	21	17310	22.10	4.20	173102	39.70	173101	45.00
12	10	26	17312	26.20	4.60	173122	45.00	173121	50.50
14	10	29	17314	28.30	5.00	173142	48.40	173141	54.10
16	10	31	17316	30.50	5.10	173162	51.10	173161	56.90
18	10	34	17318	32.60	5.30	173182	53.70	173181	59.60
20	10	36	17320	35.00	5.50	173202	56.80	173201	62.70
22	12	42	17322	45.40	6.20	173222	76.70	173221	79.80
24	12	44	17324	47.80	6.40	173242	80.00	173241	83.20
26	12	47	17326	50.10	6.80	173262	84.10	173261	87.90
28	12	49	17328	52.30	7.00	173282	87.10	173281	91.30
30	12	52	17330	54.50	7.20	173302	90.20	173301	94.80
32	12	54	17332	56.90	7 40	173322	93.40	173321	98.40

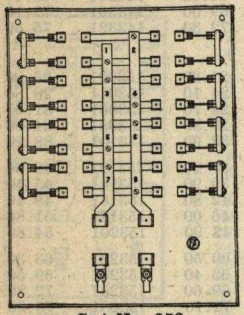
F. A. PANEL BOARDS

TYPE 2—MAINS, TWO-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

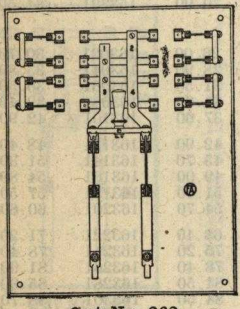
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—30-ampere knife switches with N. C. fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



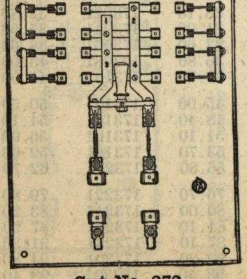
Cut No. 242



Cut No. 252



Cut No. 262



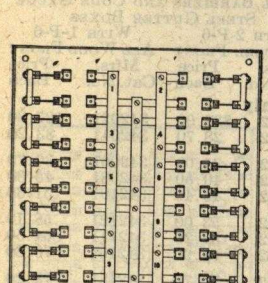
Cut No. 272

No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
Main Cable Lugs only									
2	14	6	24202	$5.40	$3.10	242022	$20.40	242021	$24.80
4	14	9	24204	8.40	3.30	242042	24.10	242041	28.60
6	14	13	24206	11.40	3.70	242062	28.50	242061	33.20
8	14	16	24208	14.40	3.90	242082	32.10	242081	36.90
10	14	18	24210	17.30	4.10	242102	35.60	242101	40.50
12	14	21	24212	20.80	4.50	242122	40.40	242121	45.40
14	14	24	24214	24.20	4.70	242142	44.50	242141	49.60
16	14	26	24216	27.50	4.90	242162	48.50	242161	53.80
18	14	30	24218	31.90	5.30	242182	54.40	242181	59.80
20	14	33	24220	35.00	5.60	242202	58.80	242201	64.30
22	14	36	24222	38.00	5.80	242222	62.50	242221	68.00
24	14	38	24224	41.40	6.00	242242	66.70	242241	72.10
26	14	41	24226	44.50	6.30	242262	76.70	242261	80.00
28	14	44	24228	47.60	6.50	242282	80.90	242281	84.30
30	14	46	24230	50.50	6.70	242302	84.60	242301	88.40
32	14	49	24232	53.80	7.10	242322	89.60	242321	94.10
Main Fuse Connections									
2	14	9	25202	6.90	3.30	252022	22.60	252021	27.10
4	14	12	25204	9.90	3.50	252042	26.30	252041	30.90
6	14	16	25206	13.20	3.90	252062	30.90	252061	35.70
8	14	19	25208	16.20	4.30	252082	35.20	252081	40.20
10	14	22	25210	19.10	4.50	252102	38.70	252101	43.70
12	14	28	25212	23.50	5.10	252122	45.20	252121	50.60
14	14	31	25214	26.90	5.40	252142	50.00	252141	55.50
16	14	33	25216	30.20	5.60	252162	54.00	252161	59.50
18	14	38	25218	36.20	6.00	252182	61.50	252181	66.90
20	14	41	25220	39.30	6.30	252202	71.50	252201	74.80
22	14	44	25222	42.30	6.50	252222	75.60	252221	79.00
24	14	46	25224	45.70	6.70	252242	79.80	252241	83.60
26	14	49	25226	48.80	7.10	252262	84.60	252261	89.10
28	14	52	25228	51.90	7.30	252282	88.60	252281	93.50
30	14	55	25230	54.80	7.70	252302	93.40	252301	98.90
32	14	57	25232	58.10	7.90	252322	97.60	252321	103.60
Main Knife Switch only									
2	14	10	26202	9.70	3.30	262022	25.40	262021	29.90
4	14	13	26204	12.70	3.70	262042	29.80	262041	34.50
6	14	19	26206	16.60	4.30	262062	35.60	262061	40.60
8	14	21	26208	19.60	4.50	262082	39.20	262081	44.20
10	14	24	26210	22.50	4.70	262102	42.80	262101	47.90
12	14	30	26212	28.80	5.30	262122	51.30	262121	56.70
14	14	32	26214	32.20	5.40	262142	55.30	262141	60.80
16	14	35	26216	35.50	5.80	262162	60.00	262161	65.50
18	14	42	26218	43.10	8.20	262182	79.30	262181	82.60
20	14	45	26220	46.20	8.70	262202	84.50	262201	88.30
22	14	48	26222	49.20	9.00	262222	88.60	262221	92.70
24	14	50	26224	52.60	9.20	262242	92.80	262241	97.40
26	14	53	26226	55.70	9.80	262262	98.10	262261	103.20
28	14	56	26228	58.80	10.00	262282	102.30	262281	107.80
30	14	58	26230	61.70	10.30	262302	106.20	262301	112.20
32	14	61	26232	65.00	10.80	262322	111.90	262321	118.60
Main Knife Switch with Fuse Connections									
2	14	11	27202	11.10	3.50	272022	27.50	272021	32.10
4	14	14	27204	14.10	3.70	272042	31.20	272041	35.90
6	14	19	27206	18.00	4.30	272062	37.00	272061	42.00
8	14	22	27208	21.00	4.50	272082	40.60	272081	45.60
10	14	24	27210	23.90	4.70	272102	44.20	272101	49.30
12	14	31	27212	32.00	5.40	272122	55.10	272121	60.60
14	14	34	27214	35.40	5.60	272142	59.20	272141	64.70
16	14	37	27216	38.70	6.00	272162	64.00	272161	69.40
18	14	44	27218	47.60	8.50	272182	85.00	272181	88.40
20	14	46	27220	50.70	8.70	272202	89.00	272201	92.80
22	14	49	27222	53.70	9.20	272222	93.90	272221	98.40
24	14	51	27224	57.10	9.50	272242	98.40	272241	103.30
26	14	54	27226	60.20	9.80	272262	102.60	272261	107.70
28	14	57	27228	63.30	10.30	272282	107.80	272281	113.80
30	14	60	27230	66.20	10.50	272302	111.60	272301	118.10
32	14	62	27232	69.50	10.80	272322	116.30	272321	123.10

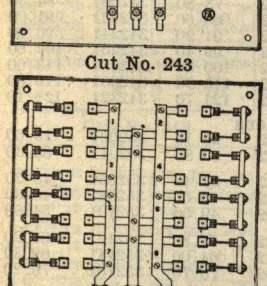
F. A. PANEL BOARDS

TYPE 2—MAINS, THREE-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

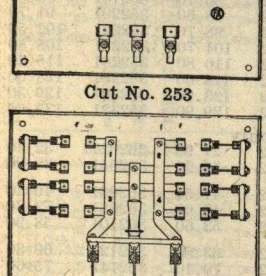
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—30-ampere knife switches with N. C. fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



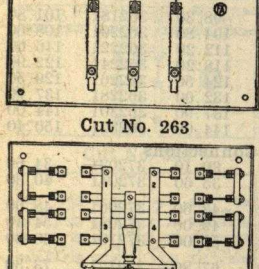
Cut No. 243



Cut No. 253



Cut No. 263



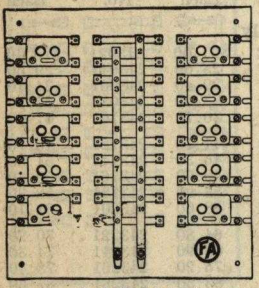
Cut No. 273

No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
Main Cable Lugs only									
2	14	8	24302	$6.00	$3.10	243022	$21.00	243021	$25.40
4	14	10	24304	9.30	3.30	243042	25.00	243041	29.50
6	14	13	24306	12.30	3.70	243062	29.40	243061	34.10
8	14	16	24308	15.30	3.90	243082	33.00	243081	37.80
10	14	18	24310	18.40	4.10	243102	36.70	243101	41.60
12	14	22	24312	22.10	4.50	243122	41.70	243121	46.70
14	14	25	24314	25.30	4.90	243142	46.30	243141	51.60
16	14	27	24316	28.30	5.10	243162	50.00	243161	55.40
18	14	30	24318	31.40	5.30	243182	53.90	243181	59.30
20	14	33	24320	34.80	5.60	243202	58.60	243201	64.10
22	16	35	24322	39.20	6.00	243222	64.80	243221	70.20
24	16	37	24324	42.70	6.10	243242	68.90	243241	74.30
26	16	40	24326	45.90	6.30	243262	75.20	243261	78.40
28	16	43	24328	49.10	6.70	243282	83.50	243281	87.30
30	16	45	24330	52.20	6.90	243302	87.60	243301	91.70
32	16	48	24332	55.70	7.10	243322	92.10	243321	96.50
Main Fuse Connections									
2	14	10	25302	8.30	3.50	253022	24.00	253021	28.50
4	14	12	25304	11.60	3.70	253042	28.00	253041	32.60
6	14	15	25306	14.60	3.90	253062	32.30	253061	37.10
8	14	18	25308	17.60	4.30	253082	35.90	253081	40.80
10	14	21	25310	20.70	4.50	253102	40.30	253101	45.30
12	14	25	25312	24.80	4.90	253122	45.80	253121	51.10
14	14	28	25314	28.00	5.30	253142	49.70	253141	55.10
16	14	30	25316	31.00	5.40	253162	53.50	253161	58.90
18	14	33	25318	34.10	5.60	253182	57.90	253181	63.40
20	14	36	25320	37.50	6.00	253202	62.00	253201	67.50
22	16	41	25322	43.30	6.50	253222	76.70	253221	80.20
24	16	44	25324	46.80	6.90	253242	81.20	253241	85.00
26	16	47	25326	50.00	7.10	253262	86.40	253261	90.80
28	16	49	25328	53.20	7.30	253282	90.50	253281	95.20
30	16	52	25330	56.30	7.70	253302	94.60	253301	99.60
32	16	55	25332	59.80	7.90	253322	100.10	253321	105.80
Main Knife Switch only									
2	14	11	26302	12.50	3.50	263022	28.90	263021	33.50
4	14	14	26304	15.80	3.70	263042	32.90	263041	37.60
6	14	17	26306	18.80	4.10	263062	37.10	263061	42.00
8	14	19	26308	21.80	4.30	263082	40.80	263081	45.80
10	14	22	26310	24.90	4.50	263102	44.50	263101	49.50
12	14	27	26312	29.70	5.10	263122	51.40	263121	56.80
14	14	30	26314	33.10	5.30	263142	55.60	263141	61.00
16	14	33	26316	36.10	5.60	263162	59.90	263161	65.40
18	14	35	26318	39.20	5.80	263182	63.70	263181	69.20
20	14	38	26320	42.60	6.00	263202	67.90	263201	73.30
22	16	43	26322	51.20	6.70	263222	85.60	263221	89.40
24	16	46	26324	54.70	6.90	263242	90.10	263241	94.20
26	16	48	26326	57.90	7.10	263262	94.30	263261	98.70
28	16	51	26328	61.10	7.50	263282	99.40	263281	104.40
30	16	54	26330	64.20	7.70	263302	103.50	263301	108.90
32	16	56	26332	67.70	7.90	263322	108.00	263321	113.70
Main Knife Switch with Fuse Connections									
2	14	12	27302	14.60	3.50	273022	31.00	273021	35.60
4	14	14	27304	17.90	3.70	273042	35.00	273041	39.70
6	14	17	27306	20.90	4.10	273062	39.20	273061	44.10
8	14	20	27308	23.90	4.30	273082	42.90	273081	47.90
10	14	23	27310	27.00	4.70	273102	47.30	273101	52.40
12	14	28	27312	32.00	5.10	273122	53.70	273121	59.10
14	14	30	27314	35.20	5.30	273142	57.70	273141	63.10
16	14	33	27316	38.20	5.60	273162	62.00	273161	67.50
18	14	36	27318	41.30	5.80	273182	65.80	273181	71.30
20	14	38	27320	44.70	6.00	273202	70.00	273201	75.40
22	16	45	27322	56.00	6.90	273222	91.40	273221	95.50
24	16	47	27324	59.50	7.10	273242	95.90	273241	100.30
26	16	50	27326	62.70	7.30	273262	100.00	273261	104.70
28	16	53	27328	65.90	7.70	273282	105.20	273281	110.60
30	16	56	27330	69.00	7.90	273302	109.30	273301	115.00
32	16	58	27332	72.50	8.10	273322	113.60	273321	119.70

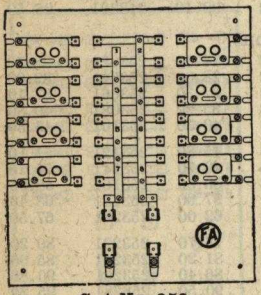
F. A. PANEL BOARDS

TYPE 3—MAINS, TWO-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

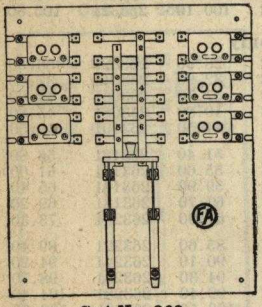
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—10-ampere, D. P. push button switches with D. P. N. C. fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



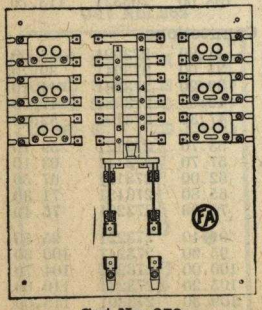
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Cut No. 352



Cut No. 362



Cut No. 372

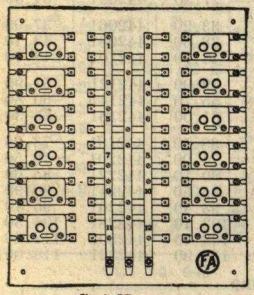
No. Cir.	Size of Panel Inches Width	Height	Mfrs. Cat. No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Mfrs. Cat. No.	Price Each	With 1-P-6 All Wood Front Mfrs. Cat. No.	Price Each
Main Cable Lugs only									
2	16	6	34202	$ 7.30	$3.30	342022	$23.00	342021	$27.30
4	16	9	34204	12.40	3.50	342042	28.70	342041	33.20
6	16	13	34206	17.30	3.90	342062	35.00	342061	39.70
8	16	15	34208	22.20	4.10	342082	40.50	342081	45.30
10	16	18	34210	27.40	4.30	342102	46.40	342101	51.30
12	16	21	34212	32.70	4.70	342122	53.00	342121	58.10
14	16	23	34214	38.20	4.90	342142	59.20	342141	64.50
16	16	26	34216	43.20	5.10	342162	64.90	342161	70.30
18	16	29	34218	49.60	5.40	342182	72.70	342181	78.20
20	16	32	34220	54.90	5.60	342202	78.80	342201	84.30
22	16	35	34222	60.00	6.00	342222	85.60	342221	91.00
24	16	37	34224	65.00	6.10	342242	91.20	342241	96.60
26	16	40	34226	70.10	6.30	342262	99.40	342261	102.60
28	16	43	34228	75.40	6.70	342282	109.80	342281	113.60
30	16	45	34230	80.30	6.90	342302	115.70	342301	119.80
32	16	48	34232	85.30	7.10	342322	121.70	342321	129.10
Main Fuse Connections									
2	16	9	35202	8.80	3.50	352022	25.10	352021	29.60
4	16	12	35204	13.70	3.70	352042	30.80	352041	35.30
6	16	16	35206	19.10	4.10	352062	37.40	352061	42.20
8	16	19	35208	23.90	4.50	352082	43.60	352081	48.60
10	16	21	35210	29.20	4.70	352102	49.50	352101	54.60
12	16	27	35212	35.40	5.20	352122	57.80	352121	63.20
14	16	30	35214	40.90	5.40	352142	64.00	352141	69.50
16	16	33	35216	45.90	5.80	352162	70.70	352161	76.20
18	16	38	35218	53.90	6.10	352182	80.10	352181	85.50
20	16	40	35220	59.20	6.30	352202	88.50	352201	91.70
22	16	43	35222	64.30	6.70	352222	98.70	352221	102.50
24	16	46	35224	69.30	6.90	352242	104.70	352241	108.80
26	16	48	35226	74.40	7.10	352262	110.80	352261	115.20
28	16	51	35228	79.70	7.50	352282	118.00	352281	123.00
30	16	53	35230	84.60	7.70	352302	123.90	352301	129.30
32	16	56	35232	89.60	7.90	352322	129.90	352321	135.60
Main Knife Switch only									
2	16	10	36202	11.60	3.50	362022	27.90	362021	32.40
4	16	13	36204	16.50	3.90	362042	34.20	362041	38.90
6	16	18	36206	22.50	4.30	362062	41.50	362061	46.40
8	16	21	36208	27.30	4.70	362082	47.60	362081	52.70
10	16	24	36210	32.60	4.90	362102	53.60	362101	58.90
12	16	29	36212	40.70	5.40	362122	63.80	362121	69.30
14	16	32	36214	46.20	5.60	362142	70.10	362141	75.60
16	16	34	36216	51.20	5.80	362162	76.00	362161	81.50
18	16	41	36218	60.80	8.50	362182	98.30	362181	101.80
20	16	44	36220	66.10	8.70	362202	104.80	362201	108.60
22	16	47	36222	71.20	9.20	362222	112.20	362221	116.60
24	16	49	36224	76.20	9.50	362242	118.20	362241	122.90
26	16	52	36226	81.30	9.75	362262	124.50	362261	129.50
28	16	55	36228	86.60	10.30	362282	132.00	362281	137.70
30	16	57	36230	91.50	10.50	362302	137.90	362301	144.00
32	16	60	36232	96.50	10.80	362322	144.00	362321	150.40
Main Knife Switch with Fuse Connections									
2	16	11	37202	13.00	3.70	372022	30.10	372021	34.60
4	16	14	37204	17.90	3.90	372042	35.60	372041	40.30
6	16	19	37206	23.90	4.50	372062	43.60	372061	48.60
8	16	21	37208	28.70	4.70	372082	49.00	372081	54.10
10	16	24	37210	34.00	4.90	372102	55.00	372101	60.30
12	16	31	37212	43.90	5.60	372122	67.80	372121	73.30
14	16	33	37214	49.40	5.80	372142	74.20	372141	79.70
16	16	36	37216	54.40	6.00	372162	80.00	372161	85.40
18	16	43	37218	65.30	8.70	372182	104.00	372181	107.80
20	16	46	37220	70.60	9.00	372202	110.40	372201	114.50
22	16	48	37222	75.70	9.20	372222	116.70	372221	121.10
24	16	51	37224	80.70	9.75	372242	123.90	372241	128.90
26	16	53	37226	85.80	10.00	372262	130.10	372261	135.50
28	16	56	37228	91.10	10.30	372282	136.50	372281	142.20
30	16	59	37230	96.00	10.80	372302	143.50	372301	149.90
32	16	61	37232	101.00	11.10	372322	149.80	372321	156.70

F. A. PANEL BOARDS

TYPE 3—MAINS, THREE-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 3 AMPERES

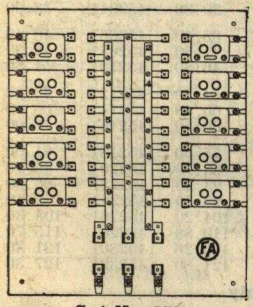
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—10-ampere D. P. push button switches with D.P.N.C., enclosed fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.

No. Cir.	Size of Panel Inches Width	Height	Mfrs. Cat. No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Mfrs. Cat. No.	Price Each	With 1-P-6 All Wood Front Mfrs. Cat. No.	Price Each
Main Cable Lugs only									
2	16	7	34302	$ 7.90	$3.30	343022	$23.60	343021	$27.90
4	16	10	34304	13.20	3.50	343042	29.50	343041	34.00
6	16	13	34306	18.20	3.90	343062	35.90	343061	40.60
8	16	15	34308	23.10	4.10	343082	41.40	343081	46.20
10	16	18	34310	28.20	4.30	343102	47.20	343101	52.10
12	16	21	34312	34.00	4.70	343122	54.30	343121	59.40
14	16	24	34314	39.00	4.90	343142	60.00	343141	65.30
16	16	27	34316	44.10	5.20	343162	66.50	343161	71.90
18	16	29	34318	49.20	5.40	343182	72.30	343181	77.80
20	16	32	34320	54.50	5.60	343202	78.40	343201	83.90
22	18	34	34322	60.90	6.00	343222	86.80	343221	91.80
24	18	36	34324	66.40	6.10	343242	92.90	343241	98.00
26	18	39	34326	71.50	6.50	343262	105.30	343261	108.40
28	18	42	34328	76.60	6.70	343282	111.40	343281	114.80
30	18	44	34330	81.80	6.90	343302	117.60	343301	121.40
32	18	47	34332	87.20	7.30	343322	125.00	343321	129.50



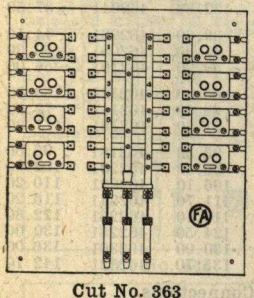
Cut No. 343

Main Fuse Connections									
2	16	10	35302	10.20	3.50	353022	26.50	353021	31.00
4	16	12	35304	15.50	3.70	353042	32.60	353041	37.10
6	16	15	35306	20.50	4.10	353062	38.80	353061	43.60
8	16	17	35308	25.40	4.30	353082	44.40	353081	49.30
10	16	20	35310	30.50	4.50	353102	50.20	353101	55.20
12	16	25	35312	36.70	5.10	353122	58.40	353121	63.80
14	16	27	35314	41.70	5.20	353142	64.10	353141	69.50
16	16	30	35316	46.80	5.40	353162	69.90	353161	75.40
18	16	32	35318	51.90	5.60	353182	75.80	353181	81.30
20	16	35	35320	57.20	6.00	353202	82.80	353201	88.20
22	18	40	35322	65.00	6.50	353222	98.80	353221	101.90
24	18	43	35324	70.00	6.90	353242	105.80	353241	109.60
26	18	46	35326	75.60	7.10	353262	112.40	353261	116.50
28	18	48	35328	80.70	7.30	353282	118.50	353281	123.00
30	18	51	35330	85.90	7.70	353302	125.80	353301	130.90
32	18	54	35332	91.30	7.90	353322	132.30	353321	137.60



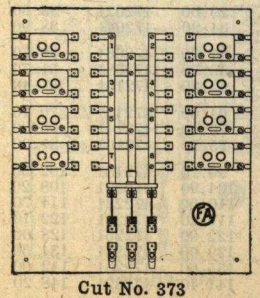
Cut No. 353

Main Knife Switch only									
2	16	11	36302	14.40	3.70	363022	31.50	363021	36.00
4	16	14	36304	19.70	3.90	363042	37.40	363041	42.10
6	16	16	36306	24.70	4.10	363062	43.00	363061	47.80
8	16	19	36308	29.60	4.50	363082	49.30	363081	54.30
10	16	21	36310	34.70	4.70	363102	55.00	363101	60.10
12	16	27	36312	41.80	5.20	363122	64.20	363121	69.60
14	16	29	36314	46.80	5.40	363142	69.90	363141	75.40
16	16	32	36316	51.90	5.60	363162	75.80	363161	81.30
18	16	35	36318	57.00	6.00	363182	82.60	363181	88.00
20	16	37	36320	62.30	6.10	363202	88.50	363201	93.90
22	18	42	36322	72.90	6.70	363222	107.70	363221	111.10
24	18	45	36324	78.40	7.10	363242	115.20	363241	119.30
26	18	47	36326	83.50	7.30	363262	121.30	363261	125.30
28	18	50	36328	88.60	7.50	363282	127.40	363281	132.20
30	18	53	36330	93.80	7.90	363302	134.80	363301	140.10
32	18	55	36332	99.20	8.10	363322	141.30	363321	146.90



Cut No. 363

Main Knife Switch with Fuse Connections									
2	16	12	37302	16.50	3.70	373022	33.60	373021	38.10
4	16	14	37304	21.80	3.90	373042	39.50	373041	44.20
6	16	17	37306	26.50	4.30	373062	45.50	373061	50.40
8	16	19	37308	31.70	4.50	373082	51.40	373081	56.40
10	16	22	37310	36.80	4.70	373102	57.10	373101	62.20
12	16	27	37312	43.90	5.20	373122	66.30	373121	71.70
14	16	30	37314	48.90	5.40	373142	72.00	373141	77.50
16	16	32	37316	54.00	5.60	373162	77.90	373161	83.40
18	16	35	37318	59.10	6.00	373182	84.70	373181	90.10
20	16	38	37320	64.40	6.10	373202	90.60	373201	96.00
22	18	44	37322	77.70	6.90	373222	113.50	373221	117.30
24	18	47	37324	83.20	7.30	373242	121.00	373241	125.50
26	18	49	37326	88.30	7.50	373262	127.10	373261	131.90
28	18	52	37328	93.40	7.70	373282	133.30	373281	138.40
30	18	54	37330	98.60	7.90	373302	139.60	373301	144.90
32	18	57	37332	104.00	8.30	373322	147.10	373321	153.00

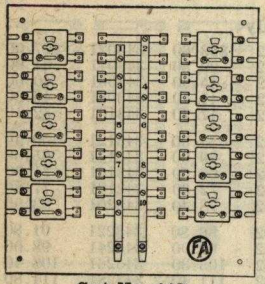


Cut No. 373

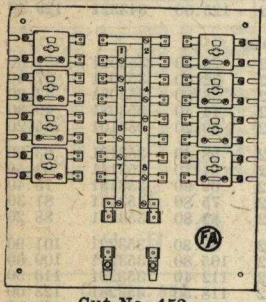
F. A. PANEL BOARDS

TYPE 4—MAINS, TWO-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

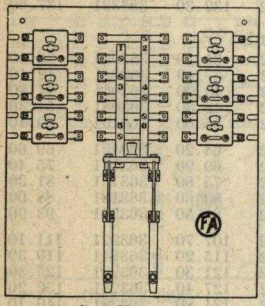
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—10-ampere D. P. indicating snap switches with D. P. N. C. fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



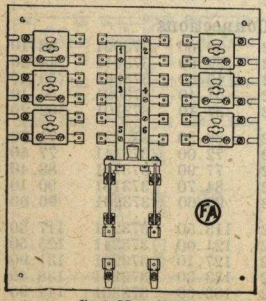
Cut No. 442



Cut No. 452



Cut No. 462



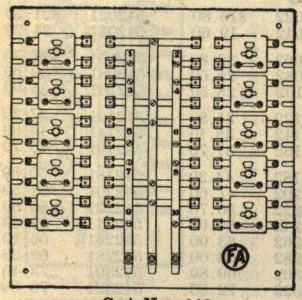
Cut No. 472

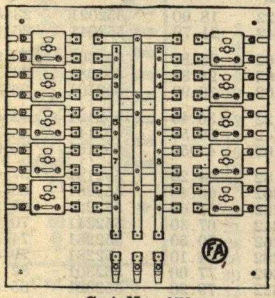
No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
Main Cable Lugs only									
2	14	6	44202	$ 6.90	$3.10	442022	$21.90	442021	$26.30
4	14	9	44204	11.60	3.30	442042	27.30	442041	31.80
6	14	13	44206	16.10	3.70	442062	33.20	442061	37.90
8	14	15	44208	20.60	3.90	442082	38.30	442081	43.10
10	14	18	44210	25.40	4.10	442102	43.70	442101	48.60
12	14	21	44212	30.30	4.50	442122	49.90	442121	54.90
14	14	23	44214	35.40	4.70	442142	55.70	442141	60.80
16	14	26	44216	40.00	4.90	442162	61.00	442161	66.30
18	14	29	44218	46.00	5.30	442182	68.50	442181	73.90
20	14	32	44220	50.90	5.40	442202	74.00	442201	79.50
22	14	35	44222	55.60	5.80	442222	80.10	442221	85.60
24	14	37	44224	60.20	6.00	442242	85.50	442241	90.90
26	14	40	44226	64.90	6.20	442262	93.40	442261	96.40
28	14	43	44228	69.80	6.50	442282	103.10	442281	106.50
30	14	45	44230	74.30	6.70	442302	108.40	442301	112.20
32	14	48	44232	78.90	6.90	442322	113.90	442321	118.00
Main Fuse Connections									
2	14	9	45202	8.40	3.30	452022	24.10	452021	28.60
4	14	12	45204	12.90	3.50	452042	29.30	452041	33.90
6	14	16	45206	17.90	3.90	452062	35.60	452061	40.40
8	14	19	45208	22.30	4.30	452082	41.30	452081	46.30
10	14	21	45210	27.20	4.50	452102	46.80	452101	51.80
12	14	27	45212	33.00	5.10	452122	54.70	452121	60.10
14	14	30	45214	38.10	5.30	452142	60.60	452141	66.00
16	14	33	45216	42.70	5.60	452162	66.50	452161	72.00
18	14	38	45218	50.30	6.00	452182	75.60	452181	81.00
20	14	40	45220	55.20	6.20	452202	83.70	452201	86.70
22	14	43	45222	59.90	6.50	452222	93.20	452221	96.60
24	14	46	45224	64.50	6.70	452242	98.60	452241	102.40
26	14	48	45226	69.20	6.90	452262	104.20	452261	108.30
28	14	51	45228	74.10	7.30	452282	110.80	452281	115.70
30	14	53	45230	78.60	7.50	452302	116.20	452301	121.30
32	14	56	45232	83.20	7.70	452322	121.80	452321	127.30
Main Knife Switch only									
2	14	10	46202	11.20	3.30	462022	26.90	462021	31.40
4	14	13	46204	15.70	3.70	462042	32.80	462041	37.50
6	14	18	46206	21.30	4.10	462062	39.60	462061	44.50
8	14	21	46208	25.70	4.50	462082	45.30	462081	50.30
10	14	24	46210	30.60	4.70	462102	50.90	462101	56.00
12	14	29	46212	38.30	5.30	462122	60.80	462121	66.20
14	14	32	46214	43.40	5.40	462142	66.50	462141	72.00
16	14	34	46216	48.00	5.60	462162	71.80	462161	77.30
18	14	41	46218	57.20	8.20	462182	93.30	462181	96.60
20	14	44	46220	62.10	8.50	462202	99.50	462201	102.90
22	14	47	46222	66.80	9.00	462222	106.10	462221	110.20
24	14	49	46224	71.40	9.20	462242	111.70	462241	116.20
26	14	52	46226	76.10	9.50	462262	117.40	462261	122.30
28	14	55	46228	81.00	10.00	462282	124.50	462281	130.00
30	14	57	46230	85.50	10.30	462302	130.00	462301	136.00
32	14	60	46232	90.10	10.50	462322	135.70	462321	142.10
Main Knife Switch with Fuse Connections									
2	14	11	47202	12.60	3.50	472022	29.00	472021	33.60
4	14	14	47204	17.10	3.70	472042	34.20	472041	38.90
6	14	19	47206	22.70	4.30	472062	41.70	472061	46.70
8	14	21	47208	27.10	4.50	472082	46.70	472081	51.70
10	14	24	47210	32.00	4.70	472102	52.30	472101	57.40
12	14	31	47212	41.50	5.40	472122	64.60	472121	70.10
14	14	33	47214	46.60	5.60	472142	70.40	472141	75.90
16	14	36	47216	51.20	5.80	472162	75.70	472161	81.20
18	14	43	47218	61.70	8.50	472182	99.10	472181	102.50
20	14	46	47220	66.60	8.70	472202	104.90	472201	108.20
22	14	48	47222	71.30	9.00	472222	110.60	472221	114.70
24	14	51	47224	75.90	9.50	472242	117.20	472241	122.10
26	14	53	47226	80.60	9.80	472262	122.90	472261	128.00
28	14	56	47228	85.50	10.00	472282	129.00	472281	134.50
30	14	59	47230	90.00	10.50	472302	135.60	472301	142.00
32	14	61	47232	94.60	10.80	472322	141.40	472321	148.20

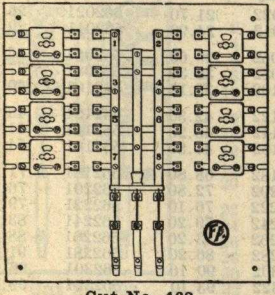
F. A. PANEL BOARDS

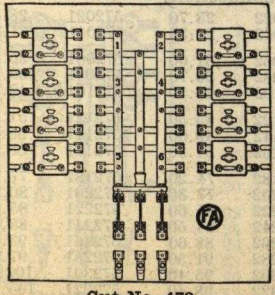
TYPE 4—MAINS, THREE-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 3 AMPERES

BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—10-ampere D. P. indicating snap switches with D. P. N. C. fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.


Cut No. 443


Cut No. 453


Cut No. 463

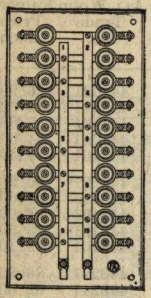

Cut No. 473

No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
Main Cable Lug only									
2	14	7	44302	$7.50	$3.10	443022	$22.50	443021	$26.90
4	14	10	44304	12.40	3.30	443042	28.10	443041	32.60
6	14	13	44306	17.00	3.70	443062	34.10	443061	38.80
8	14	15	44308	21.50	3.90	443082	39.20	443081	44.00
10	14	18	44310	26.20	4.10	443102	44.50	443101	49.40
12	14	21	44312	31.60	4.50	443122	51.20	443121	56.20
14	14	24	44314	36.20	4.70	443142	56.50	443141	61.60
16	14	27	44316	40.90	5.10	443162	62.60	443161	68.00
18	14	29	44318	45.60	5.30	443182	68.10	443181	73.50
20	14	32	44320	50.50	5.40	443202	73.60	443201	79.10
22	16	34	44322	56.50	5.80	443222	81.30	443221	86.80
24	16	36	44324	61.60	6.00	443242	87.20	443241	92.60
26	16	39	44326	66.30	6.30	443262	95.60	443261	98.80
28	16	42	44328	71.00	6.50	443282	104.40	443281	107.90
30	16	44	44330	75.80	6.70	443302	110.20	443301	114.00
32	16	47	44332	80.80	7.10	443322	117.20	443321	121.60
Main Fuse Connections									
2	14	10	45302	9.80	3.30	453022	25.50	453021	30.00
4	14	12	45304	14.70	3.50	453042	31.10	453041	35.70
6	14	15	45306	19.30	3.90	453062	37.00	453061	41.80
8	14	17	45308	23.80	4.10	453082	42.10	453081	47.00
10	14	20	45310	28.50	4.30	453102	47.50	453101	52.50
12	14	25	45312	34.30	4.90	453122	55.30	453121	60.60
14	14	27	45314	38.90	5.10	453142	60.60	453141	66.00
16	14	30	45316	43.60	5.30	453162	66.10	453161	71.50
18	14	32	45318	48.30	5.40	453182	71.40	453181	76.90
20	14	35	45320	53.20	5.80	453202	77.70	453201	83.20
22	16	40	45322	60.60	6.30	453222	89.90	453221	93.10
24	16	43	45324	65.70	6.70	453242	100.10	453241	103.90
26	16	46	45326	70.40	6.90	453262	105.80	453261	109.90
28	16	48	45328	75.10	7.10	453282	111.50	453281	115.90
30	16	51	45330	79.90	7.50	453302	118.20	453301	123.20
32	16	54	45332	84.90	7.70	453322	124.20	453321	129.60
Main Knife Switch only									
2	14	11	46302	14.00	3.50	463022	30.40	463021	35.00
4	14	14	46304	18.90	3.70	463042	36.00	463041	40.70
6	14	16	46306	23.50	3.90	463062	41.20	463061	46.00
8	14	19	46308	28.00	4.30	463082	47.00	463081	52.00
10	14	21	46310	32.70	4.50	463102	52.30	463101	57.30
12	14	27	46312	39.40	5.10	463122	61.10	463121	66.50
14	14	29	46314	44.00	5.30	463142	66.50	463141	71.90
16	14	32	46316	48.70	5.40	463162	71.80	463161	77.30
18	14	35	46318	53.40	5.80	463182	77.90	463181	83.40
20	14	37	46320	58.30	6.00	463202	83.60	463201	89.00
22	16	42	46322	68.50	6.50	463222	101.90	463221	105.40
24	16	45	46324	73.60	6.90	463242	109.00	463241	113.10
26	16	47	46326	78.30	7.10	463262	114.70	463261	119.10
28	16	50	46328	83.00	7.30	463282	120.30	463281	125.00
30	16	53	46330	87.80	7.70	463302	127.10	463301	132.50
32	16	55	46332	92.80	7.90	463322	133.10	463321	138.80
Main Knife Switch with Fuse Connections									
2	14	12	47302	16.10	3.50	473022	32.50	473021	37.10
4	14	14	47304	21.00	3.70	473042	38.10	473041	42.80
6	14	17	47306	25.60	4.10	473062	43.90	473061	48.80
8	14	19	47308	30.10	4.30	473082	49.10	473081	54.10
10	14	22	47310	34.80	4.50	473102	54.40	473101	59.40
12	14	27	47312	41.50	5.10	473122	63.20	473121	68.60
14	14	30	47314	46.10	5.30	473142	68.60	473141	74.00
16	14	32	47316	50.80	5.40	473162	73.90	473161	79.40
18	14	35	47318	55.50	5.80	473182	80.00	473181	85.50
20	14	38	47320	60.40	6.00	473202	85.70	473201	91.10
22	16	44	47322	73.30	6.70	473222	107.70	473221	111.50
24	16	47	47324	78.40	7.10	473242	114.80	473241	119.20
26	16	49	47326	83.10	7.30	473262	120.40	473261	125.10
28	16	52	47328	87.80	7.50	473282	126.10	473281	131.10
30	16	54	47330	92.60	7.70	473302	131.90	473301	137.30
32	16	57	47332	97.60	8.10	473322	138.70	473321	144.80

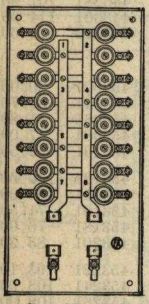
F. A. PANEL BOARDS

TYPE 5—MAINS, TWO-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

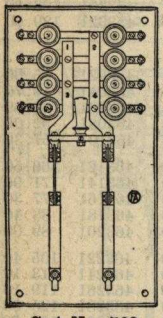
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—D. P. Edison plug fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



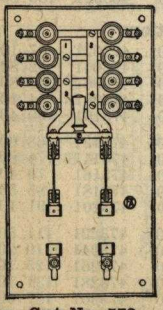
Cut No. 542



Cut No. 552



Cut No. 562



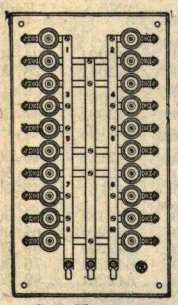
Cut No. 572

No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
Main Cable Lugs only									
2	8	6	54202	$4.20	$2.60	542022	$16.80	542021	$21.30
4	8	9	54204	6.40	2.80	542042	19.60	542041	24.20
6	8	13	54206	8.60	3.20	542062	22.80	542061	27.70
8	8	16	54208	10.70	3.40	542082	25.60	542081	30.60
10	8	19	54210	12.70	3.80	542102	28.50	542101	33.90
12	8	22	54212	15.40	4.00	542122	31.80	542121	37.20
14	8	25	54214	17.90	4.40	542142	35.10	542141	40.90
16	8	28	54216	19.90	4.60	542162	37.70	542161	43.70
18	10	32	54218	23.60	5.30	542182	44.20	542181	50.00
20	10	35	54220	25.80	5.50	542202	47.60	542201	53.50
22	10	38	54222	28.20	5.70	542222	50.70	542221	56.50
24	10	40	54224	30.30	5.90	542242	56.60	542241	59.40
26	10	43	54226	32.70	6.20	542262	63.00	542261	66.10
28	10	46	54228	34.90	6.40	542282	66.00	542281	69.20
30	10	49	54230	37.10	6.80	542302	69.80	542301	73.40
32	10	52	54232	39.30	7.00	542322	72.80	542321	76.80
Main Fuse Connections									
2	8	9	55202	5.70	2.80	552022	18.90	552021	23.50
4	8	12	55204	7.90	3.00	552042	21.70	552041	26.40
6	8	17	55206	10.40	3.60	552062	25.80	552061	30.90
8	8	20	55208	12.50	3.80	552082	28.30	552081	33.70
10	8	22	55210	14.50	4.00	552102	30.90	552101	36.30
12	8	29	55212	18.10	4.80	552122	36.40	552121	42.50
14	8	32	55214	20.60	4.90	552142	39.50	552141	45.70
16	8	35	55216	22.60	5.50	552162	42.50	552161	48.90
18	10	40	55218	27.90	5.90	552182	54.20	552181	57.00
20	10	43	55220	30.10	6.20	552202	60.40	552201	63.50
22	10	46	55222	32.50	6.40	552222	63.60	552221	66.80
24	10	49	55224	34.60	6.80	552242	67.30	552241	70.90
26	10	52	55226	37.00	7.00	552262	70.50	552261	74.50
28	10	55	55228	39.20	7.40	552282	74.10	552281	79.00
30	10	57	55230	41.40	7.60	552302	77.00	552301	82.40
32	10	60	55232	43.60	7.80	552322	79.90	552321	85.80
Main Knife Switch only									
2	8	10	56202	8.50	2.80	562022	21.70	562021	26.30
4	8	13	56204	10.70	3.20	562042	24.90	562041	29.80
6	8	19	56206	13.80	3.80	562062	29.60	562061	35.00
8	8	22	56208	15.90	4.00	562082	32.30	562081	37.70
10	8	25	56210	17.90	4.40	562102	35.10	562101	40.90
12	8	31	56212	23.40	4.90	562122	42.30	562121	48.50
14	8	33	56214	25.90	5.10	562142	45.20	562141	51.50
16	8	36	56216	27.90	5.50	562162	47.80	562161	54.20
18	10	44	56218	34.80	8.10	562182	68.80	562181	71.90
20	10	47	56220	37.00	8.60	562202	72.80	562201	76.20
22	10	50	56222	39.40	8.80	562222	76.10	562221	79.70
24	10	52	56224	41.50	9.10	562242	79.20	562241	83.20
26	10	55	56226	43.90	9.60	562262	83.20	562261	88.10
28	10	58	56228	46.10	9.90	562282	86.20	562281	91.60
30	10	61	56230	48.30	10.40	562302	90 10	562301	96.40
32	10	64	56232	50.50	10.70	562322	93.10	562321	99.80
Main Knife Switch with Fuse Connections									
2	8	11	57202	9.90	3.00	572022	23.70	572021	28.40
4	8	14	57204	12.10	3.20	572042	26.30	572041	31.20
6	8	19	57206	15.20	3.80	572062	31.00	572061	36.40
8	8	22	57208	17.30	4.00	572082	33.70	572081	39.10
10	8	25	57210	19.30	4.40	572102	36.50	572101	42.30
12	8	32	57212	26.60	4.90	572122	45.50	572121	51.70
14	8	35	57214	29.10	5.50	572142	49.00	572141	55.40
16	8	38	57216	31.10	5.70	572162	51.80	572161	58.00
18	10	45	57218	39.30	8.30	572182	74.20	572181	77.40
20	10	48	57220	41.50	8.60	572202	77.30	572201	80.70
22	10	51	57222	43.90	9.10	572222	81.60	572221	85.60
24	10	54	57224	46.00	9.40	572242	84.50	572241	88.90
26	10	57	57226	48.40	9.90	572262	88.60	572261	93.90
28	10	60	57228	50.60	10.10	572282	91.50	572281	97.40
30	10	63	57230	52.80	10.70	572302	95.40	572301	102.10
32	10	66	57232	55.00	10.90	572322	98.40	572321	105.70

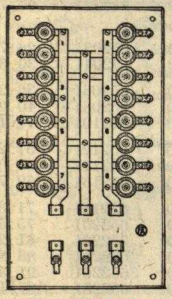
F. A. PANEL BOARDS

TYPE 5—MAINS, THREE-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 3 AMPERES

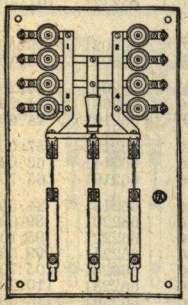
BASE.—Black slate, oiled finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—D. P. Edison plug fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



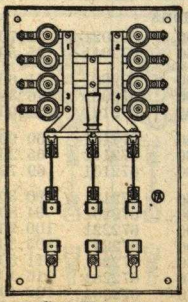
Cut No. 543



Cut No. 553



Cut No. 563



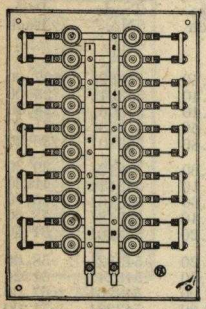
Cut No. 573

No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
Main Cable Lugs only									
2	8	7	54302	$4.90	$2.60	543022	$17.50	543021	$22.00
4	8	10	54304	7.20	2.80	543042	20.40	543041	25.00
6	8	13	54306	9.20	3.20	543062	23.40	543061	28.30
8	8	16	54308	11.60	3.40	543082	26.50	543081	31.50
10	8	19	54310	14.00	3.80	543102	29.80	543101	35.20
12	8	23	54312	16.80	4.20	543122	33.60	543121	39.30
14	8	26	54314	18.90	4.40	543142	36.10	543141	41.90
16	8	29	54316	21.30	4.80	543162	39.60	543161	45.70
18	8	31	54318	23.50	4.90	543182	42.40	543181	48.60
20	8	34	54320	25.90	5.10	543202	45.20	543201	51.50
22	10	37	54322	29.70	5.70	543222	52.20	543221	58.00
24	10	39	54324	32.10	5.90	543242	58.40	543241	61.20
26	10	42	54326	34.50	6.00	543262	64.00	543261	67.00
28	10	45	54328	36.70	6.40	543282	67.80	543281	71.00
30	10	48	54330	39.00	6.60	543302	70.90	543301	74.30
32	10	51	54332	41.40	7.00	543322	74.90	543321	78.90
Main Fuse Connections									
2	8	10	55302	7.20	2.80	553022	20.40	553021	25.00
4	8	13	55304	9.50	3.20	553042	23.70	553041	28.60
6	8	15	55306	11.50	3.40	553062	26.40	553061	31.40
8	8	18	55308	13.90	3.60	553082	29.30	553081	34.40
10	8	21	55310	16.30	4.00	553102	32.70	553101	38.10
12	8	26	55312	19.50	4.40	553122	36.70	553121	42.50
14	8	29	55314	21.60	4.80	553142	39.90	553141	46.00
16	8	32	55316	24.00	4.90	553162	42.90	553161	49.10
18	8	35	55318	26.20	5.50	553182	46.10	553181	52.50
20	8	38	55320	28.60	5.70	553202	49.30	553201	55.50
22	10	43	55322	33.80	6.20	553222	64.10	553221	67.20
24	10	46	55324	36.20	6.40	553242	67.30	553241	70.50
26	10	49	55326	38.60	6.80	553262	71.30	553261	74.90
28	10	52	55328	40.80	7.00	553282	74.30	553281	78.30
30	10	55	55330	43.10	7.40	553302	78.00	553301	82.90
32	10	58	55332	45.50	7.60	553322	81.10	553321	86.50
Main Knife Switch only									
2	8	11	56302	11.40	3.00	563022	25.20	563021	29.90
4	8	14	56304	13.70	3.20	563042	27.90	563041	32.80
6	8	17	56306	15.70	3.60	563062	31.10	563061	36.20
8	8	20	56308	18.10	3.80	563082	33.90	563081	39.30
10	8	23	56310	20.50	4.20	563102	37.30	563101	43.00
12	8	28	56312	24.60	4.60	563122	42.40	563121	48.40
14	8	31	56314	26.70	4.90	563142	45.60	563141	51.80
16	8	34	56316	29.10	5.10	563162	48.40	563161	54.70
18	8	37	56318	31.30	5.70	563182	52.00	563181	58.20
20	8	40	56320	33.70	5.90	563202	58.50	563201	61.30
22	10	45	56322	41.70	6.40	563222	72.80	563221	76.00
24	10	48	56324	44.10	6.60	563242	76.00	563241	79.40
26	10	51	56326	46.50	7.00	563262	80.00	563261	84.00
28	10	54	56328	48.70	7.20	563282	82.90	563281	87.30
30	10	57	56330	51.00	7.60	563302	86.60	563301	92.00
32	10	60	56332	53.40	7.80	563322	89.70	563321	95.60
Main Knife Switch with Fuse Connections									
2	8	11	57302	13.50	3.00	573022	27.30	573021	32.00
4	8	15	57304	15.80	3.40	573042	30.70	573041	35.70
6	8	17	57306	17.80	3.60	573062	33.20	573061	38.30
8	8	20	57308	20.20	3.80	573082	36.00	573081	41.40
10	8	23	57310	22.60	4.20	573102	39.40	573101	45.10
12	8	29	57312	26.70	4.80	573122	45.00	573121	51.10
14	8	32	57314	28.80	4.90	573142	47.70	573141	53.90
16	8	34	57316	31.20	5.10	573162	50.50	573161	56.80
18	8	37	57318	33.40	5.70	573182	54.10	573181	60.30
20	8	40	57320	35.80	5.90	573202	60.60	573201	63.40
22	10	47	57322	46.50	6.60	573222	78.40	573221	81.80
24	10	50	57324	48.90	6.80	573242	81.60	573241	85.20
26	10	53	57326	51.30	7.20	573262	85.50	573261	89.90
28	10	56	57328	53.50	7.40	573282	88.40	573281	93.30
30	10	58	57330	55.80	7.60	573302	91.40	573301	96.80
32	10	61	57332	58.20	8.00	573322	95.30	573321	101.60

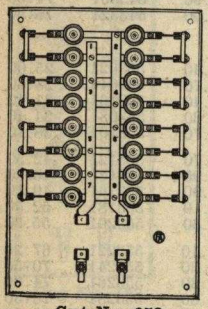
F. A. PANEL BOARDS

TYPE 6—MAINS, TWO-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

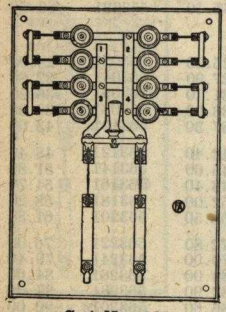
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—30-ampere knife switches and D. P. Edison plug fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



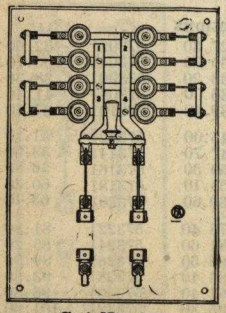
Cut No. 642



Cut No. 652



Cut No. 662



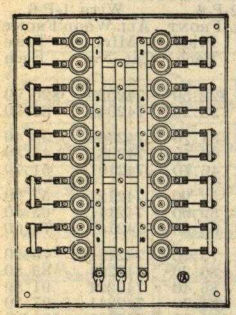
Cut No. 672

No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
Main Cable Lugs only									
2	12	6	64202	$5.50	$3.00	642022	$19.90	642021	$24.40
4	12	9	64204	8.50	3.20	642042	23.50	642041	28.20
6	12	14	64206	11.60	3.60	642062	28.00	642061	32.90
8	12	17	64208	14.80	4.00	642082	32.60	642081	37.60
10	12	20	64210	17.70	4.20	642102	36.10	642101	41.10
12	12	23	64212	21.30	4.60	642122	41.10	642121	46.20
14	12	26	64214	24.90	4.80	642142	45.40	642141	50.60
16	12	29	64216	27.90	5.20	642162	49.80	642161	55.10
18	12	33	64218	32.60	5.50	642182	55.50	642181	61.00
20	12	36	64220	35.80	5.70	642202	59.50	642201	64.90
22	12	39	64222	39.10	6.10	642222	66.90	642221	69.70
24	12	42	64224	42.20	6.20	642242	73.50	642241	76.60
26	12	45	64226	45.50	6.60	642262	78.60	642261	82.10
28	12	48	64228	48.70	6.80	642282	82.70	642281	86.50
30	12	52	64230	51.80	7.20	642302	87.50	642301	92.10
32	12	55	64232	55.00	7.60	642322	92.40	642321	97.70
Main Fuse Connections									
2	12	9	65202	7.00	3.20	652022	22.00	652021	26.70
4	12	12	65204	10.00	3.40	652042	25.70	652041	30.50
6	12	17	65206	13.40	4.00	652062	31.20	652061	36.20
8	12	20	65208	16.60	4.20	652082	35.00	652081	40.00
10	12	23	65210	19.50	4.60	652102	39.30	652101	44.40
12	12	30	65212	24.00	5.20	652122	45.90	652121	51.20
14	12	33	65214	27.60	5.50	652142	50.50	652141	56.00
16	12	36	65216	30.60	5.70	652162	54.30	652161	59.70
18	12	41	65218	36.90	6.20	652182	68.20	652181	71.30
20	12	44	65220	40.10	6.40	652202	72.30	652201	75.50
22	12	48	65222	43.40	6.80	652222	77.40	652221	81.20
24	12	51	65224	46.50	7.20	652242	82.20	652241	86.80
26	12	54	65226	49.80	7.40	652262	86.30	652261	91.30
28	12	57	65228	53.00	7.80	652282	91.30	652281	97.10
30	12	60	65230	56.10	8.00	652302	95.20	652301	101.40
32	12	63	65232	59.30	8.40	652322	100.20	652321	107.40
Main Knife Switch only									
2	12	10	66202	9.80	3.20	662022	24.80	662021	29.50
4	12	13	66204	12.80	3.60	662042	29.20	662041	34.10
6	12	19	66206	16.80	4.20	662062	35.20	662061	40.20
8	12	22	66208	20.00	4.40	662082	39.20	662081	44.20
10	12	26	66210	22.90	4.80	662102	43.40	662101	48.60
12	12	31	66212	29.30	5.30	662122	51.60	662121	57.00
14	12	35	66214	32.90	5.70	662142	56.60	662141	62.00
16	12	38	66216	35.90	5.90	662162	60.30	662161	65.70
18	12	45	66218	43.80	8.60	662182	81.00	662181	84.50
20	12	48	66220	47.00	8.80	662202	85.30	662201	89.00
22	12	51	66222	50.30	9.40	662222	90.50	662221	95.10
24	12	54	66224	53.40	9.60	662242	94.50	662241	99.50
26	12	57	66226	56.70	10.10	662262	99.90	662261	105.70
28	12	60	66228	59.90	10.40	662282	104.00	662281	110.20
30	12	64	66230	63.00	10.90	662302	109.10	662301	116.30
32	12	67	66232	66.20	11.50	662322	114.40	662321	122.60
Main Knife Switch with Fuse Connections									
2	12	11	67202	11.20	3.40	672022	26.90	672021	31.70
4	12	14	67204	14.20	3.60	672042	30.60	672041	35.50
6	12	20	67206	18.20	4.20	672062	36.60	672061	41.60
8	12	23	67208	21.40	4.60	672082	41.00	672081	46.30
10	12	26	67210	24.30	4.80	672102	44.80	672101	50.00
12	12	33	67212	32.50	5.50	672122	55.40	672121	60.90
14	12	36	67214	36.10	5.70	672142	59.80	672141	65.20
16	12	39	67216	39.10	6.10	672162	66.90	672161	69.70
18	12	47	67218	48.30	8.80	672182	86.50	672181	90.30
20	12	50	67220	51.50	9.10	672202	90.60	672201	94.80
22	12	53	67222	54.80	9.60	672222	95.90	672221	100.90
24	12	56	67224	57.90	9.90	672242	100.00	672241	105.30
26	12	59	67226	61.20	10.40	672262	105.30	672261	111.50
28	12	62	67228	64.40	10.70	672282	109.50	672281	116.10
30	12	65	67230	67.50	11.20	672302	114.70	672301	122.40
32	12	68	67232	70.70	11.50	672322	118.90	672321	127.10

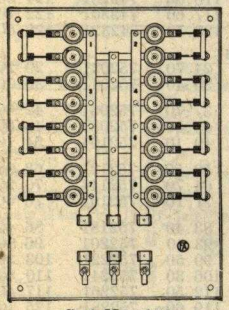
F. A. PANEL BOARDS

TYPE 6—MAINS, THREE-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 3 AMPERES

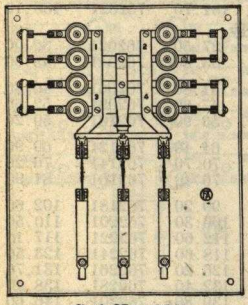
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—30-ampere knife switches and D. P. Edison plug fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



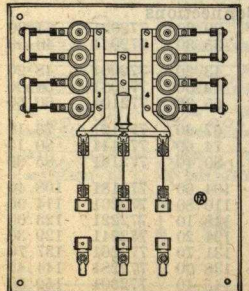
Cut No. 643



Cut No. 653



Cut No. 663



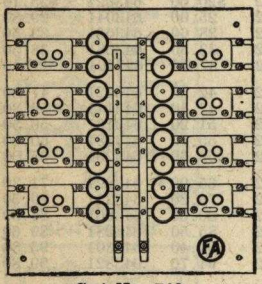
Cut No. 673

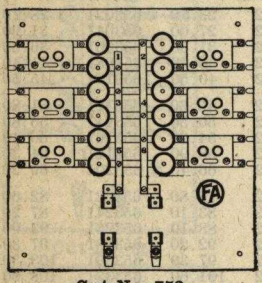
No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
Main Cable Lugs only									
2	12	8	64302	$6.20	$3.00	643022	$20.60	643021	$25.10
4	12	11	64304	9.30	3.40	643042	25.00	643041	29.80
6	12	14	64306	12.20	3.60	643062	28.60	643061	33.50
8	12	17	64308	15.70	4.00	643082	33.50	643081	38.50
10	12	20	64310	19.00	4.20	643102	37.40	643101	42.40
12	12	24	64312	22.70	4.60	643122	42.50	643121	47.60
14	12	27	64314	25.90	5.00	643142	47.10	643141	52.30
16	12	30	64316	29.30	5.20	643162	51.20	643161	56.50
18	12	33	64318	32.50	5.50	643182	55.40	643181	60.90
20	12	36	64320	35.90	5.70	643202	59.60	643201	65.00
22	14	38	64322	40.60	6.00	643222	65.90	643221	71.30
24	14	41	64324	44.00	6.30	643242	76.20	643241	79.50
26	14	44	64326	47.30	6.50	643262	80.60	643261	84.00
28	14	47	64328	50.50	6.90	643282	85.50	643281	89.60
30	14	51	64330	53.70	7.30	643302	90.40	643301	95.30
32	14	54	64332	57.10	7.50	643322	94.70	643321	99.80
Main Fuse Connections									
2	12	10	65302	8.50	3.20	653022	23.50	653021	28.20
4	12	13	65304	10.60	3.60	653042	27.00	653041	31.90
6	12	16	65306	14.50	3.80	653062	31.50	653061	36.50
8	12	19	65308	18.00	4.20	653082	36.40	653081	41.40
10	12	22	65310	21.30	4.40	653102	40.50	653101	45.50
12	12	27	65312	25.40	5.00	653122	46.60	653121	51.80
14	12	30	65314	28.60	5.20	653142	50.50	653141	55.80
16	12	33	65316	32.00	5.50	653162	54.90	653161	60.40
18	12	36	65318	35.20	5.70	653182	58.90	653181	64.30
20	12	39	65320	38.60	6.10	653202	66.40	653201	69.20
22	14	45	65322	44.70	6.70	653222	78.80	653221	82.60
24	14	48	65324	48.10	6.90	653242	83.10	653241	87.20
26	14	51	65326	51.40	7.30	653262	88.10	653261	93.00
28	14	54	65328	54.60	7.50	653282	92.20	653281	97.30
30	14	57	65330	57.80	7.90	653302	97.30	653301	103.30
32	14	60	65332	61.20	8.10	653322	101.60	653321	108.00
Main Knife Switch only									
2	12	11	66302	12.70	3.40	663022	28.40	663021	33.60
4	12	14	66304	14.80	3.60	663042	31.20	663041	36.10
6	12	17	66306	18.70	4.00	663062	36.50	663061	41.50
8	12	20	66308	22.20	4.20	663082	40.60	663081	45.60
10	12	23	66310	25.50	4.60	663102	45.30	663101	50.40
12	12	29	66312	30.50	5.20	663123	52.40	663121	55.70
14	12	32	66314	33.70	5.30	663142	56.00	663141	61.40
16	12	35	66316	37.10	5.70	663162	60.80	663161	66.20
18	12	38	66318	40.30	5.90	663182	64.70	663181	70.10
20	12	41	66320	43.70	6.20	663202	75.50	663201	78.60
22	14	47	66322	52.60	6.90	663222	87.60	663221	91.70
24	14	50	66324	56.00	7.10	663242	91.80	663241	96.30
26	14	53	66326	59.30	7.50	663262	96.90	663261	102.00
28	14	56	66328	62.50	7.70	663282	101.10	663281	106.60
30	14	59	66330	65.70	8.10	663302	106.10	663301	112.50
32	14	62	66332	69.10	8.30	663322	110.60	663321	117.40
Main Knife Switch with Fuse Connections									
2	12	12	67302	14.80	3.40	673022	30.50	673021	35.30
4	12	15	67304	16.90	3.80	673042	33.90	673041	38.90
6	12	18	67306	20.80	4.00	673062	38.60	673061	43.60
8	12	21	67308	24.30	4.40	673082	43.50	673081	48.50
10	12	24	67310	27.60	4.60	673102	47.40	673101	52.50
12	12	30	67312	32.60	5.20	673122	54.50	673121	59.80
14	12	33	67314	35.80	5.50	673142	58.70	673141	64.20
16	12	36	67316	39.20	5.70	673162	62.90	673161	68.30
18	12	39	67318	42.40	6.10	673182	70.20	673181	73.00
20	12	42	67320	45.80	6.20	673202	77.10	673201	80.20
22	14	49	67322	57.40	7.10	673222	93.20	673221	97.70
24	14	52	67324	60.80	7.30	673242	97.50	673241	102.40
26	14	55	67326	64.10	7.70	673262	102.70	673261	108.20
28	14	58	67328	67.30	7.90	673282	106.80	673281	112.80
30	14	61	67330	70.50	8.30	673302	112.00	673301	118.80
32	14	64	67332	73.90	8.50	673322	116.30	673321	123.70

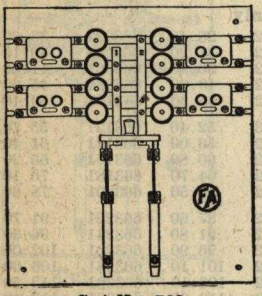
F. A. PANEL BOARDS

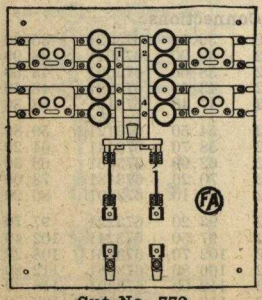
TYPE 7—MAINS, TWO-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

BASE.—Black slate, oil finish, 1/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—10-ampere D. P. push button switches with D. P. Edison plug fuse connection.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.


Cut No. 742


Cut No. 752


Cut No. 762

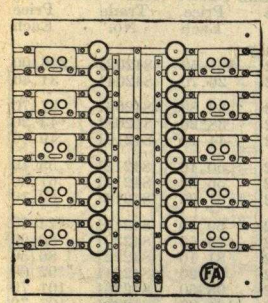

Cut No. 772

No. Cir.	Size of Panel Inches Width	Height	Mfrs. Cat. No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes All Steel Front With 2-P-6 Mfrs. Cat. No.	Price Each	All Wood Front With 1-P-6 Mfrs. Cat. No.	Price Each
Main Cable Lugs only									
2	14	6	74202	$ 7.50	$3.10	742022	$22.50	742021	$26.90
4	14	9	74204	12.50	3.30	742042	28.20	742041	32.70
6	14	13	74206	17.60	3.70	742062	34.70	742061	39.40
8	14	16	74208	22.80	3.90	742082	40.50	742081	45.30
10	14	19	74210	27.70	4.30	742102	46.70	742101	51.70
12	14	22	74212	33.30	4.50	742122	52.90	742121	57.90
14	14	25	74214	38.90	4.90	742142	59.90	742141	65.20
16	14	28	74216	43.90	5.10	742162	65.60	742161	71.00
18	14	32	74218	50.60	5.40	742182	73.70	742181	79.20
20	14	35	74220	55.80	5.80	742202	80.30	742201	85.80
22	14	38	74222	61.10	6.00	742222	86.40	742221	91.80
24	14	40	74224	66.20	6.20	742242	94.70	742241	97.70
26	14	43	74226	71.50	6.50	742262	104.80	742261	108.20
28	14	46	74228	76.70	6.70	742282	110.80	742281	114.60
30	14	49	74230	81.80	7.10	742302	117.60	742301	122.10
32	14	52	74232	87.00	7.30	742322	123.70	742321	128.60
Main Fuse Connections									
2	14	9	75202	9.00	3.30	752022	24.70	752021	29.20
4	14	12	75204	14.00	3.50	752042	30.40	752041	35.00
6	14	17	75206	19.40	4.10	752062	37.70	752061	42.60
8	14	20	75208	24.60	4.30	752082	43.60	752081	48.60
10	14	22	75210	29.50	4.50	752102	49.10	752101	54.10
12	14	29	75212	36.00	5.30	752122	58.50	752121	63.90
14	14	32	75214	41.60	5.40	752142	64.70	752141	70.20
16	14	35	75216	46.60	5.80	752162	71.10	752161	76.60
18	14	40	75218	54.90	6.20	752182	83.40	752181	86.40
20	14	43	75220	60.10	6.50	752202	93.40	752201	96.80
22	14	46	75222	65.40	6.70	752222	99.50	752221	103.30
24	14	49	75224	70.50	7.10	752242	106.30	752241	110.80
26	14	52	75226	75.80	7.30	752262	112.50	752261	117.40
28	14	55	75228	81.00	7.70	752282	119.60	752281	125.10
30	14	57	75230	86.10	7.90	752302	125.60	752301	131.60
32	14	60	75232	91.30	8.10	752322	131.70	752321	138.10
Main Knife Switch only									
2	14	10	76202	11.80	3.30	762022	27.50	762021	32.00
4	14	13	76204	16.80	3.70	762042	33.90	762041	38.60
6	14	19	76206	22.80	4.30	762062	41.80	762061	46.80
8	14	22	76208	28.00	4.50	762082	47.60	762081	52.60
10	14	25	76210	32.90	4.90	762102	53.90	762101	59.20
12	14	31	76212	41.30	5.40	762122	64.40	762121	69.90
14	14	33	76214	46.90	5.60	762142	70.70	762141	76.20
16	14	36	76216	51.90	5.80	762162	76.40	762161	81.90
18	14	44	76218	61.80	8.50	762182	99.20	762181	102.60
20	14	47	76220	67.00	9.00	762202	106.30	762201	110.50
22	14	50	76222	72.30	9.20	762222	112.60	762221	117.10
24	14	52	76224	77.40	9.50	762242	118.60	762241	123.50
26	14	55	76226	82.70	10.00	762262	126.20	762261	131.70
28	14	58	76228	87.90	10.30	762282	132.40	762281	138.40
30	14	61	76230	93.00	10.80	762302	139.80	762301	146.60
32	14	64	76232	98.20	11.10	762322	146.10	762321	153.50
Main Knife Switch with Fuse Connections									
2	14	11	77202	13.20	3.50	772022	29.60	772021	34.20
4	14	14	77204	18.20	3.70	772042	35.30	772041	40.00
6	14	19	77206	24.20	4.30	772062	43.20	772061	48.20
8	14	22	77208	29.40	4.50	772082	49.00	772081	54.00
10	14	25	77210	34.30	4.90	772102	55.30	772101	60.60
12	14	32	77212	44.50	5.40	772122	67.60	772121	73.10
14	14	35	77214	50.10	5.80	772142	74.60	772141	80.10
16	14	38	77216	55.10	6.00	772162	80.40	772161	85.80
18	14	45	77218	66.30	8.70	772182	104.60	772181	108.40
20	14	48	77220	71.50	9.00	772202	110.80	772201	114.90
22	14	51	77222	76.80	9.50	772222	118.10	772221	123.00
24	14	54	77224	81.90	9.80	772242	124.20	772241	129.30
26	14	57	77226	87.20	10.30	772262	131.70	772261	137.70
28	14	60	77228	92.40	10.50	772282	138.00	772281	144.40
30	14	63	77230	97.50	11.10	772302	145.40	772301	152.80
32	14	66	77232	102.70	11.40	772322	151.70	772321	159.60

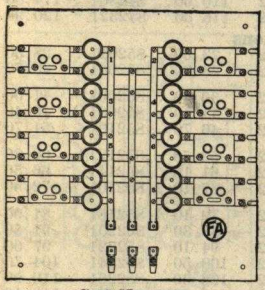
F. A. PANEL BOARDS

TYPE 7—MAINS, THREE-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 3 AMPERES

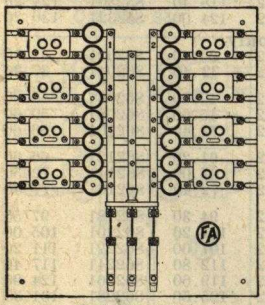
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—10-ampere D. P. push button switches with D. P. Edison plug fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



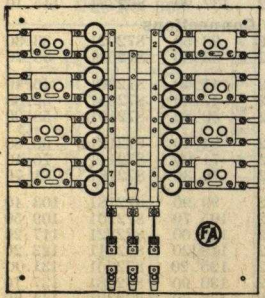
Cut No. 743



Cut No. 753



Cut No. 763



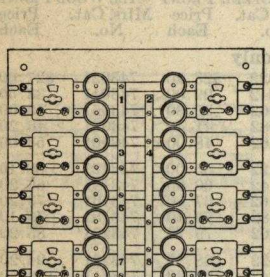
Cut No. 773

No. Cir.	Size of Panel Inches Width	Height	Mfrs. Cat. No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Mfrs. Cat. No.	Price Each	With 1-P-6 All Wood Front Mfrs. Cat. No.	Price Each
Main Cable Lugs only									
2	14	7	74302	$ 8.20	$3.10	743022	$23.20	743021	$27.60
4	14	10	74304	13.30	3.30	743042	29.00	743041	33.50
6	14	13	74306	18.20	3.70	743062	35.30	743061	40.00
8	14	16	74308	23.70	3.90	743082	41.40	743081	46.20
10	14	19	74310	29.00	4.30	743102	48.00	743101	53.00
12	14	23	74312	34.70	4.70	743122	55.00	743121	60.10
14	14	26	74314	39.90	4.90	743142	60.90	743141	66.20
16	14	29	74316	45.30	5.30	743162	67.80	743161	73.20
18	14	31	74318	50.50	5.40	743182	73.60	743181	79.10
20	14	34	74320	55.90	5.60	743202	79.70	743201	85.20
22	16	37	74322	62.60	6.10	743222	88.80	743221	94.20
24	16	39	74324	68.00	6.30	743242	97.30	743241	100.50
26	16	42	74326	73.30	6.50	743262	106.70	743261	110.20
28	16	45	74328	78.50	6.90	743282	113.90	743281	118.00
30	16	48	74330	83.70	7.10	743302	120.10	743301	124.50
32	16	51	74332	89.10	7.50	743322	127.40	743321	132.40
Main Fuse Connections									
2	14	10	75302	10.50	3.30	753022	26.20	753021	30.70
4	14	13	75304	14.60	3.70	753042	31.70	753041	36.40
6	14	15	75306	20.50	3.90	753062	38.20	753061	43.00
8	14	18	75308	26.00	4.10	753082	44.30	753081	49.20
10	14	21	75310	31.30	4.50	753102	50.90	753101	55.90
12	14	26	75312	37.40	4.90	753122	58.40	753121	63.70
14	14	29	75314	42.60	5.30	753142	65.10	753141	70.50
16	14	32	75316	48.00	5.40	753162	71.10	753161	76.60
18	14	35	75318	53.20	5.80	753182	77.70	753181	83.20
20	14	38	75320	58.60	6.00	753202	83.90	753201	89.30
22	16	43	75322	66.70	6.70	753222	101.10	753221	104.90
24	16	46	75324	72.10	6.90	753242	107.50	753241	111.60
26	16	49	75326	77.40	7.30	753262	114.70	753261	119.40
28	16	52	75328	82.60	7.50	753282	120.90	753281	125.90
30	16	55	75330	87.80	7.90	753302	128.10	753301	133.80
32	16	58	75332	93.20	8.10	753322	134.30	753321	140.40
Main Knife Switch only									
2	14	11	76302	14.70	3.50	763022	31.10	763021	35.70
4	14	14	76304	18.80	3.70	763042	35.90	763041	40.60
6	14	17	76306	24.70	4.10	763062	43.00	763061	47.90
8	14	20	76308	30.20	4.30	763082	49.20	763081	54.20
10	14	23	76310	35.50	4.70	763102	55.80	763101	60.90
12	14	28	76312	42.50	5.10	763122	64.20	763121	69.60
14	14	31	76314	47.70	5.40	763142	70.80	763141	76.30
16	14	34	76316	53.10	5.60	763162	76.90	763161	82.40
18	14	37	76318	58.30	6.00	763182	83.60	763181	89.00
20	14	40	76320	63.70	6.20	763202	92.20	763201	95.20
22	16	45	76322	74.60	6.90	763222	110.00	763221	114.10
24	16	48	76324	80.00	7.10	763242	116.40	763241	120.80
26	16	51	76326	85.30	7.50	763262	123.60	763261	128.60
28	16	54	76328	90.50	7.70	763282	129.80	763281	135.20
30	16	57	76330	95.70	8.10	763302	136.80	763301	142.90
32	16	60	76332	101.10	8.30	763322	143.20	763321	149.60
Main Knife Switch with Fuse Connections									
2	14	11	77302	16.80	3.50	773022	33.20	773021	37.80
4	14	15	77304	20.90	3.90	773042	38.60	773041	43.40
6	14	17	77306	26.80	4.10	773062	45.10	773061	50.00
8	14	20	77308	32.30	4.30	773082	51.30	773081	56.30
10	14	23	77310	37.60	4.70	773102	57.90	773101	63.00
12	14	29	77312	44.60	5.30	773122	67.10	773121	72 50
14	14	32	77314	49.80	5.40	773142	72.90	773141	78.40
16	14	34	77316	55.20	5.60	773162	79.00	773161	84.50
18	14	37	77318	60.40	5.00	773182	85.70	773181	91.10
20	14	40	77320	65.80	6.20	773202	94.30	773201	97.30
22	16	47	77322	79.40	7.10	773222	115.80	773221	120.20
24	16	50	77324	84.80	7.30	773242	122.10	773241	126.80
26	16	53	77326	90.10	7.70	773262	129.40	773261	134.80
28	16	56	77328	95.30	7.90	773282	135.60	773281	141.30
30	16	58	77330	100.50	8.10	773302	141.60	773301	147.70
32	16	61	77332	105.90	8.50	773322	149.10	773321	156.00

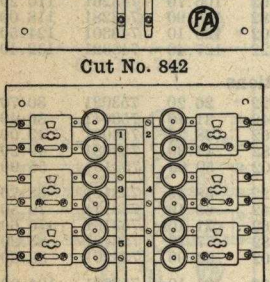
F. A. PANEL BOARDS

TYPE 8—MAINS, TWO-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 6 AMPERES

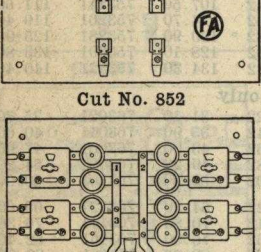
BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—10-ampere D. P. indicating snap switches with D. P. Edison plug fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.



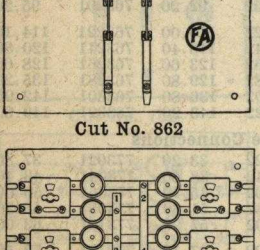
Cut No. 842



Cut No. 852



Cut No. 862



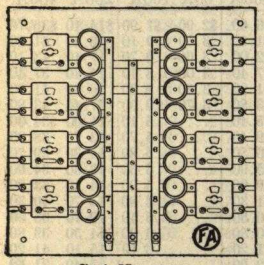
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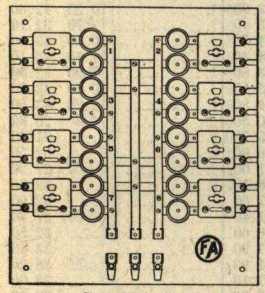
No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes All Steel Front With 2-P-6 Trade No.	Price Each	All Wood Front With 1-P-6 Trade No.	Price Each
Main Cable Lugs only									
2	12	6	84202	$7.10	$3.00	842022	$21.50	842021	$26.00
4	12	9	84204	11.70	3.20	842042	26.70	842041	31.40
6	12	13	84206	16.40	3.60	842062	32.80	842061	37.70
8	12	16	84208	21.20	3.80	842082	38.20	842081	43.20
10	12	19	84210	25.70	4.20	842102	44.10	842101	49.10
12	12	22	84212	30.90	4.40	842122	50.10	842121	55.10
14	12	25	84214	36.10	4.80	842142	56.60	842141	61.80
16	12	28	84216	40.70	5.00	842162	61.90	842161	67.10
18	12	32	84218	47.00	5.30	842182	69.30	842181	74.70
20	12	35	84220	51.80	5.70	842202	75.50	842201	80.90
22	12	38	84222	56.70	5.90	842222	81.10	842221	86.50
24	12	40	84224	61.40	6.10	842242	89.20	842241	92.00
26	12	43	84226	66.30	6.40	842262	98.50	842261	101.70
28	12	46	84228	71.10	6.60	842282	104.20	842281	107.70
30	12	49	84230	75.80	7.00	842302	110.60	842301	114.80
32	12	52	84232	80.60	7.20	842322	116.30	842321	120.90
Main Fuse Connections									
2	12	9	85202	8.60	3.20	852022	23.60	852021	28.30
4	12	12	85204	13.20	3.40	852042	28.90	852041	33.70
6	12	17	85206	18.20	4.00	852062	36.00	852061	41.00
8	12	20	85208	23.00	4.20	852082	41.40	852081	46.40
10	12	22	85210	27.50	4.40	852102	46.70	852101	51.70
12	12	29	85212	33.60	5.20	852122	55.50	852121	60.80
14	12	32	85214	38.80	5.30	852142	61.10	852141	66.50
16	12	35	85216	43.40	5.70	852162	67.10	852161	72.50
18	12	40	85218	51.30	6.10	852182	79.10	852181	81.90
20	12	43	85220	56.10	6.40	852202	88.30	852201	91.50
22	12	46	85222	61.00	6.60	852222	94.10	852221	97.60
24	12	49	85224	65.70	7.00	852242	100.50	852241	104.70
26	12	52	85226	70.60	7.20	852262	106.30	852261	110.90
28	12	55	85228	75.40	7.60	852282	112.80	852281	118.10
30	12	57	85230	80.10	7.80	852302	118.40	852301	124.20
32	12	60	85232	84.90	8.00	852322	124.00	852321	130.20
Main Knife Switch only									
2	12	10	86202	11.40	3.20	862022	26.40	862021	31.10
4	12	13	86204	16.00	3.60	862042	32.40	862041	37.30
6	12	19	86206	21.60	4.20	862062	40.00	862061	45.00
8	12	22	86208	26.40	4.40	862082	45.60	862081	50.60
10	12	25	86210	30.90	4.80	862102	51.40	862101	56.60
12	12	31	86212	38.90	5.30	862122	61.20	862121	66.60
14	12	33	86214	44.10	5.50	862142	67.00	862141	72.50
16	12	36	86216	48.70	5.70	862162	72.40	862161	77.80
18	12	44	86218	58.20	8.30	862182	94.30	862181	97.50
20	12	47	86220	63.00	8.80	862202	101.20	862201	105.00
22	12	50	86222	67.90	9.10	862222	107.00	862221	111.20
24	12	52	86224	72.60	9.40	862242	112.80	862241	117.40
26	12	55	86226	77.50	9.90	862262	119.60	862261	124.90
28	12	58	86228	82.30	10.10	862282	125.50	862281	131.30
30	12	61	86230	87.00	10.70	862302	132.10	862301	138.70
32	12	64	86232	91.80	10.90	862322	137.90	862321	145.10
Main Knife Switch with Fuse Connections									
2	12	11	87202	12.80	3.40	872022	28.50	872021	33.30
4	12	14	87204	17.40	3.60	872042	33.80	872041	38.70
6	12	19	87206	23.00	4.20	872062	41.40	872061	46.40
8	12	22	87208	27.80	4.40	872082	47.00	872081	52.00
10	12	25	87210	32.30	4.80	872102	52.80	872101	58.00
12	12	32	87212	42.10	5.30	872122	64.40	872121	69.80
14	12	35	87214	47.30	5.70	872142	71.00	872141	76.40
16	12	38	87216	51.90	5.90	872162	76.30	872161	81.70
18	12	45	87218	62.70	8.60	872182	99.90	872181	103.40
20	12	48	87220	67.50	8.80	872202	105.70	872201	109.50
22	12	51	87222	72.40	9.40	872222	112.60	872221	117.20
24	12	54	87224	77.10	9.60	872242	118.20	872241	123.20
26	12	57	87226	82.00	10.10	872262	125.20	872261	131.00
28	12	60	87228	86.80	10.40	872282	130.90	872281	137.10
30	12	63	87230	91.50	10.90	872302	137.60	872301	144.80
32	12	66	87232	96.30	11.20	872322	143.50	872321	151.20

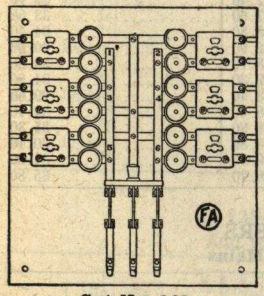
F. A. PANEL BOARDS

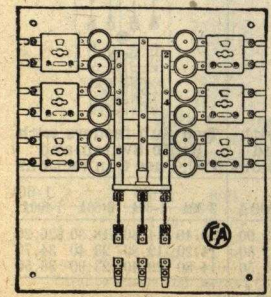
TYPE 8—MAINS, THREE-WIRE, 125 VOLTS; BRANCHES, 125 VOLTS, 3 AMPERES

BASE.—Black slate, oil finish, 7/8 inch thick.
FINISH.—Main and branch bus bars polished and lacquered.
BRANCHES.—10-ampere D. P. indicating snap switches with D. P. Edison plug fuse connections.
FRONTS.—2-P-6 dead black paint finish.
1-P-6 unfinished straight sawed oak.


Cut No. 843


Cut No. 853


Cut No. 863


Cut No. 873

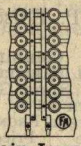
No. Cir.	Size of Panel Inches Width	Height	Trade No. Panel only	Price, Each Panel only	Barriers only	Combination Prices Panel Barriers and Code Gauge Steel Gutter Boxes With 2-P-6 All Steel Front Trade No.	Price Each	With 1-P-6 All Wood Front Trade No.	Price Each
Main Cable Lugs only									
2	12	7	84302	$ 7.80	$3.00	843022	$22.20	843021	$26.70
4	12	10	84304	11.50	3.20	843042	27.50	843041	32.20
6	12	13	84306	17.00	3.60	843062	33.40	843061	38.30
8	12	16	84308	22.10	3.80	843082	39.10	843081	44.10
10	12	19	84310	27.00	4.20	843102	45.40	843101	50.40
12	12	23	84312	32.30	4.60	843122	52.10	843121	57.20
14	12	26	84314	37.10	4.80	843142	57.60	843141	62.80
16	12	29	84316	42.10	5.20	843162	64.00	843161	69.30
18	12	31	84318	46.90	5.30	843182	69.20	843181	74.60
20	12	34	84320	51.90	5.50	843202	74.80	843201	80.30
22	14	37	84322	58.20	6.00	843222	83.50	843221	88.90
24	14	39	84324	63.20	6.20	843242	91.70	843241	94.70
26	14	42	84326	68.10	6.30	843262	100.30	843261	103.60
28	14	45	84328	72.90	6.70	843282	107.00	843281	110.80
30	14	48	84330	77.70	6.90	843302	112.70	843301	116.80
32	14	51	84332	82.70	7.30	843322	119.40	843321	124.30
Main Fuse Connections									
2	12	10	85302	10.10	3.20	853022	25.10	853021	29.80
4	12	13	85304	13.80	3.60	853042	30.20	853041	35.10
6	12	15	85306	19.30	3.80	853062	36.30	853061	41.30
8	12	18	85308	24.40	4.00	853082	42.20	853081	47.20
10	12	21	85310	29.30	4.40	853102	48.50	853101	53.50
12	12	26	85312	35.00	4.80	853122	55.50	853121	60.70
14	12	29	85314	39.80	5.20	853142	61.70	853141	67.00
16	12	32	85316	44.80	5.30	853162	67.10	853161	72.50
18	12	35	85318	49.60	5.70	853182	73.30	853181	78.70
20	12	38	85320	54.60	5.90	853202	79.00	853201	84.40
22	14	43	85322	62.30	6.50	853222	95.60	853221	99.00
24	14	46	85324	67.30	6.70	853242	101.40	853241	105.20
26	14	49	85326	72.20	7.10	853262	108.00	853261	112.50
28	14	52	85328	77.00	7.30	853282	113.70	853281	118.60
30	14	55	85330	81.80	7.70	853302	120.40	853301	125.90
32	14	58	85332	86.80	7.90	853322	126.30	853321	132.30
Main Knife Switch only									
2	12	11	86302	14.30	3.40	863022	30.00	863021	34.80
4	12	14	86304	18.00	3.60	863042	34.40	863041	39.30
6	12	17	86306	23.50	4.00	863062	41.30	863061	46.30
8	12	20	86308	28.60	4.20	863082	47.00	863081	52.00
10	12	23	86310	33.50	4.60	863102	53.30	863101	58.40
12	12	28	86312	40.10	5.00	863122	61.30	863121	66.50
14	12	31	86314	44.90	5.30	863142	67.20	863141	72.60
16	12	34	86316	49.90	5.50	863162	72.80	863161	78.30
18	12	37	86318	54.70	5.90	863182	79.10	863181	84.50
20	12	40	86320	59.70	6.10	863202	87.50	863201	90.30
22	14	45	86322	70.20	6.70	863222	104.30	863221	108.10
24	14	48	86324	75.20	6.90	863242	110.20	863241	114.30
26	14	51	86326	80.10	7.30	863262	116.80	863261	121.70
28	14	54	86328	84.90	7.50	863282	122.50	863281	127.60
30	14	57	86330	89.70	7.90	863302	129.20	863301	135.20
32	14	60	86332	94.70	8.10	863322	135.10	863321	141.50
Main Knife Switch with Fuse Connections									
2	12	11	87302	16.40	3.40	873022	32.10	873021	36.90
4	12	15	87304	20.10	3.80	873042	37.10	873041	42.10
6	12	17	87306	25.60	4.00	873062	43.40	873061	48.40
8	12	20	87308	30.70	4.20	873082	49.10	873081	54.10
10	12	23	87310	35.60	4.60	873102	55.40	873101	60.50
12	12	29	87312	42.20	5.20	873122	64.10	873121	69.40
14	12	32	87314	47.00	5.30	873142	69.30	873141	74.70
16	12	34	87316	52.00	5.50	873162	74.90	873161	80.40
18	12	37	87318	56.80	5.90	873182	81.20	873181	86.60
20	12	40	87320	61.80	6.10	873202	89.60	873201	92.40
22	14	47	87322	75.00	6.90	873222	110.00	873221	114.10
24	14	50	87324	80.00	7.10	873242	115.80	873241	120.30
26	14	53	87326	84.90	7.50	873262	122.50	873261	127.60
28	14	56	87328	89.70	7.70	873282	128.30	873281	133.80
30	14	58	87330	94.50	7.90	873302	134.00	873301	140.00
32	14	61	87332	99.50	8.30	873322	141.00	873321	147.80

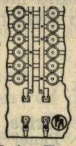
F. A. PANEL BOARDS

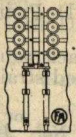
INCREASED MAINS

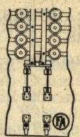
125-VOLT 2-WIRE MAINS FOR 125-VOLT BRANCHES

Add to Standard Panel Prices for Increasing Size of Mains







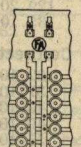


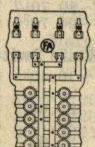
No. of Cir.	Std. Cap. Mains	Main Lugs only				Main Fuse Connections				Main Knife Switch only				Main Knife Switch with Fuse Connections			
		60A	100A	200A	400A	60A	100A	200A	400A	60A	100A	200A	400A	60A	100A	200A	400A
	*	$0.80	$1.40	$3.00	$8.40	$1.50	$3.20	$6.40	$18.80	$2.70	$6.80	$11.80	$26.60	$2.90	$7.90	$14.10	$36.70
2	30A †	1.00	1.70	3.50	9.40	2.00	4.50	8.20	20.80	3.30	8.00	14.30	31.10	3.50	9.10	16.60	41.20
	‡	1.10	1.70	3.60	9.60	2.10	6.20	8.70	21.00	3.40	8.60	14.80	32.00	3.60	9.70	17.10	43.10
	*	.80	1.50	3.30	9.10	1.50	3.40	6.80	19.50	2.70	7.00	12.10	27.40	3.00	8.10	14.40	37.40
4	30A †	1.10	1.80	3.80	10.10	2.00	4.70	8.60	21.50	3.30	8.20	14.60	31.90	3.60	9.30	16.90	41.90
	‡	1.10	1.80	3.90	10.30	2.10	5.10	9.10	23.70	3.40	8.80	15.10	33.80	3.70	9.90	17.40	43.80
	*	....	.70	2.60	8.40	....	2.00	5.40	19.00	....	4.50	9.50	25.40	....	5.10	11.90	34.30
6	60A †	....	.70	2.80	8.90	....	2.90	6.80	22.40	....	5.10	11.30	29.40	....	5.70	13.70	38.30
	‡	....	.70	2.90	9.00	....	3.20	7.10	23.00	....	5.20	11.90	30.80	....	5.80	14.30	39.70
	*	....	.90	3.00	9.10	....	2.20	5.70	19.30	....	4.70	9.90	25.90	....	5.30	12.30	34.90
8	60A †	....	.90	3.20	9.60	....	3.10	7.20	21.70	....	5.30	11.70	29.90	....	5.90	14.10	38.90
	‡	....	.90	3.30	9.70	....	3.30	7.50	23.30	....	5.40	12.30	31.30	....	6.00	14.70	40.30
	*	....	1.10	3.30	9.60	....	2.40	6.10	19.90	....	4.90	10.30	26.50	....	5.40	12.70	35.50
10	60A †	....	1.10	3.60	10.10	....	3.40	7.60	23.60	....	5.50	12.10	30.80	....	6.00	14.50	39.80
	‡	....	1.10	3.60	10.20	....	3.60	7.90	24.30	....	5.60	12.70	31.20	....	6.10	15.10	41.20
	*	....	....	2.40	9.90	....	....	4.30	18.70	....	....	5.80	22.90	....	....	7.40	31.60
12	100A †	....	....	2.60	10.40	....	....	5.40	21.20	....	....	7.90	34.20	....	....	9.60	42.90
	‡	....	....	2.70	10.50	....	....	5.60	21.70	....	....	8.50	33.90	....	....	10.20	42.60
	*	....	....	2.60	10.40	....	....	4.50	19.20	....	....	6.00	23.40	....	....	7.70	32.10
14	100A †	....	....	2.80	10.90	....	....	5.50	27.60	....	....	10.50	34.70	....	....	10.30	43.40
	‡	....	....	2.90	11.00	....	....	5.70	26.70	....	....	11.20	34.40	....	....	11.10	43.10
	*	....	....	2.80	10.90	....	....	4.70	19.60	....	....	6.20	23.80	....	....	7.90	32.50
16	100A †	....	....	3.10	11.40	....	....	9.10	28.10	....	....	11.10	35.10	....	....	10.50	43.80
	‡	....	....	3.10	11.50	....	....	6.10	27.20	....	....	9.50	34.80	....	....	12.30	43.50
	*	....	....	....	10.30	....	....	....	17.00	....	....	....	20.50	....	....	....	26.80
18	200 †	....	....	....	10.80	....	....	....	20.20	....	....	....	25.70	....	....	....	31.60
	‡	....	....	....	10.90	....	....	....	21.80	....	....	....	26.90	....	....	....	32.50
	*	....	....	....	10.80	....	....	....	17.50	....	....	....	21.00	....	....	....	27.20
20	200 †	....	....	....	11.30	....	....	....	20.70	....	....	....	26.10	....	....	....	32.00
	‡	....	....	....	11.40	....	....	....	22.30	....	....	....	27.60	....	....	....	32.90
	*	....	....	....	11.20	....	....	....	17.90	....	....	....	21.40	....	....	....	27.70
22	200 †	....	....	....	11.80	....	....	....	21.20	....	....	....	26.60	....	....	....	32.50
	‡	....	....	....	12.10	....	....	....	22.80	....	....	....	27.90	....	....	....	33.40
	*	....	....	....	11.70	....	....	....	18.40	....	....	....	21.90	....	....	....	28.20
24	200 †	....	....	....	14.60	....	....	....	21.80	....	....	....	27.10	....	....	....	33.00
	‡	....	....	....	12.60	....	....	....	23.40	....	....	....	28.30	....	....	....	33.90
	*	....	....	....	12.20	....	....	....	18.90	....	....	....	22.40	....	....	....	28.70
26	200 †	....	....	....	16.20	....	....	....	22.30	....	....	....	27.60	....	....	....	33.50
	‡	....	....	....	16.50	....	....	....	23.90	....	....	....	28.80	....	....	....	34.40
	*	....	....	....	12.70	....	....	....	19.40	....	....	....	22.90	....	....	....	29.20
28	200 †	....	....	....	13.50	....	....	....	22.80	....	....	....	28.10	....	....	....	34.00
	‡	....	....	....	13.80	....	....	....	24.40	....	....	....	29.30	....	....	....	34.90
	*	....	....	....	13.20	....	....	....	19.80	....	....	....	23.40	....	....	....	29.60
30	200 †	....	....	....	14.00	....	....	....	23.30	....	....	....	28.60	....	....	....	34.40
	‡	....	....	....	14.30	....	....	....	25.00	....	....	....	29.80	....	....	....	35.30
	*	....	....	....	13.60	....	....	....	20.30	....	....	....	23.80	....	....	....	30.10
32	200 †	....	....	....	14.40	....	....	....	23.80	....	....	....	29.00	....	....	....	34.90
	‡	....	....	....	14.70	....	....	....	25.60	....	....	....	30.20	....	....	....	35.80

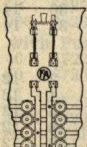
SUB-FEEDERS

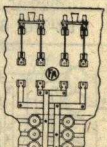
125-VOLT 2-WIRE MAINS, 125-VOLT FEEDERS

Add to Standard Panel Prices after Increasing Size of Mains









	One Sub-feeder with Fuse Connections				Two Sub-feeders with N. C. Fuse Connections				One Sub-feeder with Knife Switch and N. C. Fuse Connections				Two Sub-feeders with Knife Switch and N. C. Fuse Connections			
	30A	60A	100A	200A	2-30A	1-30A 1-60A	2-60A	1-60 1-100A	30A	60A	100A	200A	2-30A	1-30 1-60A	2-60A	1-60 1-100A
*	$2.40	$4.40	$7.80	$14.20	$6.50	$9.50	$11.80	$17.30	$4.60	$8.20	$13.80	$23.00	$10.40	$14.80	$18.30	$26.20
†	3.80	6.50	12.30	19.70	9.50	13.00	15.30	23.80	7.10	11.70	20.30	32.50	14.20	19.80	23.40	34.70
‡	4.00	6.80	12.70	20.30	9.70	13.50	15.80	24.40	7.40	12.20	21.00	32.50	14.80	29.40	23.90	35.50

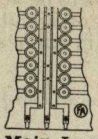
*Add to panels and barriers only. †Add to combination 2-P-6 front. ‡Add to combination 1-P-6 front.

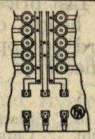
F. A. PANEL BOARDS

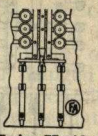
INCREASED MAINS

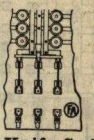
125-250-VOLT 3-WIRE MAINS FOR 125-VOLT BRANCHES

Add to Standard Panel Prices for Increasing Size of Mains







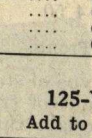


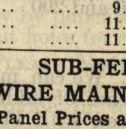
No. of Cir.	Std. Cap. Mains		Main Lugs only 60A	Main Lugs only 100A	Main Lugs only 200A	Main Fuse Connections 60A	Main Fuse Connections 100A	Main Fuse Connections 200A	Main Knife Switch only 60A	Main Knife Switch only 100A	Main Knife Switch only 200A	Main Knife Switch with Fuse Connections 60A	Main Knife Switch with Fuse Connections 100A	Main Knife Switch with Fuse Connections 200A
2	30A	*	$1.00	$2.00	$4.20	$1.90	$4.00	$8.60	$3.30	$9.40	$16.10	$3.80	$10.80	$19.70
		†	1.25	2.20	4.70	2.40	5.30	10.40	4.10	10.60	18.60	4.60	12.50	22.50
		‡	1.30	2.30	4.80	2.50	5.70	10.90	4.50	11.20	19.70	4.70	12.90	23.00
4	30A	*	1.10	2.20	4.60	2.00	4.20	9.10	3.50	9.60	16.50	3.90	11.00	20.10
		†	1.30	2.40	5.10	2.50	5.50	10.90	4.30	10.80	19.00	4.70	12.70	22.90
		‡	1.40	2.50	5.20	2.60	5.90	11.40	4.70	11.40	20.10	4.80	13.10	23.40
6	30A	*	1.20	2.40	5.00	2.10	4.40	9.50	3.60	9.80	16.90	4.00	11.20	20.50
		†	1.50	2.60	5.50	2.60	5.70	11.30	4.40	10.80	19.40	4.70	19.90	23.40
		‡	1.50	2.70	5.60	2.70	6.10	11.80	4.80	11.60	20.50	4.90	20.30	23.90
8	30A	*	1.30	2.50	5.50	2.20	4.60	9.90	3.60	10.00	17.30	4.10	11.30	20.90
		†	1.50	2.80	6.00	2.70	5.90	11.70	4.40	11.20	19.80	4.80	13.10	23.80
		‡	1.60	2.80	6.10	2.80	6.30	12.20	4.80	11.80	21.00	5.00	13.40	24.30
10	30A	*	1.40	2.70	5.80	2.30	4.70	10.40	3.70	10.20	17.80	4.20	11.50	21.40
		†	1.60	3.00	6.30	2.80	6.00	12.20	4.50	11.40	20.30	4.90	13.20	24.20
		‡	1.70	3.00	6.40	2.90	6.40	12.70	4.90	12.00	21.40	5.10	13.60	24.80
12	60A	*	....	1.40	4.90	....	2.80	8.40	....	6.90	14.40	....	7.40	17.70
		†	....	1.40	5.10	....	3.80	9.90	....	7.50	16.60	....	8.40	21.80
		‡	....	1.40	5.20	....	4.10	10.20	....	7.80	17.40	....	8.60	20.80
14	60A	*	....	1.60	5.30	....	3.00	8.90	....	7.00	15.00	....	7.60	18.20
		†	....	1.60	5.60	....	4.00	12.90	....	7.70	20.10	....	8.60	23.20
		‡	....	1.60	5.60	....	4.20	10.60	....	8.00	19.10	....	8.80	22.30
16	60A	*	....	1.80	5.70	....	3.20	9.30	....	7.10	15.40	....	7.80	18.60
		†	....	1.80	6.00	...	6.60	16.60	....	7.70	22.30	....	8.80	27.50
		‡	....	1.80	6.00	....	5.00	15.40	....	8.00	19.50	....	9.60	26.50
18	60A	*	....	2.00	6.20	....	3.40	9.70	....	7.30	16.00	....	8.00	18.80
		†	....	2.00	6.40	....	4.60	12.10	....	14.20	20.90	....	12.70	25.80
		‡	....	2.00	6.60	....	5.20	13.00	....	12.30	19.90	....	13.40	27.20
20	60A	*	....	2.20	6.60	....	3.60	10.20	....	7.50	16.30	....	8.10	19.50
		†	....	2.20	6.80	....	4.80	13.00	....	8.90	21.30	....	9.70	23.30
		‡	....	2.20	6.90	....	5.80	13.90	....	9.40	22.50	....	10.30	24.60
22	100A	*	....	....	4.80	....	....	8.20	....	....	9.20	....	....	11.80
		†	....	....	5.10	....	....	9.70	....	....	13.60	....	....	14.00
		‡	....	....	5.20	....	....	10.10	....	....	14.40	....	....	14.70
24	100A	*	....	....	5.10	....	....	8.50	....	....	9.50	....	....	12.00
		†	....	....	5.50	....	....	10.00	....	....	14.00	....	....	14.30
		‡	....	....	5.60	....	....	10.40	....	....	14.80	....	....	15.00
26	100A	*	....	....	5.30	....	....	8.80	....	....	9.80	....	....	12.30
		†	....	....	5.80	....	....	10.30	....	....	14.20	....	....	14.50
		‡	....	....	6.00	....	....	10.60	....	....	14.90	....	....	15.30
28	100A	*	....	....	5.70	....	....	9.00	....	....	10.10	....	....	12.60
		†	....	....	6.20	....	....	10.50	....	....	14.50	....	....	14.80
		‡	....	....	6.30	....	....	10.90	....	....	15.20	....	....	15.50
30	100A	*	....	....	5.90	....	....	9.30	....	....	10.30	....	....	12.80
		†	....	....	6.40	....	....	10.80	....	....	14.70	....	....	15.00
		‡	....	....	6.50	....	....	11.20	....	....	15.50	....	....	15.80
32	100A	*	....	....	6.10	....	....	9.60	....	....	10.60	....	....	13.10
		†	....	....	6.60	....	....	11.10	....	....	15.00	....	....	15.30
		‡	....	....	6.80	....	....	11.40	....	....	15.70	....	....	16.10

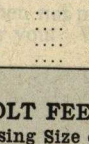
SUB-FEEDERS

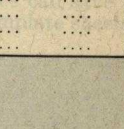
125-VOLT 3-WIRE MAINS, 125-VOLT FEEDERS

Add to Standard Panel Prices after Increasing Size of Mains





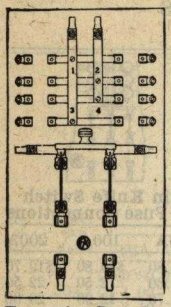




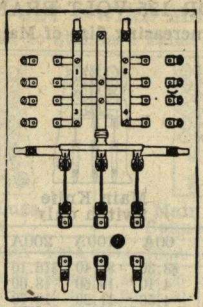
		With Sub-feeder with N. C. Fuse Connections 30A	With Sub-feeder with N. C. Fuse Connections 60A	With Sub-feeder with N. C. Fuse Connections 100A	Two Sub-feeders with N. C. Fuse Connections only 2-30A	Two Sub-feeders with N. C. Fuse Connections only 1-30 1-60A	Two Sub-feeders with N. C. Fuse Connections only 2-60A	One Sub-feeder with Knife Switch and N. C. Fuse Connections 30A	One Sub-feeder with Knife Switch and N. C. Fuse Connections 60A	One Sub-feeder with Knife Switch and N. C. Fuse Connections 100A	Two Sub-feeders with Knife Switch and N. C. Fuse Connections 2-30A	Two Sub-feeders with Knife Switch and N. C. Fuse Connections 1-30 1-60A	Two Sub-feeders with Knife Switch and N. C. Fuse Connections 2-60A
	*	$2.80	$5.70	$10.20	$8.70	$11.80	$16.30	$6.10	$10.90	$18.80	$14.00	$20.20	$25.50
	†	4.20	7.80	14.70	11.70	15.30	19.80	8.50	14.40	25.30	17.90	25.30	30.60
	‡	4.40	8.10	15.10	11.90	15.80	20.30	8.90	14.90	25.90	18.40	25.80	31.10

*Add to panels and barriers only. †Add to combination 2-P-6 front. ‡Add to combination 1-P-6 front.

F. A. PANELS AND CABINETS



Two-wire Panel



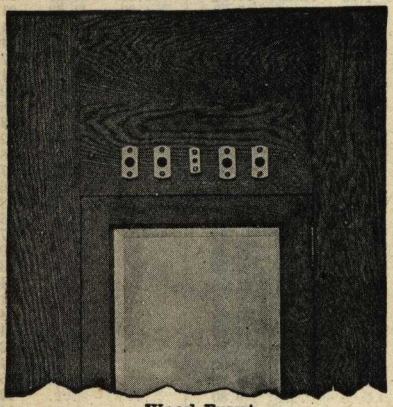
Three-wire Panel

METER LOOP CONNECTIONS

List prices and heights to be added to list price and height of any type of standard slate panel board equipped with main knife switch with fuse connections.

Add to Height of Panel Inches	Standard Capacity of Mains Amperes		Add to List Price of Panel Two-wire	Add to List Price of Panel Three-wire and Three-Two-wire Convertible
		*	$2.20	$2.30
1	30	†	2.60	2.80
		‡	2.80	2.90
		*	2.40	2.50
2	60	†	2.90	3.10
		‡	3.20	3.20
		*	2.80	2.90
2	100	†	3.40	3.70
		‡	3.60	4.00
		*	3.50	3.60
3	200	†	5.20	5.50
		‡	6.10	6.60
		*	8.10	10.40
4	400	†	8.90	11.20
		‡	10.00	12.30
Note.—Minimum width of panel for 400 amperes meter loop.			11 inches	15 inches

*Add for panels and barriers only.
†Add for combination 2-P-6 front.
‡Add for combination 1-P-6 front.



Wood Front

METER SPACE ON FRONTS

Wood Fronts

We can make any type of wood front with 12 inches of additional height of trim or frame and fitted with porcelain bushing of size as ordered for meter loops, as per illustration.

For Panel with Bus Bar Capacity Amperes	Add to List Price of Standard Fronts Two-wire	Three-wire
30 and 60	$3.85	$4.50
100 and 200	4.50	5.40

Steel Fronts

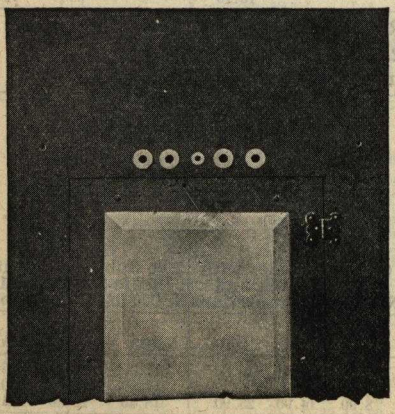
We can make any type of steel front with 12 inches of additional height of trim or frame and fitted with Federal Porcelain Bushings of size as ordered for meter loops.

30 and 60	3.25	3.70
100 and 200	4.00	4.85
400	4.50	5.30

Meter board 12x12x⅞ inches, oak wood, finished. List, $1.75.

Unless otherwise specified, we will furnish the following Federal bushings with our fronts.

Federal No.	Style Connection
1A	Shunt connection
2A	30-ampere mains
3A	60-ampere mains
4A	100-ampere mains
5A	200-ampere mains
6A	400-ampere mains

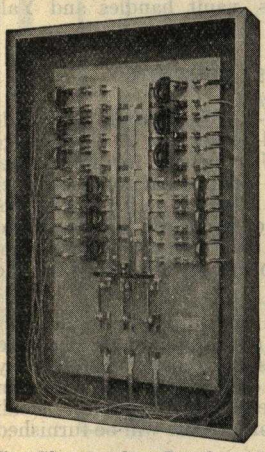


Steel Front

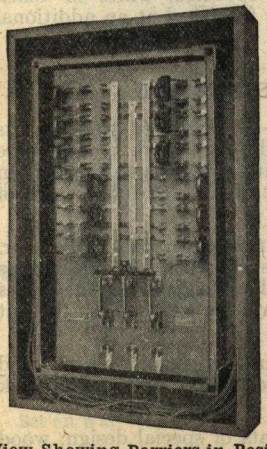
F. A. CABINET BOXES



Steel Box

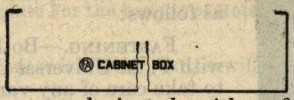


View Showing how Panel can be Connected before Barriers are Installed



View Showing Barriers in Position after All Wires are Connected

STANDARD GUTTER CABINET BOXES

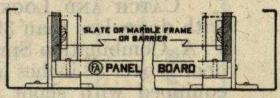


CONSTRUCTION. — Standard gutter cabinet boxes are all made from one piece of sheet steel, flanged or lapped at the four corners and riveted, with a ¾-inch flange turned inwardly all around outside edge. This flange materially adds to the rigidity of the construction and is used in connection with the F. A. Universal Clamp for fastening the front to the box of the cabinet.

THICKNESS.—F. A. Steel Cabinet Boxes are made in two thicknesses.

TYPE 140 Standard Code thickness, made of No. 14 U. S. gauge for all boxes of 1200 square inches or less in area and under 49 inches in height, and No. 10 for boxes over this size.

One-piece boxes of No. 8 U. S. gauge (3/16 inch) steel made to order at additional price.



GUTTER SPACE. — Standard gutter cabinet boxes are all listed and made with gutter space all around panel varying with height of panel either 3 or 4 inches wide.

FRAME OR BARRIER.—Slate and marble barriers are separately listed and are not included in either price of panel, box or front. Barriers are always furnished with four patented F. A. Adjustable Corner Supports.

NOTE.—1915 Code Standard rules specify that all cut-out boxes and cabinets having more than four circuit branches shall be provided with barriers (partitions) for separating wiring gutter space from the cut-outs, switches, panel boards and other apparatus, unless wires leave the cabinet directly opposite their terminal connections.

DEPTH.—Standard gutter cabinet boxes are all made with at least ¼ inch space back of panel and at least ½ inch clear space between door and any current-carrying part of panel; this depth can be increased to take care of specified conditions of installation, at an additional price.

FLUSH OR SURFACE.—Standard gutter cabinet boxes are made with turned-in flange, and can be used for both flush and surface installation.

HOLES.—Standard gutter cabinet boxes are punched with all necessary "cleared" holes for both feeder and circuit cables and wires; provided template for holes is sent with order. No allowance made for holes when not punched. We can save you money by punching holes for you. Write for template sheets to lay out holes for each box.

PLEASE NOTE—When template for holes does not accompany order, our standard practice is (unless order says no holes to provide in top of cabinet box knockout holes for ½-inch conduit equal to the total number of circuit branches on the panel, and in the bottom for 20 per cent of this amount.

In addition to the above, knockout holes not exceeding 2-inch conduit size are provided for the mains in both the top and bottom of cabinet box, the size and number depending upon their capacity and whether same are 2 or 3-wire.

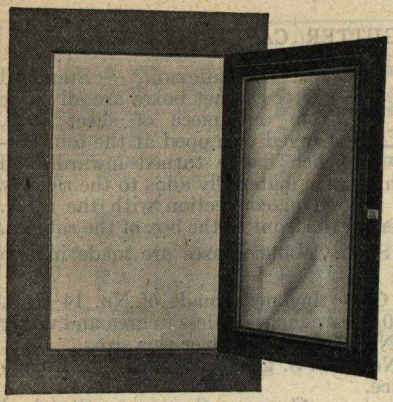
If width of cabinet box will not accommodate the required number of holes in the top, the excess number are placed in the sides.

PLUGS

An extra charge of 10 per cent for boxes ordered with holes made knock-out, according to a hole template.

NOTE.—Knock-out holes are an unnecessary expense to the contractor, as we will furnish, on demand, F. A. Plugs free, not exceeding 20 per cent of the number of ½ and ¾-inch holes specified for entire order, and these F. A. Plugs can be placed in just the holes not used for conduit.

F. A. STANDARD FRONTS FOR GUTTER CABINETS



Type 2-G-6 Panel Front

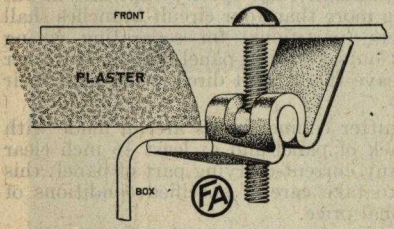
F. A. Standard Fronts are made in steel, Types 2-P-6 and 2-G-6, and wood, Types 1-P-6 and 1-G-6, as follows:

FASTENING.—Both wood and steel fronts are fitted with F. A. Universal Clamps, which are self-adjusting, to take care of any variation in thickness of the plaster up to the extreme case of ¾ inch and hold the front firmly in position, entirely eliminating the trouble of locating the old time threaded hole in flange of box.

FLUSH OR SURFACE.—All fronts for cabinet boxes set in wall flush with finished plaster are made ¾ inch larger than box, and all fronts for cabinet boxes set on wall are made the same size as outside of box.

NOTE.—The flush type front will always be furnished unless the customer specifies that surface type is desired.

CATCH AND LOCK.—Both steel and wood fronts with doors less than 39 inches high are equipped with F. A. Combination Spring Catch Yale Lock, and when door is over 38 inches high or for double doors, they are equipped with shoot bolts, vault handles and Yale lock.



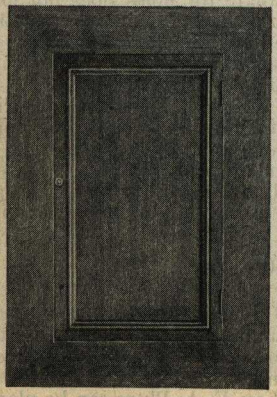
Universal Clamp

STEEL CONSTRUCTION

TYPES 2-P-6 AND 2-G-6.—Steel fronts are made from a single sheet of steel, either No. 12 U. S. gauge for small size or No. 10 U. S. gauge, for large size. The door is cut out, leaving a trim (mat) of the proper width all around the door. There is no joint or patching at the corners. A strip of band iron is spot-welded along the inner edge of the door frame in such a manner as to project out and form a ¼-inch rabbet for the door to close against.

GLASS PANEL.—When glass panel in door is specified, Type 2-G-6, the door is again cut out and proper size Code thickness glass panel fastened by steel molding on inside of door as may be noted on illustration. When specified, plate glass for small sizes or beveled edge glass for any size will be furnished at an additional price.

FINISH.—Standard steel fronts are finished in dead black paint. When specified, white or black baked enamel finish will be furnished at an additional price.



Wood Panel, Type 3-P-6

WOOD CONSTRUCTION

TYPES 1-P-6 AND 1-G-6.—Standard wood fronts are made of ⅞-inch straight-sawed oak, yellow pine or cypress wood, fitted with hinges and finished in natural color with one coat of filler and two coats of varnish.

GLASS PANEL.—Wood fronts with glass panel door, Type 1-G-6, will be furnished with Code thickness glass panel. When specified, plate glass for small sizes or beveled edge glass for any size will be furnished at an additional price.

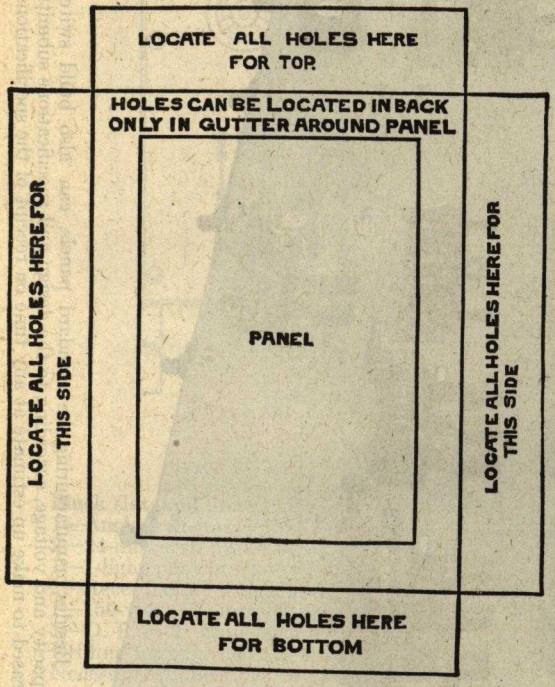
LINING.—All wood fronts are regularly furnished with No. 16 U. S. gauge steel lining over entire back of trim and door.

SPECIAL FRONTS.—Fronts of special design, wood or finish will be furnished as per specifications submitted, at an additional price.

F. A. DRILLING TEMPLATE FOR STEEL BOX CABINETS

We Must Have This Template For the Layout of Holes Before Starting Work On Boxes

NOTE.—Unless template is sent with order, boxes will be shipped without holes.



DIMENSIONS OF CONDUIT, BUSHINGS AND SPACING

Rigid Enameled Steel Conduit

Internal Diam. Conduit, In.	Diam. In. Hole in Box	Spacing, In. Center to Center
1/2	7/8	1 3/8
3/4	1 1/8	1 5/8
1	1 3/8	2
1 1/4	1 3/4	2 3/8
1 1/2	2	2 5/8
2	2 1/2	3 1/8
2 1/2	3	3 3/4
3	3 5/8	4 3/8

Flexible Conduit

1/4	5/8	1
3/8	11/16	1 1/8
1/2	7/8	1 3/8
5/8	1	1 1/2
3/4	1 1/8	1 5/8
1	1 3/8	2
1 1/4	1 3/4	2 3/8
1 1/2	2	2 5/8
1 3/4	2 1/2	2 7/8

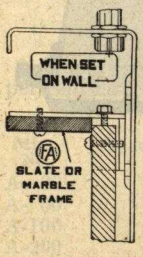
Federal Clamp Bushing

Bushing No.	Internal Diam. Conduit In.	Diam., In. Hole in Box	Spacing, In. Center to Center
1-A	9/32	11/16	1
2-A	13/32	7/8	1 1/4
3-A	9/16	1 1/8	1 3/8
4-A	3/4	1 3/8	1 3/4
5-A	1 1/8	1 3/4	2 1/8
6-A	1 5/8	2 1/2	2 7/8

NOTE BELOW WHERE CONDUIT ENTERS BOX

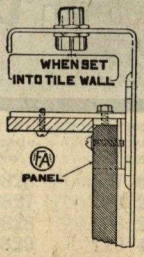
Cross Out 2 Illustrations Not Wanted

Back



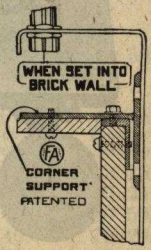
Set on Wall

Center



Set in Tile Wall

Front

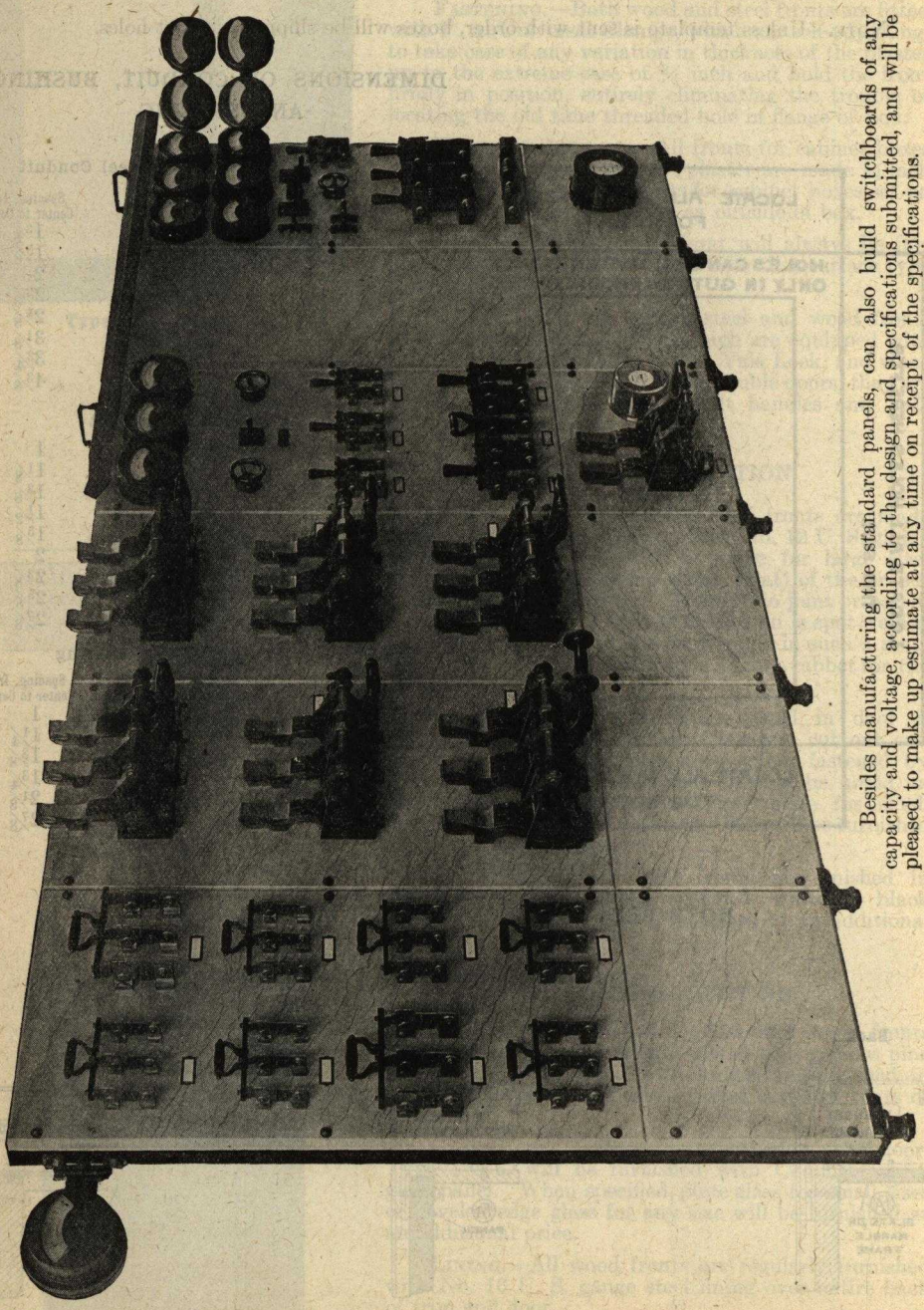


Set in Brick Wall

NOTE.—Extra copies of this page will be furnished on request. Do not tear out.

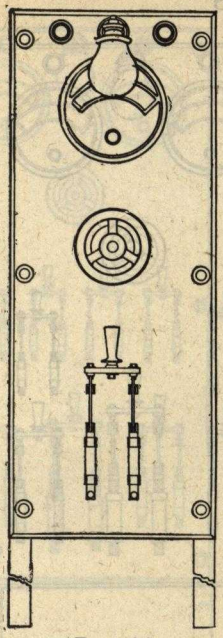
F. A. SWITCHBOARDS

ALTERNATING CURRENT

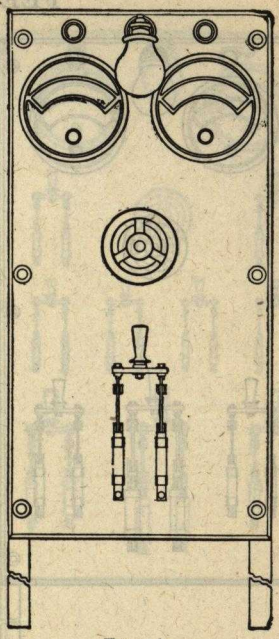


Besides manufacturing the standard panels, can also build switchboards of any capacity and voltage, according to the design and specifications submitted, and will be pleased to make up estimate at any time on receipt of the specifications.

F. A. STANDARD GENERATOR PANELS



Type AA



Type A

TYPE AA SPECIFICATIONS

Black slate, oil finish, 1¼ inches thick, with edges beveled.
1—Angle iron frame holding top of board 72 inches from floor.
2—24-inch iron pipe wall braces.
1—1-light pilot bracket with socket and shade.
2—Receptacles for ground lamps.
1—150-volt, 7½-inch diameter R. P. voltmeter.
1—D. P. S. T. knife switch with New Code fuses.
Drilling for one rheostat (furnished by purchaser).
Necessary connections on rear of board.

Mfrs. No.	Size of Panel Inches	Cap. of Switch Amperes	With Norton Type C Trade No.	With Norton Type C Price Each	With Weston Model 159 Trade No.	With Weston Model 159 Price Each	Add to List for Marble
AA- 30	14x30	30	98811	$59.00	98821	$63.00	$8.00
AA- 60	14x36	60	98812	61.75	98822	65.75	8.00
AA-100	16x42	100	98813	68.50	98823	72.50	9.60
AA-200	16x48	200	98814	77.15	98824	81.15	10.80
Add to list for 300-V. voltmeter.....			98815	3.50	98825	3.75	.....

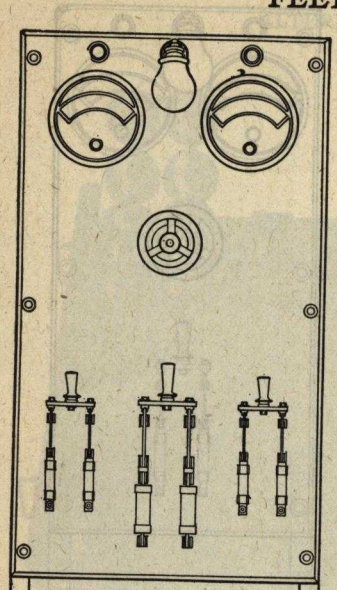
TYPE A SPECIFICATIONS

Same specifications as above, with additional 7½-inch diameter R. P. ammeter (having 50 per cent larger scale than capacity of generator switch).

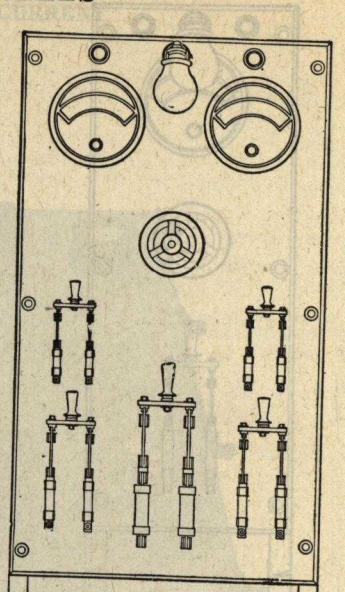
Mfrs. No.	Size of Panel Inches	Cap. of Switch Amperes	With Norton Type C Trade No.	With Norton Type C Price Each	With Weston Model 159 Trade No.	With Weston Model 159 Price Each	Add to List for Marble
A- 30	18x30	30	98826	$87.60	98838	$96.35	$9.25
A- 60	18x36	60	98827	90.25	98839	99.00	9.25
A-100	18x42	100	98828	98.25	98840	103.75	10.50
A-200	18x48	200	98829	110.40	98841	118.40	12.20
A-400	18x48	300	98830	122.00	98842	130.75	12.20
Add to list for 300-V. voltmeter...			98831	3.50	98843	3.75	.....

Note.—Approximate shipping weight per square foot is 50 pounds.

F. A. STANDARD COMBINATION GENERATOR AND FEEDER PANELS



Type AF-2



Type AF-4

TYPE AF-2 SPECIFICATIONS

Black slate, oil finish, 1¼ inches thick, with beveled edges.
1—Angle iron frame holding top of board 72 inches from floor.
2—24-inch iron pipe wall braces.
1—1-light pilot bracket with socket and shade.
2—Receptacles for ground lamps.
1—150-volt, 7½-inch diameter R. P. voltmeter.
1—7½-inch diameter R. P. ammeter (having 50 per cent larger scale than capacity of generator switch).
1—D. P. S. T. generator switch with New Code fuses.
2—D. P. S. T. feeder switches with New Code fuses.
Drilling for one rheostat (furnished by purchaser).
Necessary connections on rear of board.

Mfrs. No.	Size of Panel Inches	Capacity Amperes Gen. Switch	Capacity Amperes Feeder Switches	With Norton Type C Trade No.	With Norton Type C Price Each	With Weston Model 159 Trade No.	With Weston Model 159 Price Each	Add to List for Marble
AF- 32	18x36	30	2– 30	98854	$ 95.75	98866	$104.50	$ 9.50
AF- 62	18x36	60	2– 30	98855	102.50	98867	111.25	12.25
AF-102	24x42	100	2– 60	98856	114.00	98868	119.50	14.00
AF-202	24x42	200	2–100	98857	136.25	98869	144.25	14.00
AF-402	24x48	300	2–200	98858	162.00	98870	170.75	14.00
Add to list for 300-V. voltmeter.....				98859	3.50	98871	3.75	.....

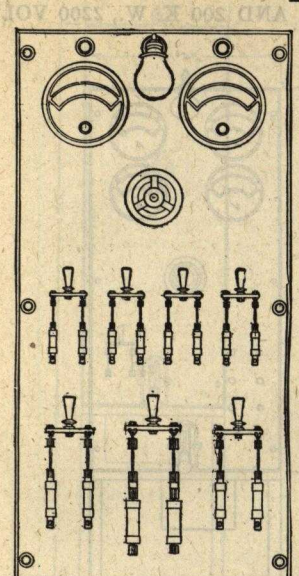
TYPE AF-4 SPECIFICATIONS

Same specifications as above, with four instead of two feeder switches.

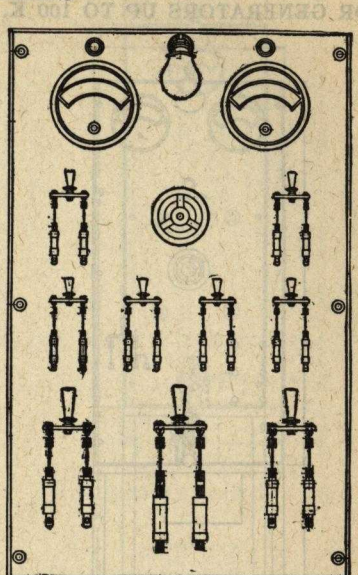
AF- 34	18x48	30	4–30	98872	108.00	98890	116.75	12.25
AF- 64	18x48	60	4–30	98873	114.25	98891	123.00	12.25
AF-104	24x48	100	4–30	98874	129.00	98892	134.50	14.00
AF-104A	24x48	100	2–30, 2–60	98875	130.00	98893	135.50	14.00
AF-204	24x54	200	4–60	98876	151.75	98894	159.75	14.00
AF-204A	24x54	200	2–30, 2–100	98877	154.00	98895	162.00	14.00
AF-404	24x60	400	4–100	98878	191.00	98896	200.50	15.50
AF-404C	24x60	400	2–60, 2–200	98879	199.50	98897	209.00	15.50
Add to list for 300-V. voltmeter.....				98880	3.50	98898	3.75	.....

NOTE.—Approximate shipping weight per square foot is 50 pounds.

F. A. COMBINATION GENERATOR AND FEEDER PANELS



Type AF-6



Type AF-8

TYPE AF-6 SPECIFICATIONS

Black oiled slate panel, 1¼ inch thick, with beveled edges.
1—Angle iron frame holding top of board 72 inches from floor.
2—24-inch iron pipe wall braces.
1—1 light pilot bracket with socket and shade.
1—R. P. voltmeter as selected.
1—R. P. ammeter as selected (50 per cent larger scale than capacity of generator switch).
1—D. P. S. T. generator switch with New Code fuses.
6—D. P. S. T. feeder switches with New Code fuses.
2—Receptacles for ground lamps.
Drilling for one rheostat (furnished by purchaser).
Necessary connections on rear of board.

Mfrs. No.	Size of Panel Inches	Capacity, Amperes Gen. Switch	Capacity, Amperes Feeder Switches	With Norton Type C Trade No.	With Norton Type C Price Each	With Weston Model 159 Trade No.	With Weston Model 159 Price Each	Add to List for Marble
AF- 36	24x48	30	6–30	99235	$118.00	99253	$126.75	$14.00
AF- 66	24x48	60	6–30	99236	128.50	99254	137.25	14.00
AF-106	24x54	100	6–30	99237	141.00	99255	146.50	14.00
AF-106A	24x54	100	4–30, 2–60	99238	143.75	99256	149.25	14.00
AF-206	24x54	200	4–30, 2–100	99239	159.80	99257	167.80	16.50
AF-206A	24x60	200	2–30, 4–60	99240	160.25	99258	168.25	16.50
AF-406	24x60	400	4–60, 2–100	99241	201.25	99259	210.75	19.75
AF-406A	24x60	400	2–30, 2–60, 2–200	99242	210.50	99260	220.00	19.75
Add to list for 300-v. voltmeter.....				99243	3.50	99261	5.50	.....

TYPE AF-8 SPECIFICATIONS

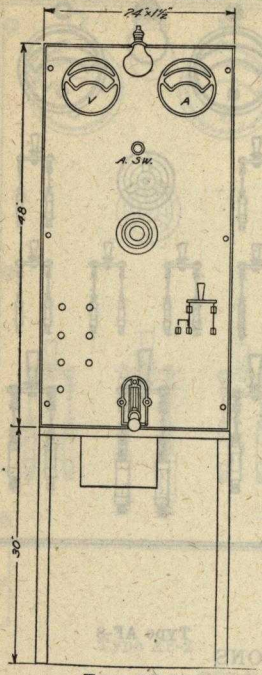
Same as above, with eight instead of six feeder switches.

AF- 68	30x48	60	8–30	99262	$141.25	99282	$150.00	$19.50
AF-108	30x54	100	6–30, 2–60	99264	160.00	99284	165.50	19.50
AF-208	30x54	200	6–30, 2–100	99265	184.00	99285	192.00	19.50
AF-208A	30x54	200	4–30, 2–60, 2–100	99266	186.00	99286	194.00	19.50
AF-308	30x60	300	2–30, 4–60, 2–100	99267	210.00	99287	218.75	19.50
AF-308A	30x60	300	4–30, 4–100	99268	216.50	99288	225.25	19.50
AF-408	30x60	400	4–30, 4–200	99269	225.00	99289	234.50	19.50
AF-408A	30x60	400	4–30, 2–60, 2–200	99270	230.75	99290	240.25	19.50
Add to list for 300-v. voltmeter.....				99271	3.50	99291	5.50	.....

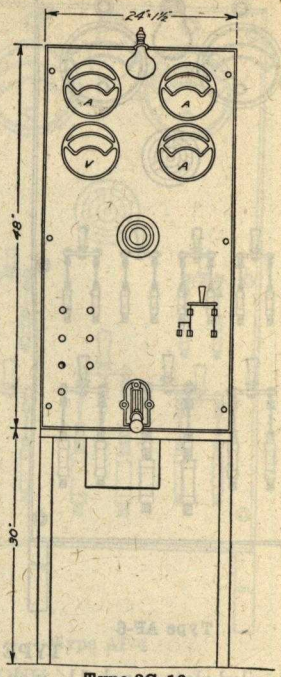
Note.—Approximate shipping weight per square foot is 50 pounds.

F. A. STANDARD THREE-PHASE GENERATOR PANELS

FOR GENERATORS UP TO 100 K. W., 1100 VOLTS, AND 200 K. W., 2200 VOLTS



Type 3G-15



Type 3G-16

General Specifications

Black oiled slate, 24x48x1½ inches; angle iron frame; 30-inch legs; 30-inch wall braces.

Equipment:

TYPE 3G-15

1—1 light switchboard bracket with socket and shade.
1—Weston No. 156 A. C. ammeter, scale as selected.
1—Weston No. 156 A. C. voltmeter, scale as selected.
1—G. E. rotary ammeter switch.
1—F. A. high tension voltmeter and ground detector switch.
2—Series transformers, ratio as selected.
1—Potential transformer, ratio as selected.
1—F. A. 60-amp. D. P. S. T. knife switch with field discharge clip.
1—Resistance block.
1—3 P. S. T. non-automatic oil switch.

Type 3G-15 equipment, complete, as described above	$271.00
Add for automatic oil switch	36.00
Add for synchronism plug and receptacle	19.00
Add for double-throw non-automatic oil switch	13.50
Add for double-throw automatic oil switch	79.00
Deduct for omitting G. E. ammeter switch and one current transformer	35.00

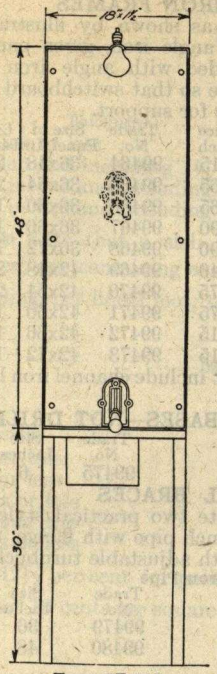
Equipment:

TYPE 3G-16

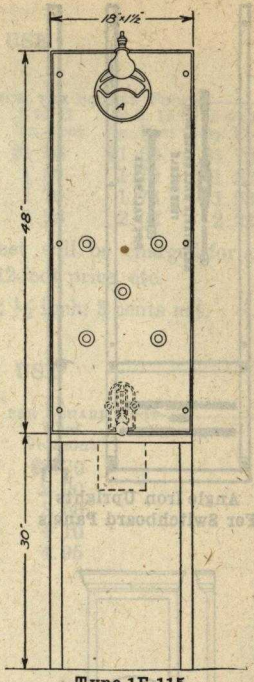
1—1 light switchboard bracket with socket and shade.
3—Weston No. 156 A. C. ammeters, scales as selected.
1—Weston No. 156 A. C. voltmeter, scale as selected.
1—F. A. high tension voltmeter and ground detector switch.
2—Series transformers, ratio as selected.
1—Potential transformer, ratio as selected.
1—F. A. 60-amp. D. P. S. T. knife switch with field discharge clip.
1—Resistance block.
1—3 P. S. T. non-automatic oil switch.

Type 3G-16 equipment, complete, as described above	$317.00
Add for automatic oil switch	36.00
Add for synchronism plug and receptacle, with increased potential transformer	19.00
Add for double-throw non-automatic oil switch	13.50
Add for double-throw automatic oil switch	79.00

F. A. STANDARD A. C. FEEDER PANELS



Type 3F-113



Type 1F-115

General Specifications

Black oiled slate, 18x48x1½ inches, with angle iron frame; legs 30 inches; braces, 30 inches.

TYPE 3F-113

Equipment:

1—1 light switchboard bracket, with socket and shade.
Three-pole automatic oil switch, trip coils as selected.
Connections between feeder and adjoining generator panel.

Complete with one three-pole S. T. automatic oil switch	$155.00
Complete with one three-pole D. T. automatic oil switch	214.00
Complete with two three-pole S. T. automatic oil switches	265.00
Complete with one three-pole S. T. and one three-pole D. T. automatic oil switch	324.00
Complete with two three-pole D. T. automatic switches	383.00

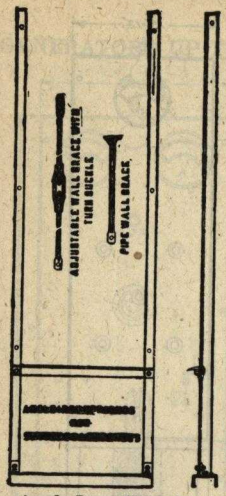
TYPE 1F-115

Equipment:

1—1 light switchboard bracket, with socket and shade.
1—Weston No. 156 A. C. ammeter.
2—3000-volt S. P. secondary plug switches.
1—3000-volt S. P. short circuiting plug switch.
2—3000-volt S. P. primary plug switches, with fuses.
Connections between feeder and adjoining panel.

Type 1F-115 equipment complete as described above	$191.00
Add for one D. P. S. T. non-automatic oil switch	30.50
Add for one D. P. S. T. automatic oil switch	88.00
Deduct for omitting two secondary plug switches	28.00
Deduct for omitting one short circuit plug switch	14.00
Deduct for omitting two primary plug switches	44.00

F. A. STANDARD SWITCHBOARD MATERIAL



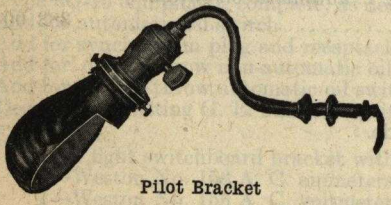
Angle Iron Uprights For Switchboard Panels



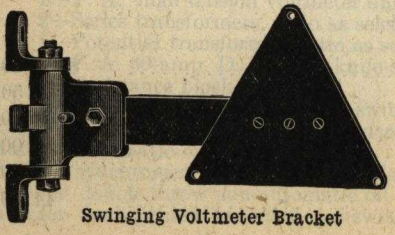
Switchboard Leg



Switchboard Bolt



Pilot Bracket



Swinging Voltmeter Bracket

ANGLE IRON FRAMES

Angle iron frames, as shown by illustration are made of 2x1½x3/16-inch angle iron, given one coat of black paint, and provided with angle iron support or cross connecting piece so that switchboard does not have to depend on bolts for support.

Trade No.	Size of Panel, In.	Legs Inches	Price Each	Trade No.	Size of Panel, In.	Legs Inches	Price Each
99454	18x48	24	$7.15	99464	36x48	24	$7.75
99455	18x54	24	7.65	99465	36x54	24	8.15
99456	18x60	18	7.65	99466	36x60	18	8.15
99457	18x66	18	7.90	99467	36x66	18	8.15
99458	18x72	12	7.90	99468	36x72	12	8.15
99459	24x48	24	7.40	99469	42x48	24	7.90
99460	24x54	24	7.75	99470	42x54	24	8.25
99461	24x60	18	7.75	99471	42x60	18	7.90
99462	24x66	18	8.15	99472	42x66	18	8.25
99463	24x72	12	8.15	99473	42x72	12	8.25

Above prices do not include channel iron base, wall braces or bolts.

CHANNEL IRON BASES—NOT DRILLED

Trade No.	Size Inches	Price per Ft.	Trade No.	Size Inches	Price per Ft.
99474	4	$1.00	99475	6	$2.15

WALL BRACES

We list and illustrate two practical styles of wall braces, one made of ½-inch pipe with flange, the other made of ½-inch pipe with adjustable turnbuckle.

Iron Pipe

Trade No.	Size Inches	Price Each	Trade No.	Size Inches	Price Each
99476	12	$0.75	99479	36	$2.15
99477	18	1.15	99480	48	2.90
99478	24	1.50	.....	....	....

Adjustable—With Turnbuckles

99481	18	3.25	99484	48	4.50
99482	24	3.65	99485	60	5.90
99483	36	4.00	.....	....	....

ORNAMENTAL SWITCHBOARD LEGS

99486	12	2.65	99488	18	4.25
99487	15	3.35	99489	24	5.15

Furnished in either copper-plated or japanned enameled finish. Japanned enameled will be sent unless order calls for copper-plated.

SWITCHBOARD BOLTS

Trade No.	Thickness of Panel, In.	Size Inches	Price Each
99490	1¼	½x2	$0.60
99491	1½	½x2¼	.65
99492	2	½x2¾	.70

Prices include washers, bolt and polished copper cap nut.

PILOT BRACKETS

Trade No.	Description	Price Each
99493	1-light bracket	$2.50
99494	2-light bracket	4.40
99495	½ pear porcelain green shade.....	1.00
99496	½ pear tin shade.....	.50

Bracket complete includes Edison Base Sockets, 2¼-inch shade holders, wired ready for mounting on switchboard. Price does not include the shade.

SWINGING VOLTMETER BRACKETS

These brackets are made with cast iron hinge parts and wrought iron bar, substantially built for fastening to angle iron of switchboard on either side of board.

99497	For one instrument.....	5.00
99498	For two instruments.....	6.25

For back connected instruments, add $2.75 to list price.

When ordering, specify type of instruments that will be used. Unless otherwise specified, brackets will be furnished for front connection instruments.

F. A. SWITCHBOARD MATERIAL

SLATE FOR ELECTRICAL USE

Black Slate, Oil Finish

Thickness	Price, per Square Foot					
	1 to 3 Sq. Feet	3 to 8 Sq. Feet	8 to 12 Sq. Feet	12 to 15 Sq. Feet	15 to 20 Sq. Feet	20 to 25 Sq. Feet
1 inch thick or less	$1.21	$1.28	$1.53	$1.60	$1.75	$1.85
Over 1 inch and including 1¼ inches	1.23	1.33	1.58	1.70	1.83	1.95
Over 1¼ inches and including 1½ inches	1.36	1.41	1.70	1.78	1.93	2.07
Over 1½ inches and including 2 inches	1.58	1.68	1.98	2.02	2.22	2.20

Please note that a slab containing exactly 3 square feet will be charged for at the 3 to 8-foot price; one containing exactly 8 square feet at the 8 to 12-foot price, etc.

Beveling, per lineal foot, ¼ inch, 1 cent; ⅜ inch, 2 cents; ½ inch, 3 cents net.

MARBLE FOR ELECTRICAL USE

Thickness	Price, per Square Foot		
	Pink or Gray Tennessee	Blue Vermont	White Italian
⅞ inch or less	$2.25	$2.70	$2.90
1 inch or less	2.48	2.90	3.10
1¼ inches or less	2.90	3.50	3.70
1½ inches or less	3.50	4.10	4.55
2 inches or less	4.75	4.95	6.00

Add 12½ per cent for polished bevel edges.

Deduct 10 cents per square foot if not boxed or crated.

BUS BAR COPPER

We have listed below a complete line of standard size copper, which we carry in St. Louis stock for immediate shipment.

Orders for special sizes not listed can be shipped from the mill within two weeks after receipt of the order. 6 feet is a standard length of copper thinner than $\frac{3}{32}$ inch, and 12 feet for all others. Capacity is based on 1000 amperes to the square inch cross section.

List price, 50 cents per pound. Extra charge for cutting.

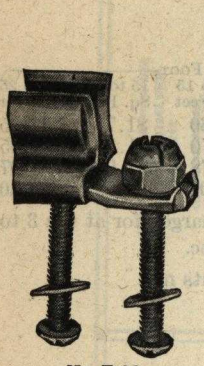
This list price is based on a 13½ cents bar copper base.

For each 1 cent increase or decrease in base price of bar copper, add or deduct from list price, 3 cents.

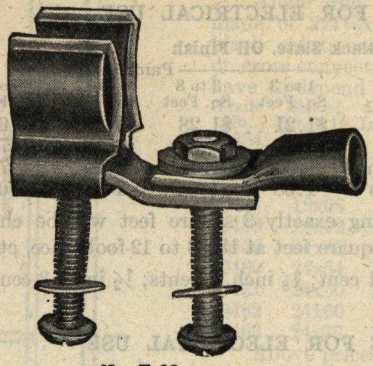
Dimensions Inches	Capacity Amperes	Dimensions Inches	Capacity Amperes	Dimensions Inches	Capacity Amperes	Dimensions Inches	Capacity Amperes
1/20x ½	25	⅛x ⅞	109	¼x1¼	312	7/16x1⅜	602
1/16x ⅝	39	⅛x1	125	¼x1½	375	7/16x1½	656
1/16x 11/16	42	⅛x1¼	156	¼x1¾	437	½x ¾	375
1/16x ¾	46	⅛x1¾	218	¼x2	500	½x1¾	875
1/16x ⅞	54	⅛x2	250	¼x2½	625	½x2	1000
1/16x1	62	⅛x2½	312	¼x3	750	½x2¼	1125
1/16x2	125	⅛x3	375	¼x3¼	812	½x3	1500
1/16x2½	160	⅛x3¼	406	¼x4	1000	9/16x1	562
.085x ½	42	⅛x4	500	5/16x 7/16	135	9/16x1¾	984
3/32x 7/16	40	5/32x2¼	351	5/16x ½	156	⅝x1⅛	703
3/32x 9/16	52	5/32x2½	390	5/16x 11/16	214	⅝x3	1875
3/32x 11/16	64	5/32x3½	546	5/16x1	313	11/16x1¼	859
3/32x ⅞	82	3/16x 7/16	81	5/16x1⅛	351	¾x1⅜	1030
3/32x1¼	117	3/16x 9/16	105	5/16x2¼	703	¾x1½	1125
3/32x1½	130	3/16x ¾	140	5/16x2½	782	⅞x1¾	1531
3/32x1⅝	152	3/16x ⅞	164	5/16x3½	1093	⅞x1⅞	1640
3/32x2¼	211	3/16x1	187	⅜x 9/16	210	⅞x2⅛	1859
⅛x ½	62	3/16x1¼	234	⅜x ⅞	322	1 x2½	2500
⅛x 9/16	70	3/16x1½	281	⅜x1⅛	422	1 x3	3000
⅛x ⅝	78	¼x ¾	187	⅜x1¼	468	.....	....
⅛x ¾	93	¼x1	250	7/16x1¼	546	.....	....

F. A. FUSE TERMINALS

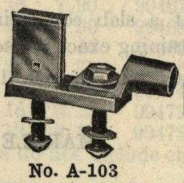
NATIONAL ELECTRICAL CODE STANDARD



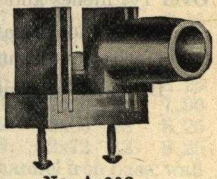
No. F-33
3 to 30 Amperes



No. F-63
31 to 60 Amperes



No. A-103
61 to 600 Amperes



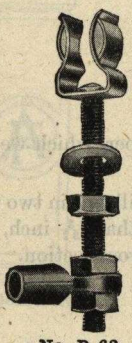
No. A-603
601 to 1200 Amperes

FUSE TERMINALS COMPLETE—FRONT CONNECTED

Mfrs. No.	Cap. Amps.	Plain Trade No.	Plain Price Each	Polished Trade No.	Polished Price Each
		250 Volts—Ferrule Contact			
F- 33	30	99378	$0.20	99380	$0.26
F- 63	60	99379	.32	99381	.40
		250 Volts—Knife-Blade Contact			
A- 103	100	99382	.50	99389	.64
A- 203	200	99383	.80	99390	1.00
A- 403	400	99384	1.90	99391	2.25
A- 603	600	99385	2.50	99393	2.90
A- 803	800	99387	4.10	99394	4.80
A-1003	1200	99388	5.25	99395	6.25
		600 Volts—Ferrule Contact			
F- 36	30	99396	.23	99398	.29
F- 66	60	99397	.35	99399	.45
		600 Volts—Knife-Blade Contact			
A- 103	100	99400	.50	99406	.64
A- 203	200	99401	.80	99407	1.00
A- 403	400	99402	1.90	99408	2.25
A- 603	600	99403	2.50	99409	2.90
A- 803	800	99404	4.10	99410	4.80
A-1003	1200	99405	5.25	99411	6.25



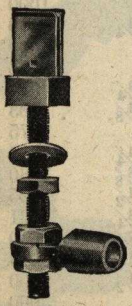
No. B-33
3 to 30 Amperes



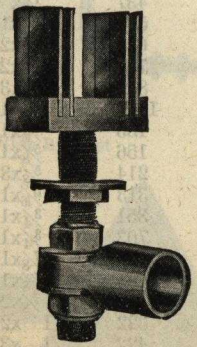
No. B-63
31 to 60 Amperes

FUSE TERMINALS COMPLETE—BACK CONNECTED

		250 Volts—Ferrule Contact			
B- 33	30	99412	.20	99414	.25
B- 63	60	99413	.34	99415	.40
		250 Volts—Knife-Blade Contact			
B- 103	100	99416	.80	99422	.90
B- 203	200	99417	1.20	99423	1.40
B- 403	400	99418	2.80	99424	3.20
B- 603	600	99419	4.00	99425	4.50
B- 803	800	99420	7.50	99426	8.20
B-1003	1200	99421	10.00	99427	11.00
		600 Volts—Ferrule Contact			
B- 36	30	99428	.23	99430	.30
B- 66	60	99429	.37	99431	.45
		600 Volts—Knife-Blade Contact			
B- 103	100	99432	.80	99438	.90
B- 203	200	99433	1.20	99439	1.40
B- 403	400	99434	2.80	99440	3.20
B- 603	600	99435	4.00	99441	4.50
B- 803	800	99436	7.50	99442	8.20
B-1003	1200	99437	10.00	99443	11.00



No. B-103
61 to 600
Amperes



No. B-603
601 to 1200
Amperes

Front connected fuse terminals are furnished with short screws, requiring heads to be countersunk.

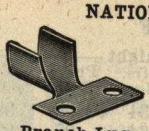
Back connected fuse terminals are furnished with studs long enough for 2-inch slate or marble mounting.

NOTE.—Plain finish will be sent unless otherwise specified.

UNION FUSE BLOCK FITTINGS

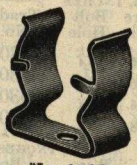
NATIONAL ELECTRICAL CODE STANDARD


No. 4500

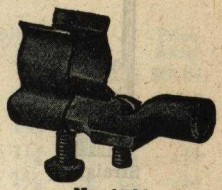

Branch Lug


No. 4501


No. 4505

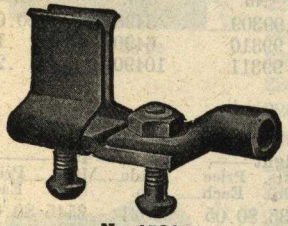

No. 4511


No. 4520


No. 4521

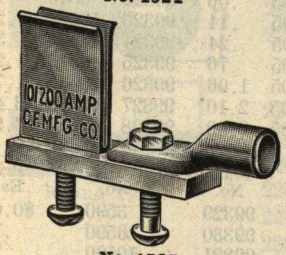
FRONT CONNECTION LUGS—250 AND 600 VOLTS

Trade No.	Mfrs. No.	Cap. Amps.	Dimen., Inches Diam. of Screw Hole	Diam. of Wire Hole	Size Wire Lugs Take	Style Lugs	Std. Pkg.	Price per 100
45709	4500	31– 60	1/4	1/4	4	Stamped	100	$ 8.00
45671	4501	61–100	9/32	7/16	00	Tubular	100	10.00
45672	4502	101–200	5/16	1/2	0000	Tubular	100	14.00
45673	4503	201–400	3/8	3/4	600000 C.M.	Cast	50	40.00
45674	4504	401–600	3/8	1 1/16	900000 C.M.	Cast	20	60.00
45675	Branch lug		3/16	...	0	Stamped	100	8.00


No. 4524

BACK CONNECTION LUGS—250 AND 600 VOLTS

45676	4505	31– 60	5/16	1/4	4	Stamped	100	8.00
45677	4506	61–100	1/2	7/16	00	Cast	100	24.00
45678	4507	101–200	5/8	1/2	0000	Cast	100	44.00
45679	4508	201–400	13/16	3/4	600000 C.M.	Cast	50	90.00
45680	4509	401–600	1 1/32	1 1/16	900000 C.M.	Cast	20	160.00

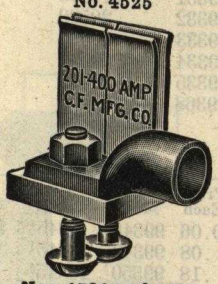


No. 4525

FUSE CLIPS

All clips will be furnished with fuse stop prongs, but can be supplied without prongs if desired.

Trade No.	Mfrs. No.	Cap. Amps.	Volts	Std. Pkg.	Price per 100
45681	4510	3– 30	250	100	$3.00
45682	4511	31– 60	250	100	6.50
45683	4512	3– 30	600	100	6.00
45684	4513	31– 60	600	100	9.00
45685	4514	61–100	250 & 600	100	14.00
45686	4515	101–200	250 & 600	100	30.00
45687	4516	201–400	250 & 600	50	100.00
45688	4517	401–600	250 & 600	20	250.00
45710	Midget clip low 0–15		250	100	3.00
45711	Midget clip high 0–15		250	100	3.40



Nos. 4526 and 4527

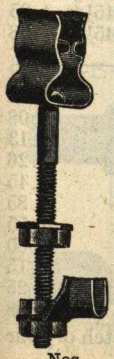
FUSE TERMINALS COMPLETE

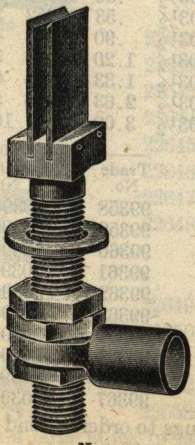
Front Connection

Trade No.	Mfrs. No.	Cap. Amps.	Volts	Form of Contact	Std. Pkg.	Price Each
45689	4520	3– 30	250	Ferrule	100	$0.10
45690	4521	31– 60	250	Ferrule	100	.20
45691	4522	3– 30	600	Ferrule	100	.14
45692	4523	31– 60	600	Ferrule	100	.24
45693	4524	61– 100	250 & 600	Knife blade	100	.50
45694	4525	101– 200	250 & 600	Knife blade	100	1.10
45695	4526	201– 400	250 & 600	Knife blade	50	3.00
45696	4527	401– 600	250 & 600	Knife blade	20	5.00
45697	4528	601– 800	250 & 600	Knife blade	20	8.00
45698	4529	801–1000	250 & 600	Knife blade	20	12.00

Back Connection

45699	4530	3– 30	250	Ferrule	100	.25
45700	4531	31– 60	250	Ferrule	100	.44
45701	4532	3– 30	600	Ferrule	100	.30
45702	4533	31– 60	600	Ferrule	100	.50
45703	4534	61– 100	250 & 600	Knife blade	100	2.00
45704	4535	101– 200	250 & 600	Knife blade	100	3.40
45705	4536	201– 400	250 & 600	Knife blade	50	6.90
45706	4537	401– 600	250 & 600	Knife blade	20	10.00
45707	4538	601– 800	250 & 600	Knife blade	20	12.00
45708	4539	801–1000	250 & 600	Knife blade	20	16.00


Nos. 4530 to 4533


Nos. 4534 to 4539

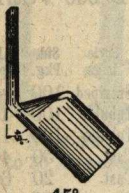
F. A. DRAWN AND CAST COPPER LUGS



Straight

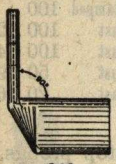
TYPE F

Cap. Amps.	Size of Wire Stranded	Size, Inches Wire Hole	Size, Inches Bolt Hole	Straight Trade No.	Straight Mfrs. No.	Straight Price Each	45° Trade No.	45° Mfrs. No.	45° Price Each
30	No. 8	3/16	11/64	99301	34	$0.06	99305	3445	$0.08
60	No. 2	5/16	7/32	99302	64	.07	99306	6445	.09
100	No. 00	7/16	17/64	99303	104	.15	99307	10445	.19
200	250000 C. M.	5/8	11/32	99304	204	.30	99308	20445	.36



45°

Cap. Amps.	Size of Wire Stranded	Size, Inches Wire Hole	Size, Inches Bolt Hole	90° Trade No.	90° Mfrs. No.	90° Price Each
30	No. 8	3/16	11/64	99309	3490	$0.09
60	No. 2	5/16	7/32	99310	6490	.11
100	No. 00	7/16	17/64	99311	10490	.22

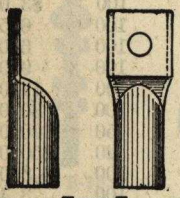


90°

TYPE A

Cap. Amps.	Size of Wire Stranded	Size, Inches Wire Hole	Size, Inches Bolt Hole	Straight Trade No.	Straight Mfrs. No.	Straight Price Each	45° Trade No.	45° Mfrs. No.	45° Price Each
30	No. 8	3/16	11/64	99313	35	$0.05	99321	3545	$0.09
60	No. 2	5/16	7/32	99314	65	.06	99322	6545	.10
100	No. 00	7/16	1/4	99315	105	.14	99323	10545	.21
200	250000 C. M.	5/8	5/16	99316	205	.24	99324	20545	.36
400	600000 C. M.	15/16	25/64	99317	405	.76	99325	40545	1.24
600	1000000 C. M.	1 1/4	17/32	99318	605	1.06	99326	60545	1.72
800	1500000 C. M.	1 1/2	21/32	99319	805	2.10	99327	80545	3.40
1000	2000000 C. M.	1 3/4	21/32	99320	1005	2.40	99328	100545	3.90

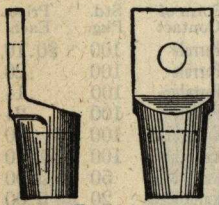
Cap. Amps.	Size of Wire Stranded	Size, Inches Wire Hole	Size, Inches Bolt Hole	90° Trade No.	90° Mfrs. No.	90° Price Each
30	No. 8	3/16	11/64	99329	3590	$0.09
60	No. 2	5/16	7/32	99330	6590	.10
100	No. 00	7/16	1/4	99331	10590	.21
200	250000 C. M.	5/8	5/16	99332	20590	.36
400	600000 C. M.	15/16	25/64	99333	40590	1.24
600	1000000 C. M.	1 1/4	17/32	99334	60590	1.72
800	1500000 C. M.	1 1/2	21/32	99335	80590	3.40
1000	2000000 C. M.	1 3/4	21/32	99368	100590	3.90



Type F

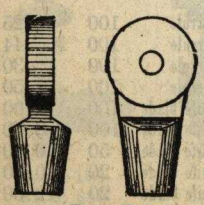
TYPE B

Cap. Amps.	Size of Wire Stranded	Size, Inches Wire Hole	Size, Inches Bolt Hole	Straight Trade No.	Straight Mfrs. No.	Straight Price Each	45° Trade No.	45° Mfrs. No.	45° Price Each
30	No. 8	3/16	9/32	99338	33 1/2	$0.06	99348	3345 1/2	$0.08
60	No. 2	5/16	11/32	99339	63 1/2	.08	99349	6345 1/2	.13
100	No. 00	7/16	13/32	99340	103 1/2	.18	99350	10345 1/2	.26
200	250000 C. M.	5/8	17/32	99341	203 1/2	.30	99351	20345 1/2	.45
300	350000 C. M.	3/4	11/16	99342	303 1/2	.53	99352	30345 1/2	.85
400	600000 C. M.	15/16	13/16	99343	403 1/2	.90	99353	40345 1/2	1.55
500	750000 C. M.	1 1/16	15/16	99344	503 1/2	1.20	99354	50345 1/2	1.80
600	1000000 C. M.	1 1/4	15/16	99345	603 1/2	1.33	99355	60345 1/2	2.15
800	1500000 C. M.	1 1/2	1 1/16	99346	803 1/2	2.63	99356	80345 1/2	4.25
1000	2000000 C. M.	1 3/4	1 3/16	99347	1003 1/2	3.00	99357	100345 1/2	4.88



Type A

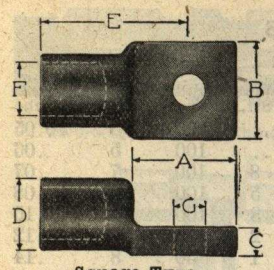
Cap. Amps.	Size of Wire Stranded	Size, Inches Wire Hole	Size, Inches Bolt Hole	90° Trade No.	90° Mfrs. No.	90° Price Each
30	No. 8	3/16	9/32	99358	33901/2	$0.08
60	No. 2	5/16	11/32	99359	63901/2	.13
100	No. 00	7/16	13/32	99360	103901/2	.26
200	250000 C. M.	5/8	17/32	99361	203901/2	.45
300	350000 C. M.	3/4	11/16	99362	303901/2	.85
400	600000 C. M.	15/16	13/16	99363	403901/2	1.55
500	750000 C. M.	1 1/16	15/16	99364	503901/2	1.80
600	1000000 C. M.	1 1/4	15/16	99365	603901/2	2.15
800	1500000 C. M.	1 1/2	1 1/16	99366	803901/2	4.25
1000	2000000 C. M.	1 3/4	1 3/16	99367	1003901/2	4.88



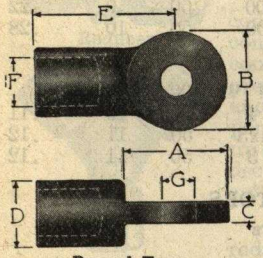
Type B

Can furnish special size and shape lugs to order. Send sketch of your requirements.

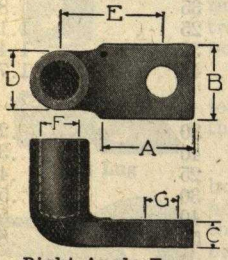
CUTTER TERMINALS



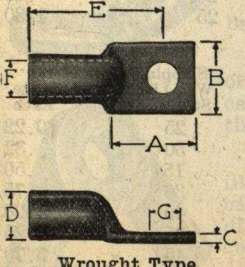
Square Type



Round Type



Right Angle Type



Wrought Type

SQUARE TYPE, CAST

Trade No.	Amps.	Wire Size	Standard Dimensions, Inches A	B	C	D	E	F	G	Price Each
22609	30	8	1/2	1/2	1/8	5/16	3/4	3/16	3/16	$0.04
22610	50	5	5/8	5/8	1/8	3/8	1	7/32	3/16	.06
22611	75	3	5/8	5/8	3/16	1/2	1 1/8	9/32	9/32	.08
22612	100	1	13/16	3/4	3/16	17/32	1 1/4	11/32	9/32	.11
22613	150	00	15/16	7/8	3/16	5/8	1 3/8	7/16	13/32	.14
22614	175	000	1	15/16	1/4	11/16	1 1/2	1/2	13/32	.17
22615	200	0000	1 1/16	1	1/4	13/16	1 5/8	19/32	13/32	.20
22616	250	300000	1 3/32	1	5/16	15/16	1 3/4	11/16	13/32	.25
22617	300	350000	1 3/8	1 1/4	3/8	1	2	3/4	13/32	.38
22618	350	400000	1 1/2	1 1/2	7/16	1 1/16	2 1/4	13/16	13/32	.61
22619	400	500000	1 5/8	1 1/2	1/2	1 1/4	2 3/8	15/16	13/32	.68
22620	500	750000	1 3/4	1 3/4	9/16	1 3/8	2 3/4	1 1/16	17/32	1.11
22621	600	1000000	2	1 3/4	9/16	1 9/16	3	1 3/16	17/32	1.40
22622	700	1250000	2 1/4	2	5/8	1 3/4	3 1/8	1 5/16	17/32	2.13
22623	800	1500000	2 1/2	2	5/8	2	3 1/4	1 1/2	17/32	2.55
22624	1000	2000000	2 5/8	2 1/4	3/4	2 1/4	3 3/8	1 3/4	21/32	4.06

ROUND TYPE, CAST

22625	30	8	9/16	9/16	1/8	5/16	3/4	3/16	3/16	.04
22626	50	5	13/16	3/4	3/16	3/8	1 1/8	7/32	3/16	.07
22627	75	3	15/16	7/8	3/16	1/2	1 1/4	9/32	9/32	.09
22628	100	1	1 1/16	1	7/32	1/2	1 3/8	11/32	9/32	.12
22629	150	00	1 1/16	1	1/4	5/8	1 1/2	7/16	13/32	.15
22630	175	000	1 3/16	1 1/8	1/4	11/16	1 1/2	1/2	13/32	.18
22631	200	0000	1 1/4	1 1/4	1/4	13/16	1 3/4	19/32	13/32	.24
22632	250	300000	1 5/16	1 1/4	5/16	15/16	1 7/8	11/16	13/32	.30
22633	300	350000	1 1/2	1 3/8	5/16	1	2	3/4	13/32	.35
22634	350	400000	1 5/8	1 1/2	5/16	1 1/8	2 1/8	13/16	13/32	.53
22635	400	500000	1 3/4	1 5/8	7/16	1 1/4	2 3/8	15/16	13/32	.82
22636	500	750000	2 1/8	1 15/16	1/2	1 3/8	3	1 1/16	17/32	1.12
22637	600	1000000	2 3/8	2 1/4	5/8	1 5/8	3 3/8	1 3/16	17/32	1.80
22638	700	1250000	2 5/8	2 1/2	3/4	1 3/4	3 7/8	1 5/16	17/32	2.42
22639	800	1500000	2 5/8	2 1/4	3/4	2	3 7/8	1 1/2	17/32	3.78
22640	1000	2000000	2 3/4	2 1/2	3/4	2 1/4	4	1 3/4	21/32	5.03

RIGHT ANGLE TYPE, CAST

22641	30	8	1/2	3/8	1/8	5/16	9/16	3/16	3/16	.08
22642	50	5	5/8	5/8	1/8	3/8	3/4	7/32	3/16	.15
22643	100	1	13/16	3/4	3/16	1/2	1	11/32	9/32	.25
22644	150	00	1	7/8	5/16	5/8	1 1/8	7/16	11/32	.35
22645	200	0000	1 1/8	1	3/8	13/16	1 3/8	19/32	13/32	.45
22646	300	350000	1 1/4	1 1/4	3/8	1	1 1/2	3/4	13/32	.70
22647	400	500000	1 1/2	1 1/2	3/8	1 1/4	1 3/4	15/16	13/32	1.00
22648	600	1000000	2	1 3/4	7/16	1 5/8	2	1 3/16	17/32	2.00

WROUGHT TYPE

22649	25– 50	6	9/16	7/16	3/32	5/16	7/8	3/16	3/16	.03
22650	75–100	3	3/4	9/16	1/8	3/8	1 1/4	1/4	1/4	.06
22651	150	0	15/16	11/16	1/8	1/2	1 1/2	3/8	11/32	.07
22652	200	000	1 1/16	7/8	1/8	5/8	1 3/4	1/2	3/8	.12
22653	300	300000	1 1/4	1 1/8	1/8	3/4	2	5/8	13/32	.16

We have a large stock of patterns for special cable terminals and will quote prices upon application. Send sketches and dimensions with order.

CONNECTORS

WIRE CONNECTORS



Connector, with Two Set Screws

With Two Set Screws

Trade No.	Mfrs. No.	Length Inches	Diam., Inches Outside	Inside	Largest Wire Solid	Str.	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
067193	200	1½	5/16	.106	12	..	100	5	$0.05
067194	201	1½	9/16	.147	8	..	100	5	.06
067195	202	1¾	3/8	.185	6	8	100	7	.07
067196	203	1⅞	7/16	.221	4	5	100	9	.08
067197	204	1⅞	1/2	9/32	2	3	100	11	.10
067198	205	1⅞	9/16	11/32	0	2	50	7	.12
067199	206	1⅞	5/8	3/8	00	1	50	8	.14



Connector, with Four Set Screws

With Four Set Screws

067200	207	1⅞	7/16	.221	4	5	100	10	.09
067201	208	1⅞	1/2	9/32	2	3	100	11	.11
067202	209	1⅞	9/16	11/32	0	2	50	7	.13
067203	210	1⅞	5/8	3/8	00	1	50	7	.15
067204	211	2	11/16	7/16	000	00	50	9	.22
067205	212	2	3/4	1/2	0000	000	50	10	.28

Brooklyn Connectors

A dividing wall prevents melted solder from running through.



Brooklyn Connector

067206	310	1⅞	1/2	1/4	3	4	50	10	.11
067207	311	1⅞	9/16	1/4 x 19/64	3x1	4x3	50	11	.12
067208	312	1⅞	9/16	19/64	1	3	50	11	.12

CAST COPPER CONNECTORS

Equipped with Set Screws

Tee Connectors



Tee Connector

Trade No.	Size of Rod Inches	Std. Pkg.	Shipping Wt., Lbs. Std. Pkg.	Price Each
22881	1/4	50	30	$0.38
22882	3/8	50	30	.48
22883	1/2	50	30	.75
22884	9/16	50	35	.85
22885	5/8	25	25	1.10
22886	3/4	25	35	1.45
22887	1	25	45	1.70

Straight Connectors



Straight Connector

22889	1/4	100	30	.20
22890	3/8	100	40	.30
22891	1/2	50	25	.45
22892	9/16	50	30	.52
22893	5/8	50	40	.58
22894	3/4	50	50	.85

Elbow Connectors



Elbow Connector

22895	1/4	100	40	.25
22896	3/8	50	25	.35
22897	1/2	50	30	.50
22898	9/16	50	35	.60
22899	5/8	25	20	.80
22900	3/4	25	25	1.30

Bus Bar Connectors

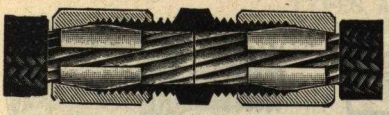


Bus Bar Connector

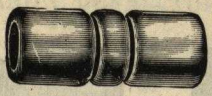
Trade No.	Size of Hole Line Inches	Size of Hole Lead up to, Inches	Std. Pkg.	Shipping Wt., Lbs. Std. Pkg.	Price Each
22657	1/4	1/4	50	25	$0.22
22658	3/8	3/8	50	30	.32
22659	1/2	1/2	25	15	.50
22660	5/8	5/8	25	30	.75
22661	3/4	3/4	25	40	1.20
22662	1	1	10	35	2.25
22663	1¼	1¼	10	45	3.70
22664	1½	1½	10	50	5.10

In ordering, give size of both line and lead.

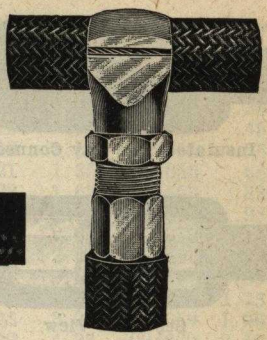
DOSSERT CONNECTORS



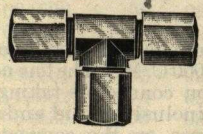
Two-way, Type A, Showing Detail



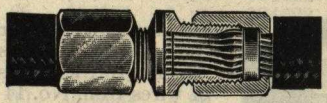
Type C



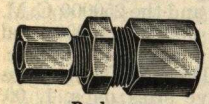
Cable Tap



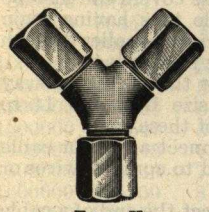
Three-way



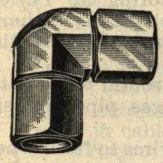
Two-way, Type B
Sectional View



Reducer



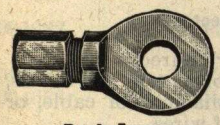
Type Y



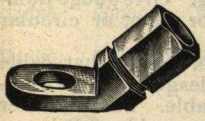
Elbow



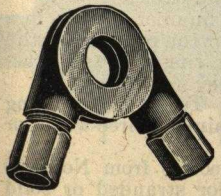
Front Lug



Back Lug



Angle Lug



Swivel Lug

Dossert & Company make a mechanical joint for solid or stranded conductor, which has great mechanical strength and an electrical conductance in excess of that of the cable. The joint (Type A) consists of a nipple, two compression sleeves or bushings and two compression nuts. As shown, the compression sleeves are split lengthwise and tapered at both ends. The tapered ends of the sleeve fit into correspondingly tapered parts of the nipple and nut. When the nut is screwed up on the nipple the action of the taper causes the compression sleeve to decrease in diameter and grip the strands tightly together, thereby getting good electrical contact.

Type A connectors are for use on cables, stranded or solid wires, rods and tubing. They are simple and effective, and by their use splices can be quickly made in conductors of any size. Type A connectors, however, should not be used on a cable that is to be subjected to heavy tensile strains.

Lugs, three-ways, Y's, reducers, elbows, and many other types of connectors are made with this principle for making the electrical connections and can be used for connections on switchboards, panels, bus bars, transformers, meters, electric smelting furnaces, fuse blocks, service boxes, grounding devices, motors, oil switches, etc.

For overhead work where the cables are subjected to considerable tensile strain, another type of joint (Type B) is made, but for general use the above described connector is recommended and almost always used.

A special application of this joint is the cable tap. It consists of a hook, cover, jam nut, compression sleeve and compression nut. The hook is machined to fit the main cable, while its shank is drilled and threaded to form the nipple of a standard Dossert Joint for size of branch required.

The cable tap is used to connect a branch wire, rod or bleeder to a main wire, rod or feeder. It does not splice the main, but simply clamps on to it. Equalizers are combinations of two cable taps. They can be furnished to equalize the load on any two sizes of cable.

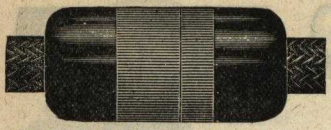
The three-way is used to make a main line splice and to connect a branch wire at the joint.

When main and branch cables are of different sizes, please give size of main first in ordering cable taps. To determine the list price of a cable tap of an odd size: Add the list price of the two-way connector for the main to half the list price of a two-way for the branch.

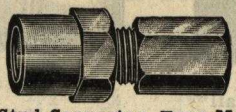
Reducers are made in two-ways and three-ways. The accompanying illustration shows a two-way reducer. Any combination of reduction can be effected by means of these reducers. To ascertain the list price of a two-way reducer, take one half the list price of a regular two-way of the corresponding size of each end.

The elbow makes an admirable right angle connection. List prices same as for straight two-way connectors of corresponding size.

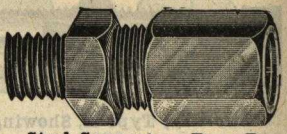
DOSSERT CONNECTORS



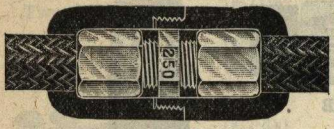
Insulated Two-way Connector



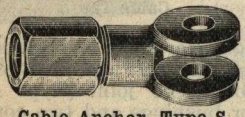
Stud Connector, Type M



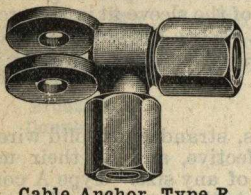
Stud Connector, Type F



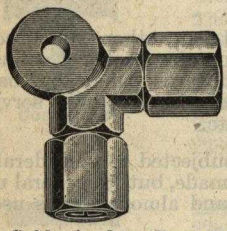
Sectional View



Cable Anchor, Type S



Cable Anchor, Type R



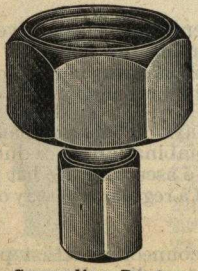
Cable Anchor, Type E



Service Box Lug



Service Box Plug



Grounding Device

Insulating covers can be supplied for all sizes of Dossert Two-way Connectors up to 250000 C. M. The line comprises No. 4 cover, which is for use on connectors taking all sizes of wires from No. 14 to No. 4, inclusive, solid and stranded; the No. 1 cover which is for use on the connector taking Nos. 1, 2 and 3 sizes of wires; the No. 00 cover, which is for use on the No. 0 and No. 00 connectors; and the 250000 C. M. cover, which is for use on the No. 000, No. 0000 and 250000 sizes of connectors.

Insulating covers can be furnished for Dossert Cable Taps up to 500000 C. M., the line comprising five sizes: Nos. 1, 00, 0000, 300000 C. M. and 500000 C. M. These covers can also be used on intermediate sizes and also on cable taps having main connections of the foregoing sizes and various smaller branch connections. Prices given on the following page.

An insulating cover can be furnished for the No. 4 three-way connector, taking conductors ranging in size from No. 14 to No. 4, inclusive, or different combinations of these sizes.

Stud connector, Style F, is used to connect a wire or cable to a stud or threaded rod. Style M is used to connect wires or cables to flat strips or blocks.

Cable anchor, Style S, is used to connect the end of a cable to a strain insulator for the purpose of anchoring it. Style R is used to anchor one cable and take a branch off the anchored cable. Style E is used to splice and anchor two cables that are at right angles to each other.

The ground cap is used for connecting ground wires to the end of a pipe. When ordering, give size of gas pipe and size of wire and state whether solid or stranded.

The service box lug is used to connect wires to fuses where ordinarily a solder lug with a flat contact surface would be used. By the use of an assortment of sleeves with wire holes of different sizes, the same lug may be employed for connecting all wires from a certain predetermined size down to the smallest size used.

How to Order Dossert Connectors

Use the proper name of the connector desired.

In ordering Type A Connectors for concentric laid cables, give circular mileage of cable, or exact diameter of cable, or exact diameter of one wire, and number of wires.

Type A, for solid wires, rods and tubing. Give gauge number of wire, or exact diameter of rod, wire or tube, or circular mileage of rod.

Type A, for rope laid and flexible cable. State that cable is rope laid or flexible and give circular mileage, or gauge number, or exact diameter, or send sample of cable. The diameter for given size of rope laid or flexible cable is considerably larger than that of the same size of concentric laid cable.

Type B. It is necessary to know the number of wires in a cable in furnishing Type B Connectors, for the reason that the diameter of the core over which the inner ring fits varies according to the number of wires in the cable.

Do not use the words T Joints or Tees. In ordering connectors of that character, state plainly Three-ways or Cable Taps.

In ordering the smaller sizes of connectors from No. 0000 down, please be sure and state whether for stranded or solid wires.

DOSSERT CONNECTORS

TYPES A, B AND C CONNECTORS

Size of Cable	Two-way Trade No.	Two-way Price Each	Three-way Trade No.	Three-way Price Each	Style Y Trade No.	Style Y Price Each	Cable Tap Trade No.	Cable Tap Price Each	Standard Lug Trade No.	Standard Lug Price Each
*14–4	094524	$0.40	094555	$0.60	094586	$0.60	094617	$0.60	094648	$0.30
* 3–1	094525	.50	094556	.75	094587	.75	094618	.75	094649	.38
0	094526	.60	094557	.90	094588	.90	094619	.90	094650	.45
00	094527	.74	094558	1.11	094589	1.11	094620	1.11	094651	.56
000	094528	.90	094559	1.35	094590	1.35	094621	1.35	094652	.68
0000	094529	1.10	094560	1.65	094591	1.65	094622	1.65	094653	.83
250000	094530	1.30	094561	1.95	094592	1.95	094623	1.95	094654	.98
300000	094531	1.52	094562	2.28	094593	2.28	094624	2.28	094655	1.14
350000	094532	1.74	094563	2.61	094594	2.61	094625	2.61	094656	1.31
400000	094533	2.00	094564	3.00	094595	3.00	094626	3.00	094657	1.50
450000	094534	2.30	094565	3.45	094596	3.45	094627	3.45	094658	1.73
500000	094535	2.60	094566	3.90	094597	3.90	094628	3.90	094659	1.95
550000	094536	2.90	094567	4.35	094598	4.35	094629	4.35	094660	2.18
600000	094537	3.18	094568	4.77	094599	4.77	094630	4.77	094661	2.39
650000	094538	3.44	094569	5.16	094600	5.16	094631	5.16	094662	2.58
700000	094539	3.68	094570	5.52	094601	5.52	094632	5.52	094663	2.76
750000	094540	3.92	094571	5.88	094602	5.88	094633	5.88	094664	2.94
800000	094541	4.16	094572	6.22	094603	6.22	094634	6.22	094665	3.11
850000	094542	4.40	094573	6.60	094604	6.60	094635	6.60	094666	3.30
900000	094543	4.64	094574	6.96	094605	6.96	094636	6.96	094667	3.48
1000000	094544	5.00	094575	7.50	094606	7.50	094637	7.50	094668	3.75
1100000	094545	5.50	094576	8.25	094607	8.25	094638	8.25	094669	4.13
1200000	094546	6.00	094577	9.00	094608	9.00	094639	9.00	094670	4.50
1300000	094547	6.50	094578	9.75	094609	9.75	094640	9.75	094671	4.88
1400000	094548	7.00	094579	10.50	094610	10.50	094641	10.50	094672	5.25
1500000	094549	7.50	094580	11.25	094611	11.25	094642	11.25	094673	5.63
1600000	094550	8.00	094581	12.00	094612	12.00	094643	12.00	094674	6.00
1700000	094551	8.50	094582	12.75	094613	12.75	094644	12.75	094675	6.38
1800000	094552	9.00	094583	13.50	094614	13.50	094645	13.50	094676	6.75
1900000	094553	9.50	094584	14.25	094615	14.25	094646	14.25	094677	7.13
2000000	094554	10.00	094585	15.00	094616	15.00	094647	15.00	094678	7.50

*Prices of 14 to 4, and 3 to 1 incl., respectively, are the same; in ordering, state exact size, as inner bore of sleeve must be drilled to fit wire.

Type A connectors furnished, unless otherwise specified. When ordering Type B give number strands in cable. When made with round nipple and round nuts, the connector is styled Type C. Prices of Types, A, B and C are the same.

Two-way Insulating Covers

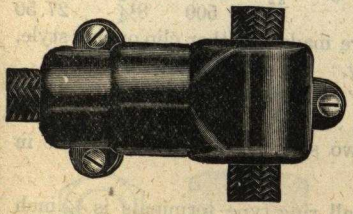
Trade No.	Mfrs. No.	Description	Price, Each
094679	4	For use on connector to take all sizes from Nos. 4 to 14, incl.	$0.20
094683	1	For use on connector to take Nos. 1, 2 and 3 wires	.26
094680	00	For use on Nos. 00 and 0 connectors	.38
094681	250000	For use also on Nos. 0000 and 000 connectors	.60

Three-way Insulating Covers

094682	.....	For use on No. 4 connector, taking conductors from Nos. 4 to 14, incl.	.65

Cable Tap Insulating Covers

094687	1	For use on No. 1 cable tap and also No. 1 with smaller branches	.60
094688	00	For use on No. 00 and No. 0 cable taps and same sizes with smaller branches	.80
094684	0000	For use on No. 0000 cable tap and No. 0000 main to smaller branches	1.00
094685	300000	For use on 300000 C. M. cable tap and various sizes of mains and branches	1.10
094686	500000	For use on 500000 C. M. cable tap and various sizes of mains and branches	2.00



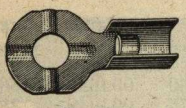
Insulated Cable Tap Cover

EXTRA SLEEVES

Dossert Connectors of a given size may be used on cables of a smaller size by changing the sleeves. The table shows how each size may be sleeved down. For example, a connector for No. 4 stranded cable may be sleeved to take any smaller size down to No. 14, either solid or stranded, a different sleeve being used for each size of wire or cable.

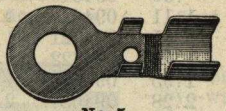
Trade No.	Size of Nut	Size of Cable	Price per 100	Trade No.	Size of Nut	Size of Cable	Price per 100
018502	4	4–14	$8.00	018506	000	000– 12	$16.00
018503	1	1–12	9.00	018507	0000	0000–000	20.00
018504	0	0–12	12.00	018508	0000	00– 0	20.00
018505	00	00–12	14.00	018509	0000	1– 12	20.00

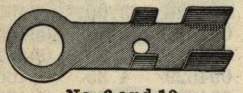
SHERMAN TERMINALS


No. 0


No. 3


No. 4


No. 5


No. 6 and 10

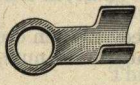

Nos. 7 to 9


No. 11

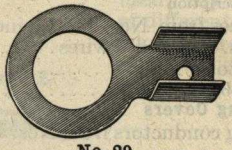

No. 21

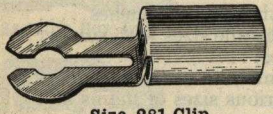

No. 24

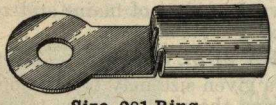

No. 25

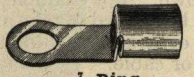

No. 26


No. 27


No. 29


Size .281 Clip


Size .281 Ring


$\frac{7}{32}$ Ring


$\frac{9}{32}$ Ring

SHEET COPPER TERMINALS

Trade No.	Mfrs. No.	Gauge Inches	Diam. Stud Hole Inches	Approx. Weight Pounds per 1000	Price per 1000
139627	0	.022	$\frac{3}{16}$	$2\frac{1}{2}$	$3.25
139628	3	.022	$\frac{3}{16}$	$2\frac{3}{4}$	3.50
139629	4	.022	$\frac{3}{16}$	$2\frac{1}{4}$	3.50
139630	4	.030	$\frac{3}{16}$	3	4.75
139631	4	.040	$\frac{3}{16}$	4	6.25
139632	5	.022	$\frac{3}{16}$	$3\frac{1}{2}$	4.25
139633	5	.030	$\frac{3}{16}$	$4\frac{3}{4}$	5.75
139634	5	.040	$\frac{3}{16}$	$6\frac{1}{2}$	7.75
139635	6	.030	$\frac{7}{32}$	$4\frac{1}{2}$	7.00
139636	7	.022	$\frac{1}{4}$	$5\frac{3}{4}$	7.00
139637	7	.040	$\frac{1}{4}$	$10\frac{1}{4}$	12.00
139638	8	.022	$\frac{1}{4}$	7	9.00
139639	8	.040	$\frac{1}{4}$	12	15.00
139640	9	.022	$\frac{1}{4}$	$11\frac{3}{4}$	12.00
139641	10	.030	$\frac{9}{32}$	$4\frac{1}{2}$	7.50
139642	11	.030	$\frac{3}{16}$	4	6.50
139643	21	.022	$\frac{9}{64}$	$1\frac{1}{4}$	2.50
139644	24	.030	$\frac{3}{16}$	$1\frac{7}{8}$	2.75
139645	24	.040	$\frac{3}{16}$	$2\frac{3}{8}$	3.50
139646	25	.022	$\frac{3}{16}$	2	3.00
139647	26	.030	$\frac{7}{32}$	$2\frac{1}{2}$	4.25
139648	27	.022	$\frac{3}{16}$	$2\frac{1}{2}$	3.50
138649	27	.040	$\frac{3}{16}$	$4\frac{1}{4}$	6.50
139650	29	.040	$\frac{13}{32}$	$6\frac{3}{8}$	8.50

Unless otherwise specified, terminals sent will be of thinnest copper and with regular size stud hole, as listed above.

Terminals with stud hole of different diameter than listed will be made to order at additional price depending on quantity.

BRASS CLIP AND RING TERMINALS

No more efficient terminals for automobile work could be had at any price, and more complicated varieties are uselessly expensive and usually harder to attach.

Trade No.	Size	Diameter of Cable Mm.	Diameter of Cable In.	Std. Pkg.	Approx. Wt., Lbs. per Std. Pkg.	Price per 1000
139651	.200	..	$\frac{6}{32}$	1000	$8\frac{1}{2}$	$20.00
139652	.215	5	..	1000	9	20.50
139653	.235	..	$\frac{7}{32}$	1000	$9\frac{1}{2}$	21.00
139654	.281	7	..	1000	$10\frac{1}{2}$	22.00
139655	.300	..	$\frac{9}{32}$	1000	$11\frac{3}{4}$	23.00
139656	.325	..	$\frac{10}{32}$	1000	$11\frac{1}{4}$	23.00
139657	.360	9	$\frac{11}{32}$	1000	$13\frac{1}{4}$	24.00
139658	.475	..	$\frac{15}{32}$	500	$8\frac{1}{4}$	27.50

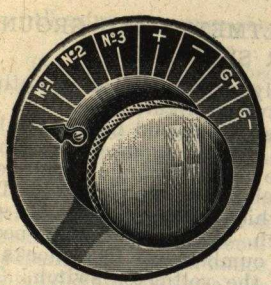
The above are made in either clip or ring style. Be sure to specify.

139659	$\frac{7}{32}$	..	$\frac{7}{32}$	1000	$4\frac{1}{4}$	12.00
139660	$\frac{9}{32}$	..	$\frac{9}{32}$	1000	$5\frac{1}{2}$	13.50

The above two sizes, $\frac{7}{32}$ and $\frac{9}{32}$, are made in ring style only.

Stud hole of all ring type terminals is $\frac{3}{16}$ inch full. Sizes in first column show inside diameter of wire sleeve in decimals or fractions of an inch.

F. A. STANDARD SWITCHBOARD MATERIAL

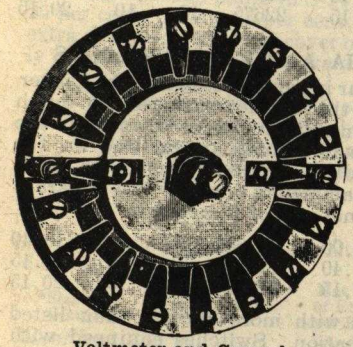


Voltmeter and Ground Detector Switch Front View

VOLTMETER AND GROUND DETECTOR SWITCHES

Designed to be mounted on back of board with stem extending through to front. On the end of this stem is mounted a highly polished copper knob for operating the switch. The stationary contacts are mounted on one piece of porcelain, which is made secure to back of board with a clamp that admits of adjustment for panels from 1 to 2 inches thick. The movable contacts are also carried on one piece of porcelain, which is held in position and insures perfect and equal contact at every point.

Trade No.	Mfrs. No.	No. of Circuits	Price Each
99509	3008	8	$12.00

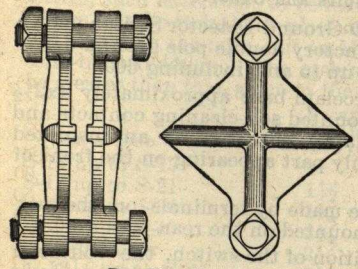


Voltmeter and Ground Detector Switch Rear View

BUS BAR CLAMPS

Bus bar clamps are made of malleable iron and are complete with bolts and nuts for clamping bus bars. These clamps can be used with all sizes of copper up to and including 4 inches wide.

Trade No.	Size Inches	Price Each
99510	2	$0.80
99511	2½	1.10
99512	3	1.45
99513	4	2.00



Bus Bar Clamp

EXTENSION STUDS

These extension studs are made of pure hard-drawn copper bar cut to length as ordered, and threaded from end to end, and are used with coupling to extend standard length knife switch studs.

Trade No.	Size Inches	Threads per Inch	Cap. Amps.	Price per Ft.
99514	¼	20	30	$0.25
99515	5/16	20	60	.35
99516	⅜	18	100	.46
99517	½	18	200	.75
99518	⅝	18	300	1.10
99519	¾	14	400	1.80
99520	⅞	14	600	2.10
99521	1	14	800	2.45
99522	1⅛	12	1000	3.35
99523	1¼	12	1200	4.15
99524	1⅜	12	1500	4.85

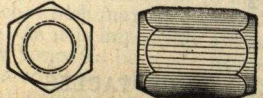


Extension Stud

EXTENSION STUD COUPLINGS

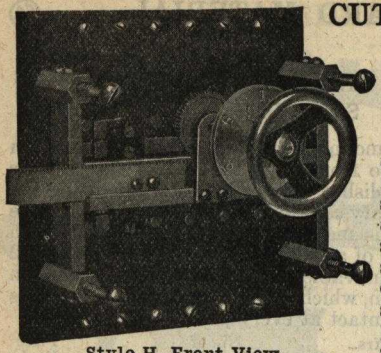
These brass couplings are made of hex. brass rod up to 500-ampere and of cast copper, 98 per cent pure for 600-ampere and over, and are heavy and long enough to insure safe carrying capacity. These couplings when used with extension studs, will save labor and bus bars in the connection of a switchboard.

Trade No.	Size Inches	Threads per Inch	Length Inches	Cap. Amps.	Price Each
99526	5/16	20	11/16	60	$0.12
99527	⅜	18	13/16	100	.15
99528	½	18	1⅛	200	.25
99529	⅝	18	1⅜	300	.50
99530	¾	14	1¾	400	.72
99531	⅞	14	2	600	1.15
99532	1	14	2 7/16	800	1.85
99533	1⅛	14	2 11/16	1000	2.45
99534	1¼	14	2 15/16	1200	3.10
99535	1⅜	12	3¼	1500	4.20

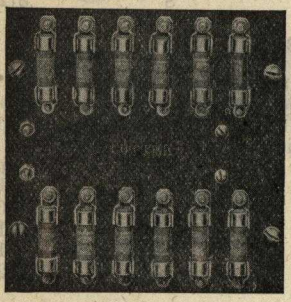


Extension Stud Coupling

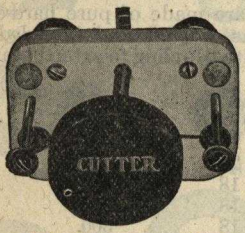
CUTTER SWITCHES



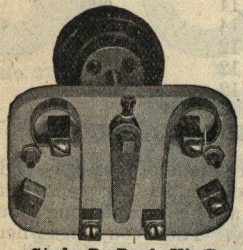
Style H, Front View



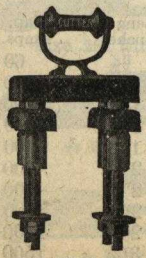
Style H, Back View



Style D, Front View



Style D, Back View



Voltmeter Plug Receptacle

CUTTER STYLE H VOLTMETER AND GROUND DETECTOR SWITCHES

This switch is built only for rear board mounting, and in sizes from three to twelve circuits, inclusive. It is compact, durable in construction and has no trouble some coiled springs. The contact surfaces are ampel and self-cleaning. The safe installation of any voltmeter switch requires fuses in each leg of each circuit. This switch is the only one in which the terminals are a self-contained part of the switch. It is not, therefore, necessary to place a cluster of cumbersome fuse blocks on your board in addition to the voltmeter switch. The switch is built for link or enclosed fuses. If for use with two scale voltmeters, add 10 per cent.

Trade No.	No. Circuits	Wt., Lbs. Boxed	Price Each	Trade No.	No. Circuits	Wt., Lbs. Boxed	Price Each
22670	3	10	$17.00	22673	8	10	$18.40
22671	4	10	17.40	22674	10	10	19.15
22672	6	10	18.15	22675	12	10	20.15

CUTTER STYLE HA AMMETER SWITCHES

The switch is similar in general design to the Cutter Voltmeter Switch, but the contact surfaces are much larger in area, thereby introducing no resistance in the shunt circuits. The fuse terminals are omitted on the ammeter switch, but switch can be arranged for readings upon double scale ammeters or upon two separate ammeters at an additional cost of 10 per cent.

22965	3	10	17.00	22968	8	10	18.40
22966	4	10	17.40	22969	10	10	19.15
22967	6	10	18.15	22970	12	10	20.15

Prices on switches with more circuits than listed above, quoted on application. Switches equipped with clips for enclosed fuses, 10 cents per circuit extra, list.

Above prices do not include fuses.

CUTTER STYLE D GROUND DETECTOR SWITCHES

600 Volts and Under

The Cutter Style D Ground Detector Switch shown above is the only satisfactory double-pole ground detector switch for voltages up to and including 600.

It consists of a porcelain base approximately 4x2½ inches, on which are mounted self-cleaning contacts and contact springs, the latter actuated by an insulated handle, which is the only part appearing on the front of the switchboard.

All connections are made by terminals on the porcelain base, which is mounted on the rear.

In the normal position of the switch, the voltmeter is connected directly to the bus bars, and with a slight movement of the handle to either the right or left, the voltmeter is connected to read positive or negative ground.

Trade No.	No. Points	Price Each
22909	..	$5.00

VOLTMETER PLUGS

22910	2	.75
22911	4	1.85
22912	6	3.00

VOLTMETER PLUG RECEPTACLES

22913	..	.80

WESTINGHOUSE MAZDA LAMPS

EXTRA CHARGES

All extra percentage charges will be figured on the basic list price of the clear lamps.

Tipless Lamps

The prices given in schedules cover lamps with a tip, unless otherwise indicated; for tipless MAZDA lamps the additional charge is 20 per cent.

Frosted Lamps

The prices for frosted lamps cover only lamps either bowl frosted or all frosted. The prices of any lamps with special frosting may be obtained on application.

Colored Lamps

For superficial coloring, excepting opal, add 15 per cent to list price of clear lamps. For superficial opal coloring (opal dipping) a lamp, the list additional charge to the price of the lamp is the same as the list additional charge for frosting the lamp. When 10000 or more of any one color of superficially colored lamps, or 10000 or more of bowl or all frosted lamps (not including any combination of the three) are ordered at one time, the additional charge shall be two-thirds the regular charge provided such orders cover lamps which are all of the same type, class and size of lamp and bulb. Superficially colored MAZDA C lamps are not recommended.

For natural colored lamps (in S-17, S-19, S-21, S-30, PS-20, PS-22, PS-25, G-18½, G-25, G-30 and T-10 bulbs), add the following percentages to the price of clear lamps: Green or blue, 50 per cent; purple, 75 per cent; ruby or opal, 100 per cent; amber or canary, 150 per cent. MAZDA lamps in S-14 bulbs, take the following percentages additional: Green or blue, 25 per cent; purple, 35 per cent; ruby or opal, 50 per cent; amber or canary, 60 per cent. The extra charges given above cover only bulbs of the manufacturers' standard colored glass. Specially colored glass bulbs will take a higher price, which will be furnished on application.

Bases

The prices in each schedule cover only the base or bases stated therein. For lamps fitted with other bases the prices may be obtained on application.

Lamps regularly fitted with medium screw unskirted base, if fitted with medium screw skirted base, will take an additional charge of 10 cents to list prices.

There will be no reduction in the price of lamps which are regularly based when furnished unbased.

Etching Letters

The following charges for letters or designs on MAZDA lamps are net, and are subject to no discount:

*Size in Watts	Net Price of Etching per Lamp	*Size in Watts	Net Price of Etching per Lamp
50 or less	$0.00½	151 to 250	$0.01¼
51 to 80	.00¾	Over 250	.01½
81 to 150	.01	.....	.....

*For street series lamps, size in candle power.

The net price of etching letters or designs on lamps given above applies only to the following:

The area to be etched on a lamp may be occupied by a standard design made up of Gothic letters, such letters not to be less than $\frac{3}{32}$-inch nor more than $\frac{5}{8}$-inch in height. The design or letters may be etched any place on the side of the bulb between the maximum diameter and base, not including the neck, but on MAZDA lamps it must not be nearer to the base than the MAZDA sand-blasted design. The etching area of designs to be placed on the side of the bulb shall not be greater than that given in the following table:

Size of Bulb	Etched Area to be not Greater Than Length, In.	Height, In.	Size of Bulb	Etched Area to be not Greater Than Length, In.	Height, In
S-14 up to S-17	1	½	G-40 and over	2½	1
S-17 up to S-21	1½	¾	T-8 up to T-10	¾	½
S-21 up to S-30	1¾	1	T-10 up to T-14	1	½
S-30 up to S-40	2¼	1¼	T-14 and over	1¾	1
S-40 and over	2½	1¼	PS-20 up to PS-25	1½	½
G-18½ up to G-25	1½	½	PS-25 up to PS-30	1¾	¾
G-25 up to G-30	1¾	¾	PS-30 up to PS-40	2¼	1
G-30 up to G-40	2¼	1	PS-40 and over	2½	1

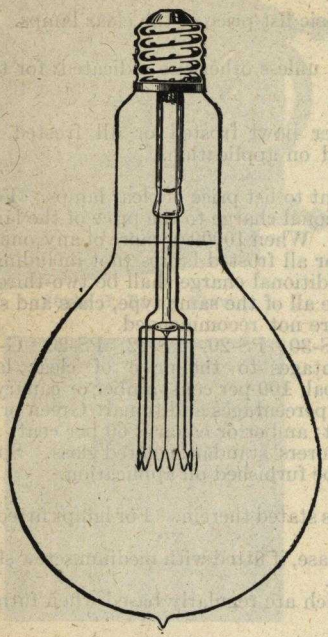
Tip etching must be limited to a design or lettering made up of Gothic letters, as given above, design or lettering having a diameter not greater than 1⅛ inches for a lamp whose bulb is 3⅛ inches or smaller in diameter, and limited to a diameter of 2 inches for larger bulbs. The additional charge for any etching not in accordance with the above may be obtained on application.

Special Lamps

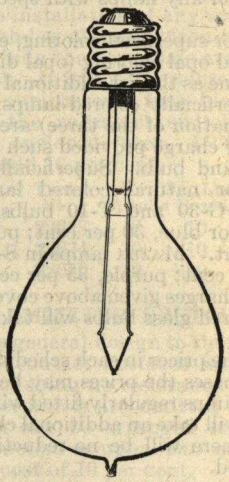
Any lamp requiring a change in construction from the standard, such as shape or color of bulb, number of loops in filament, number of anchors, wattage, voltage, etc., will take a special price, which may be obtained upon application.

As it is impossible always to produce an exact quantity of any special lamps ordered, or of any lamps to be made tipless (when listed tipped) or of any lamps to be furnished in natural, colored bulbs, all such orders may be filled either short or in excess, within the limits of 10 per cent, and not more than two lamps short or excess on orders for twenty lamps or less.

WESTINGHOUSE MAZDA C LAMPS



1000 Watts
MAZDA C Lamp
For Multiple Service
(¼ Actual Size)



400 C. P.
MAZDA C Lamp
For Series Circuit
(¼ Actual Size)

MAZDA C LAMPS FOR MULTIPLE CIRCUITS

MAZDA C Lamps are the latest development in the art of incandescent lamp manufacture. They are remarkably durable and produce a steady high candle power light of excellent color quality. These lamps show but comparatively little variation in light with voltage fluctuation and do not burn out with the most severe voltage surges ordinarily found on commercial lighting circuits. They operate on either direct or alternating current.

These lamps are ideal for store front illumination, for street lighting and for interior illumination, in factories, warehouses and large auditoriums. They do not require trimming or adjustment and for this reason may be placed in comparatively inaccessible locations. They consume but little electric current as compared with the great amount of light which they produce, and are unexcelled as a drawing advertisement for moving picture theaters, drug stores, restaurants and, in fact, stores of every description.

Because of the intense brightness of MAZDA C lamps, it is recommended that diffusing glassware or reflector units which screen the filament from view be used with them. Fixtures used with these lamps should be ventilated and when lamps are installed outdoors they should be protected from the weather.

MAZDA C LAMPS FOR SERIES CIRCUITS

MAZDA C lamps are rapidly revolutionizing outdoor lighting of every description and street lighting particularly.

The fact that they require almost no attention after they have once been installed—no trimming or adjustment—makes them especially suited to street lighting. In addition, they successfully withstand the most severe surges ordinarily found on lighting circuits.

These lamps may be used to replace older types of illuminants, usually without requiring any alteration of circuits or generating machinery.

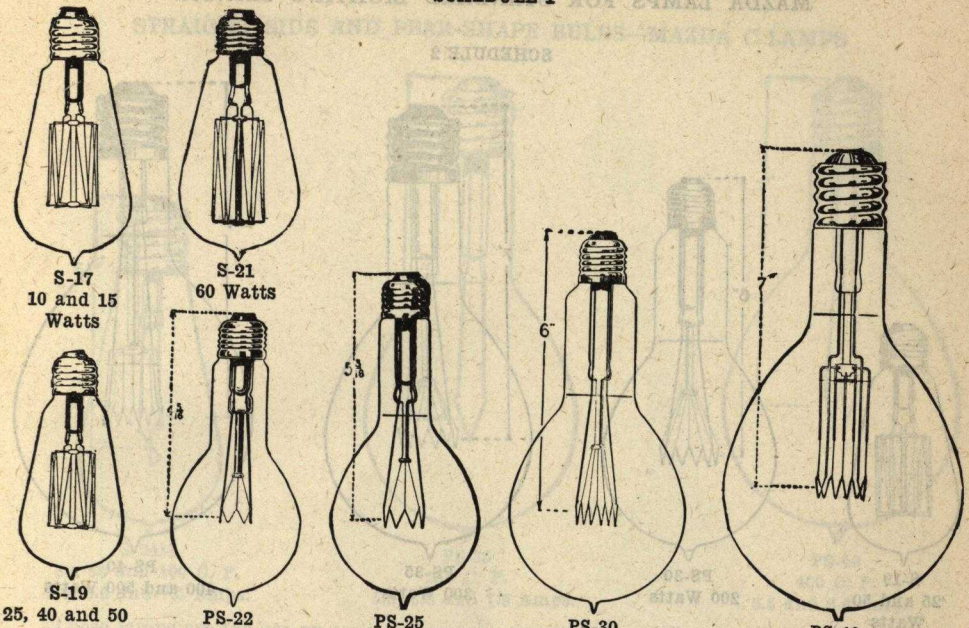
Because of their concentrated light source, their light is easily directed by means of proper reflector units. Reflecting units used with these lamps should protect the lamp from the weather.

Complete Data Regarding the Styles and Sizes in which these Lamps are Made will be Found on other Pages

WESTINGHOUSE MAZDA LAMPS

MAZDA LAMPS FOR STANDARD LIGHTING SERVICE

SCHEDULE 1



S-17 10 and 15 Watts

S-21 60 Watts

S-19 25, 40 and 50 Watts

PS-22 75 Watts

PS-25 100 and 150 Watts

PS-30 200 Watts

PS-40 400 and 500 Watts

These lamps constitute more than 75 per cent of the ordinary lamp demand for such service as residence, store and office lighting. The higher wattage sizes are used for various industrial and store lighting purposes. These lamps are for use on ordinary 110 to 125-volt lighting circuits. Proper reflector equipment should be provided to protect the eyes from the extremely bright filaments of MAZDA C lamps, especially whenever the lamps are hung low and in the usual line of vision.

STRAIGHT SIDE BULB—MAZDA B LAMPS—110 TO 125 VOLTS

Trade No.	Rated Watts	Lumens per Watt	Watts per Spherical C. P.	Watts per Horizontal C. P.	Type Bulb	Diam. Inches	Length Inches	Base Regularly Furnished	Std. Pkg.	Price, Each Clear	Frosted
27165	10	7.52	1.67	1.30	S–17	2⅛	4⅝	Med. screw	100	$0.30	$0.33
27146	15	8.55	1.47	1.15	S-17	2⅛	4⅝	Med. screw	100	.30	.33
27148	25	9.17	1.37	1.08	S-19	2⅜	5¼	Med. screw	100	.30	.33
27166	40	9.45	1.33	1.05	S-19	2⅜	5¼	Med. screw	100	.30	.33
81236	50	9.52	1.32	1.04	S-19	2⅜	5¼	Med. screw	100	.30	.33
27167	60	9.74	1.29	1.02	S-21	2⅝	5½	Med. screw	100	.30	.33
27151	100	10.13	1.24	.98	S-30	3¾	7⅞	Med. sc. sk.	24	.35	.39
										.70	.77

†PEAR SHAPED BULB—MAZDA C LAMPS—110 TO 125 VOLTS

81237	75	11.53	1.09	....	PS-22	2¾	6⅛	Med. screw	50	.70	.75
27174	100	12.57	1.00	....	PS-25	3⅛	7⅛	Med. screw	24	1.10	1.15
81238	150	13.66	.92	....	PS-25	3⅛	7⅛	Med. screw	24	1.65	1.70
27172	200	14.61	.86	....	PS-30	3¾	8⅜	Med. screw	24	2.20	2.27
27173	300	16.11	.78	....	PS-35	4⅜	9¾	¶Mog. screw	24	3.25	3.35
27168	400	15.32	.82	....	PS-40	5	10	Mog. screw	12	4.30	4.45
27169	500	16.11	.78	....	PS-40	5	10	Mog. screw	12	4.70	4.85
27170	750	16.98	.74	....	PS-52	6½	13⅜	Mog. screw	8	6.50	6.75
27171	1000	17.95	.70	....	PS-52	6½	13⅜	Mog. screw	8	7.50	7.75

Lamps of voltages of 100 to 109 and 129 to 130, inclusive, are not regularly carried in stock, but may be obtained at the same prices.

¶ Mogul screw base regularly supplied, but medium screw skirted base (the lamp having maximum over-all length of 10¼ inches and light center length 7½ inches) will be supplied at same price if demanded, but attention is called to the fact that the use of MAZDA C lamps of this wattage in medium screw sockets is contrary to the Rules of the Underwriters.

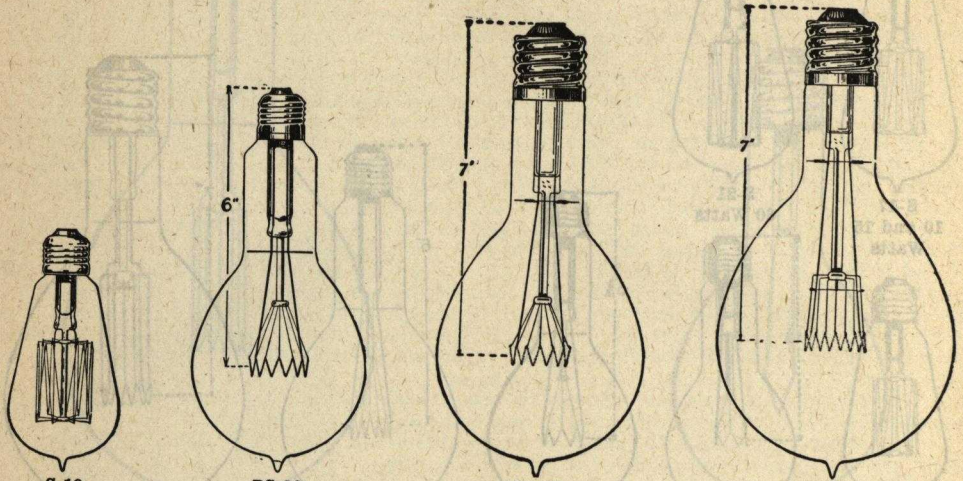
† Orders should specifically state if lamps are to be burned in other than the pendent position.

Illustrations are one-fourth actual size.

WESTINGHOUSE MAZDA LAMPS

MAZDA LAMPS FOR STANDARD LIGHTING SERVICE

SCHEDULE 2



S-19
25 and 50 Watts

PS-30
200 Watts

PS-35
300 Watts

PS-40
400 and 500 Watts

These lamps are used on 220 to 250-volt lighting circuits. Some central station lighting companies supply power for lighting at this voltage and some manufacturing plants, having their own lighting system, also employ this voltage.

STRAIGHT SIDE BULB—MAZDA B LAMPS—220 TO 250 VOLTS

Trade No.	Rated Watts	Lumens. per Watts	Watts per Spherical C. P.	Watts per Hor. C. P.	Type Bulbs	Diam. Inches	Length Inches	Base Regularly Supplied	Std. Pkg.	Price, Each Clear	Frosted
27154	25	7.62	1.65	1.30	S-19	2⅜	5¼	Med. screw	100	$0.35	$0.38
27155	50	8.43	1.49	1.18	S-19	2⅜	5¼	Med. screw	100	.35	.38
27157	100	9.04	1.39	1.10	S-30	3¾	7⅞	Med. sc. sk.	24	.85	.92
27158	150	9.45	1.33	1.05	S-35	4⅜	8¾	Med. sc. sk.	24	1.30	1.40
27159	250	10.47	1.20	.95	S-40	5	10	Med. sc. sk.	12	2.20	2.35

*PEAR-SHAPE BULB—MAZDA C LAMPS—220 TO 250 VOLTS

109694	200	12.57	1.00	....	PS-30	3¾	8⅜	Med. screw	24	2.40	2.47
109695	300	13.66	.92	....	PS-35	4⅜	9¾	Mog. screw	24	3.90	4.00
109696	400	14.61	.86	....	PS-40	5	10	Mog. screw	12	5.10	5.25
109697	500	14.78	.85	....	PS-40	5	10	Mog. screw	12	5.60	5.75
109698	750	15.32	.82	....	PS-52	6½	13⅜	Mog. screw	8	7.70	7.95
109699	1000	16.11	.78	....	PS-52	6½	13⅜	Mog. screw	8	9.00	9.25

* Orders should specifically state if lamps are to be burned in other than the pendent position.

Illustrations are one-fourth actual size.

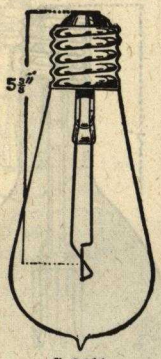
Lamps of voltages of 200 to 219 and 251 to 260, inclusive, are not regularly carried in stock, but may be obtained at the same prices.

WESTINGHOUSE MAZDA LAMPS

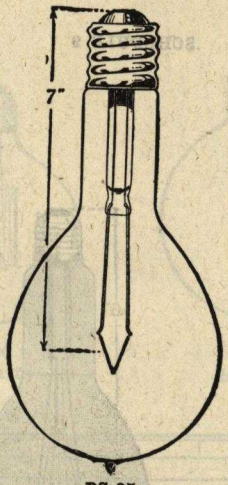
MAZDA LAMPS FOR USE IN SERIES ON STREET LIGHTING CIRCUITS

SCHEDULE 6

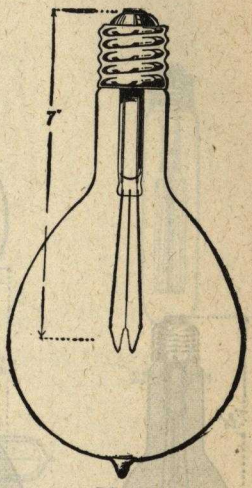
STRAIGHT SIDE AND PEAR-SHAPE BULBS—MAZDA C LAMPS



S-24½
60, 80 and 100 C. P.
5.5, 6.6 and 7.5 Amps.



PS-35
250 C. P.
5.5, 6.6 and 7.5 Amps.



PS-40
400 C. P.
5.5 and 6.6 Amps.

These lamps are for use on constant current circuits. A small compensator made for each size of lamp is used with the 15 and 20-ampere lamps to raise the current from 5.5, 6.6 or 7.5 amperes to the 15 or 20 amperes required.

The price of lamps for rectifier service which are not included in the following may be obtained on application.

Trade No.	Amps.	C. P.	Total Lumens	Average Volts	Type Bulb	Diam. Inches	Max. Length Inches	*Base Regularly Supplied	Std. Pkg.	Price, Each Clear	Frosted
81146	5.5	60	600	8.5	S-24½	3 1/16	7¼	Mog. screw	50	$1.00	$1.05
81147	5.5	80	800	10.8	S-24½	3 1/16	7¼	Mog. screw	50	1.20	1.25
81148	5.5	100	1000	13.0	S-24½	3 1/16	7¼	Mog. screw	50	1.20	1.25
81149	5.5	250	2500	29.7	PS-35	4⅜	9¾	Mog. screw	24	2.35	2.45
81150	5.5	400	4000	47.4	PS-40	5	10	Mog. screw	12	4.00	4.15
81151	6.6	60	600	7.1	S-24½	3 1/16	7¼	Mog. screw	50	1.00	1.05
81139	6.6	80	800	9.1	S-24½	3 1/16	7¼	Mog. screw	50	1.20	1.25
81140	6.6	100	1000	10.9	S-24½	3 1/16	7¼	Mog. screw	50	1.20	1.25
81141	6.6	250	2500	23.5	PS-35	4⅜	9¾	Mog. screw	24	2.35	2.45
81142	6.6	400	4000	37.1	PS-40	5	10	Mog. screw	12	4.00	4.15
81143	6.6	600	6000	55.7	PS-40	5	10	Mog. screw	12	5.00	5.15
81152	7.5	60	600	6.4	S-24½	3 1/16	7¼	Mog. screw	50	1.00	1.05
29168	7.5	80	800	8.0	S-24½	3 1/16	7¼	Mog. screw	50	1.20	1.25
81153	7.5	100	1000	9.6	S-24½	3 1/16	7¼	Mog. screw	50	1.20	1.25
29169	7.5	250	2500	19.6	PS-35	4⅜	9¾	Mog. screw	24	2.35	2.45
81154	7.5	400	4000	30.5	PS-40	5	10	Mog. screw	12	4.00	4.15
81155	7.5	600	6000	45.8	PS-40	5	10	Mog. screw	12	5.00	5.15
81156	15	400	4000	15.3	PS-40	5	12½	Mog. screw	12	4.00	4.15
29171	20	600	6000	15.5	PS-40	5	12½	Mog. screw	12	5.00	5.15
29172	20	1000	10000	25.9	PS-40	5	12½	Mog. screw	12	6.00	6.15

*Medium screw skirted base also supplied at same price, except the 400, 600 and 1000-candle power lamps, which are supplied only with Mogul Screw Unskirted Base.

Orders for lamps of 250-candle power and higher should specifically state if they are to be burned in other than pendent position. The light center length of the 15 and 20-ampere MAZDA C lamps shown above is 9½ inches for burning in pendent position and 8¼ inches where ordered for burning tip up.

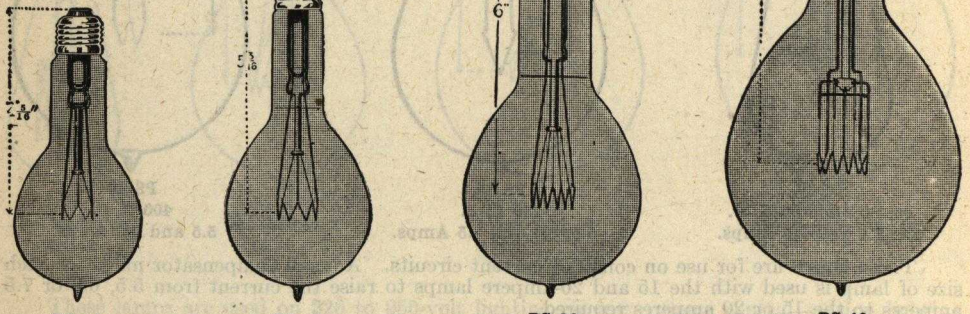
MAZDA lamps for street series service selected for use on multiple compensators or for any other purpose where a single voltage or range of voltages closer than stated are required will take a special price, which may be obtained upon application.

Illustrations are one-fourth actual size.

WESTINGHOUSE MAZDA LAMPS

MAZDA C-2 LAMPS FOR STANDARD LIGHTING SERVICE

SCHEDULE 9



PS-22
75 Watts

PS-25
100 and 150 Watts

PS-30
200 Watts

PS-40
500 Watts

The following MAZDA C-2 lamps are designed to produce light of a quality which will ordinarily make colors appear as in the light of day. The bulbs of these lamps are made of a special blue glass to filter out the excess red and yellow light rays, and for this reason they are called MAZDA C-2 lamps to distinguish them from clear bulb MAZDA C lamps.

PEAR-SHAPE BULB—MAZDA C-2 LAMPS—110 TO 125 VOLTS

Trade No.	Rated Watts	Type Bulb	Diam. Inches	Length Inches	Base Regularly Supplied	Std. Pkg.	Price, Each Clear	Frosted
81239	75	PS-22	2¾	6⅛	Med. screw	50	$0.80	$0.90
81240	100	PS-25	3⅛	7⅛	Med. screw	24	1.25	1.35
81241	150	PS-25	3⅛	7⅛	Med. screw	24	1.90	2.00
81242	200	PS-30	3¾	8⅜	Med. screw	24	2.50	2.64
81243	300	PS-35	4⅜	9¾	Mog. screw	24	3.75	3.95
69402	500	PS-40	5	10	Mog. screw	12	5.50	5.80

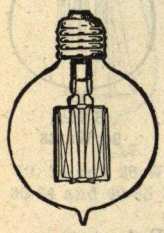
Lamps of voltages of 100 to 109 and 126 to 130, inclusive, are not regularly carried in stock but may be obtained at the same prices.

Illustrations are one-fourth actual size.

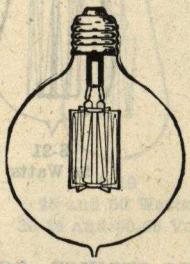
WESTINGHOUSE MAZDA LAMPS

MAZDA LAMPS FOR ORNAMENTAL LIGHTING SERVICE

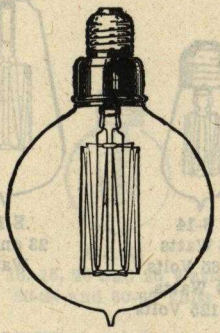
SCHEDULE 3



G-25
15, 25 and 40 Watts



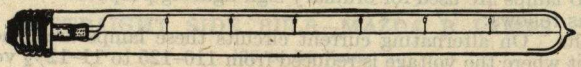
G-30
60 Watts



G-35
100 Watts



T-10
25 Watts



T-8
25 and 40 Watts

These lamps are used for ornamental purposes in homes, churches, hotels, etc. For this reason they are often installed without shades or reflectors and in such instances it is generally desirable to have the lamps frosted. These lamps are for use on ordinary lighting circuits.

Tubular lamps are especially designed for show case, special display sign and cornice lighting or for other services where a line source is necessary to light confined spaces or to define outlines.

ROUND BULB—MAZDA B LAMPS—110 TO 125 VOLTS†

Trade No.	Rated Watts	Lumens per Watt	Efficiency Watts per Spherical C. P.	Watts per Horizontal C. P.	Type Bulb	Diam. Inches	Length Inches	Base Regularly Supplied	Std. Pkg.	Price, Each Clear	Frosted
27175	*15	8.79	1.43	1.14	G-25	3⅛	4¾	Med. screw	50	$0.50	$0.55
27176	*25	9.31	1.35	1.08	G-25	3⅛	4¾	Med. screw	50	.50	.55
27177	40	9.45	1.33	1.06	G-25	3⅛	4¾	Med. screw	50	.50	.55
27178	60	10.22	1.23	.98	G-30	3¾	5½	Med. screw	24	.70	.77
27179	100	10.65	1.18	.94	G-35	4⅜	7¼	Med. sc. sk.	24	1.00	1.10

ROUND BULB—MAZDA B LAMPS—220 TO 250 VOLTS‡

27183	25	7.71	1.63	1.30	G-25	3⅛	4¾	Med. screw	50	.60	.65
27184	50	8.43	1.49	1.19	G-25	3⅛	4¾	Med. screw	50	.60	.65

TUBULAR BULB—MAZDA B LAMPS—110 TO 125 VOLTS†

27188	25	9.11	1.38	1.08	T-10	1¼	5⅞	Med. screw	100	.55	.60
27190	25	8.73	....	....	T- 8	1	12	Med. screw	50	1.00	1.10
27191	40	9.04	....	.....	T- 8	1	12	Med. screw	50	1.00	1.10

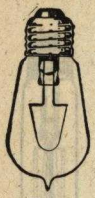
* Lamps of these wattages can be supplied in G-18½ bulb at an efficiency in watts per spherical c. p. of 1.53 and 1.45, respectively, standard package, 100, at $0.50 clear and $0.53 frosted.

† Lamps of voltages of 100 to 109 and 126 to 130, inclusive, are not regularly carried in stock, but may be obtained at the same prices.

‡ Lamps of voltages of 200 to 219 and 251 to 260, inclusive, are not regularly carried in stock, but may be obtained at the same prices.

Illustrations are one-fourth actual size.

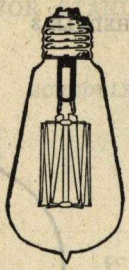
WESTINGHOUSE MAZDA LAMPS



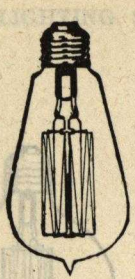
S-14
2½ and 5 Watts
11-12½ Volts



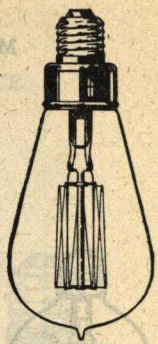
S-14
5 Watts
55-65 Volts
10 Watts
110-125 Volts



S-19
23 and 36
Watts



S-21
56 Watts



S-24½
94 Watts

MAZDA LAMPS FOR SIGN LIGHTING SERVICE—SCHEDULE 4

STRAIGHT SIDE BULB—MAZDA B LAMPS

11 to 12½, 55 to 65 and 110 to 125 Volts

These MAZDA B lamps are used for ordinary sign lighting purposes. The lamps are divided into three groups as follows:

11 to 12½ Volts. On alternating current circuits these lamps are generally operated on a transformer circuit where the voltage is reduced from 110–125 to 11–12½ volts. These lamps are available in ½-volt steps from 11 to 12½ volts, inclusive. If direct current only is available these lamps may be burned, if so desired, ten in series on a standard 110 to 125-volt circuit.

55 to 65 Volts. These lamps are generally burned two in sereis or grouped in series multiple on standard 110 to 125-volt circuit.

110 to 125 Volts. These lamps are for use on regular multiple or ordinary lighting circuits.

11 to 12½ Volts*

Trade No.	Rated Watts	Lumens per Watt	Watts per Spherical C. P.	Watts per Horizontal C. P.	Type Bulb	Diam. Inches	Length Inches	Base Regularly Supplied	Std. Pkg.	Price, Each Clear	Frosted
27160	2.5	8.27	1.52	1.20	S-14	1¾	4	Med. screw	100	$0.27	$0.30
27161	5	8.61	1.46	1.15	S-14	1¾	4	Med. screw	100	.27	.30
					55 to 65 Volts†						
27163	5	7.26	1.73	1.35	S-14	1¾	4	Med. screw	100	.30	.33
					110 to 125 Volts‡						
27164	10	7.26	1.73	1.35	S-14	1¾	4	Med. screw	100	.30	.33

* Lamps of voltages of 10, 10½ and 13 are not regularly carried in stock, but may be obtained at the same prices.

† Lamps of voltages of 50 to 54, inclusive, are not regularly carried in stock but may be obtained at the same prices.

‡ Lamps of voltages of 100 to 109 and 125 to 130, inclusive, are not regularly carried in stock but may be obtained at the same prices.

MAZDA LAMPS FOR ELECTRIC STREET RAILWAY SERVICE—SCHEDULE 5

STRAIGHT SIDE BULB—MAZDA B LAMPS

Five in Series—525, 550, 575, 600, 625 and 650 Volts

These MAZDA lamps are selected for amperes and labeled for use five in series on the 525, 550, 660, 625 and 650-volt circuits ordinarily used by electric street railway companies.

As considerable voltage fluctuation is sometimes found in this class of circuits, these lamps are only manufactured for 6-voltage groups and care should be taken to see that the voltage group of lamps supplied corresponds closely to the average voltage found on the circuit.

Trade No.	Rated Watts	Amp.	Lumens per Watt	Efficiency Watts per Spherical C. P.	Watts per Horizontal C. P.	Type Bulb	Diam. In.	Length In.	Base Regularly Supplied	Std. Pkg.	Price, Each Clear	Frosted
29779	23	0.214	8.73	1.44	1.14	S-19	2⅜	5¼	Med. screw	100	$0.30	$0.33
29789	36	0.342	8.91	1.41	1.11	S-19	2⅜	5¼	Med. screw	100	.30	.33
29793	56	0.519	9.52	1.32	1.04	S-21	2⅝	5½	Med. screw	100	.35	.39
29794	94	0.863	9.89	1.27	1.00	S-24½	3⅛	7⅛	Med. sc. sk.	50	.70	.77

Only the above lamps which are selected for amperes and for one-fifth the voltage on which they are labeled for use in series will be supplied at these prices.

Illustrations are one-fourth actual size.

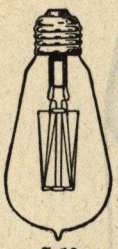
WESTINGHOUSE MAZDA LAMPS

MAZDA LAMPS FOR TRAIN LIGHTING SERVICE

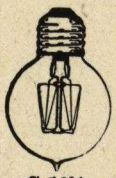
SCHEDULE 7.



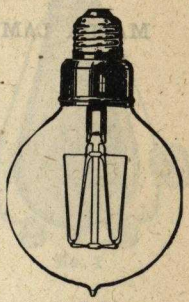
S-17
10, 15 and 20 Watts
30-34 and 60-65 Volts



S-19
25 and 50 Watts
30-34 and 60-65 Volts



G-18½
10, 15, 20 and 25 Watts
30-34 and 60-65 Volts



G-30
50 Watts
30-40 and 60-65 Volts

The 30-34 and 60-65-volt lamps are generally operated from locomotive headlight outfits or 16 and 32-cell battery lighting systems respectively. These lamps are used for ordinary train lighting service.

STRAIGHT SIDE BULB—MAZDA B LAMPS

†30 to 34 Volts

Trade No.	Total Lumens	Labeled Watts Nominal	Lumens per Watt	Watts per Spherical C. P.	Type Bulb	Diam. Inches	Length Inches	Base Regularly Supplied	Std. Pkg.	Price, Each Clear	Frosted
144094	85	10	9.17	1.37	S-17	2⅛	4⅝	Med. screw	100	$0.30	$0.33
144095	125	15	9.59	1.31	S-17	2⅛	4⅝	Med. screw	100	.30	.33
144096	175	20	9.74	1.29	S-17	2⅛	4⅝	Med. screw	100	.30	.33
§144114	125	15	8.16	1.54	S-17	2⅛	4⅝	Med. screw	100	.33	.36
144097	250	25	9.74	1.29	S-19	2⅜	5¼	Med. screw	100	.30	.33
144098	500	50	10.13	1.24	S-19	2⅜	5¼	Med. screw	100	.30	33

‡60 to 65 Volts

144099	85	10	8.73	1.44	S-17	2⅛	4⅝	Med. screw	100	.30	.33
144100	125	15	9.11	1.38	S-17	2⅛	4⅝	Med. screw	100	.30	.33
144101	175	20	9.24	1.36	S-17	2⅛	4⅝	Med. screw	100	.30	.33
144102	250	25	9.24	1.36	S-19	2⅜	5¼	Med. screw	100	.30	.33
144103	500	50	10.13	1.24	S-19	2⅜	5¼	Med. screw	100	.30	.33

ROUND BULB—MAZDA B LAMPS

†30 to 34 Volts

144104	85	10	8.73	1.44	G-18½	2⅝	3¾	Med. screw	100	.40	.43
144105	125	15	9.11	1.38	G-18½	2⅝	3¾	Med. screw	100	.40	.43
144106	175	20	9.24	1.36	G-18½	2⅝	3¾	Med. screw	100	.40	.43
144107	250	25	9.24	1.36	G-18½	2⅝	3¾	Med. screw	100	.40	.43
144108	500	50	10.30	1.22	G-30	3¾	6¼	Med. sc. sk.	24	.70	.77

‡60 to 65 Volts

144109	85	10	8.32	1.51	G-18½	2⅝	3¾	Med. screw	100	.40	43
144110	125	15	8.73	1.44	G-18½	2⅝	3¾	Med. screw	100	.40	.43
144111	175	20	8.85	1.42	G-18½	2⅝	3¾	Med. screw	100	.40	.43
144112	250	25	8.85	1.42	G-18½	2⅝	3¾	Med. screw	100	.40	.43
144113	500	50	10.30	1.22	G-30	3¾	6¼	Med. sc. sk.	24	.70	.77

†Lamps of voltages of 25 to 29, inclusive, are not regularly carried in stock but may be obtained at the same prices.

‡Lamps of voltages of 50 to 59, inclusive, are not regularly carried in stock but may be obtained at the same prices.

§34 volts only. For locomotive cab lighting service.

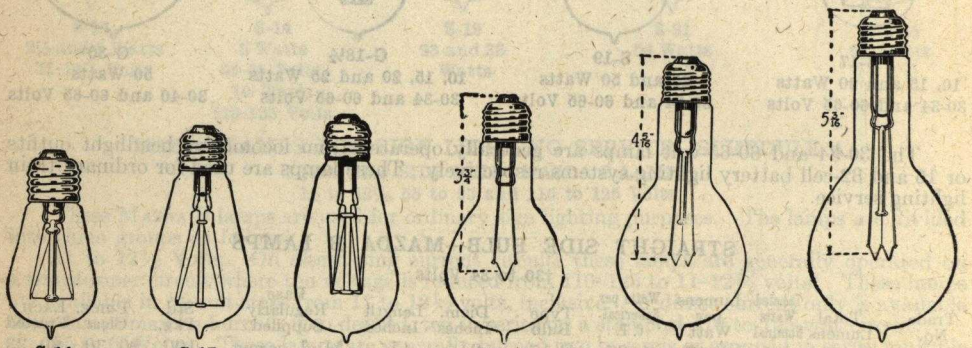
For locomotive headlight lamps see Schedule 10.

Illustrations are one-fourth actual size.

WESTINGHOUSE MAZDA LAMPS

MAZDA LAMPS FOR USE WITH COUNTRY HOME LIGHTING OUTFITS

SCHEDULE 8



S-14 5 Watts | **S-17** 10 and 20 Watts | **S-19** 40 Watts | **PS-20** 50 Watts | **PS-22** 75 Watts | **PS-25** 100 Watts

These lamps are generally used on the circuits of country home lighting outfits having 16 cells of lead storage battery in connection with a generator lighting system. The capacity of country home lighting outfits is usually expressed in number of lamps (such as 50-lamp outfits), the lamp unit being a 20-watt lamp equivalent.

STRAIGHT SIDE BULB—MAZDA B LAMPS—16-CELL (28-32 VOLTS)

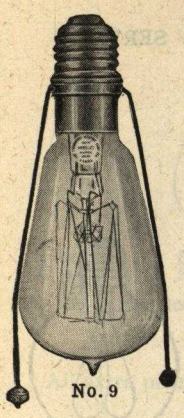
Trade No.	Labeled Watts Nominal	Lumens per Watt	Efficiency Watts per Spherical C. P.	Watts per Horizontal C. P.	Type Bulb	Diam. Inches	Length Inches	Base Regularly Supplied	Std. Pkg.	Price, Each Clear	Frosted
27196	5	8.73	1.44	1.14	S-14	1¾	4	Med. screw	100	$0.30	$0.33
27197	10	9.17	1.37	1.08	S-17	2⅛	4⅝	Med. screw	100	.30	.33
27198	20	9.74	1.29	1.02	S-17	2⅛	4⅝	Med. screw	100	.30	.33
27199	40	10.13	1.24	.98	S-19	2⅜	5¼	Med. screw	100	.30	.33

PEAR SHAPE BULB—MAZDA C LAMPS—16-CELL (28-32 VOLTS)

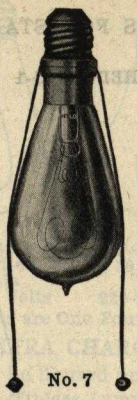
27200	50	13.96	.90	....	PS-20	2½	5½	Med. screw	50	.70	.75
144124	75	14.78	.85	....	PS-22	2¾	6⅛	Med. screw	50	.80	.85
144125	100	15.71	.80	....	PS-25	3⅛	7⅛	Med. screw	24	1.20	1.25

Illustrations are one-fourth actual size.

HYLO-ECONOMICAL TURN DOWN LAMPS



No. 9



No. 7



No. 1

Convenient, safe and economical for the hall, sleeping room, bathroom, den, dining room, porch and other similar locations.

HYLO MAZDA LAMPS

No. 9—Pull String

Bulb is the same size as regular Mazda lamps.

Trade No.	Watts	Candle Power	Voltage	Std. Pkg.	Price Each
102689	25–5	20–1.2	105–125	100	$0.90
102690	40–5	32–1.2	105–125	100	.90
47136	25–5	20–1.2	28–32	100	.90
47137	40–5	32–1.2	28–32	100	.90

Both filaments Mazda. 25 and 40-watt lamps can be assorted to make a standard package.



No. 2

HYLO CARBON LAMPS

No. 7—Pull String

Trade No.	Candle Power	Voltage	Std. Pkg.	Price Each
046217	8– ½–out	50–125	250	$0.60
046218	8– ½–out	220–250	250	.60
046219	16–1 –out	50–125	250	.60
046220	16–1 –out	220–250	250	.60
046221	32–1 –out	50–125	250	.75
046222	32–1 –out	220–250	250	.75

Hylo Carbon Lamps can be assorted in all candle powers and voltages to make a standard package.

ECONOMICAL CARBON LAMPS

No. 1—Pull String

046199	8– ½	50–125	250	.60
046200	8– ½	220–250	250	.60
046201	16–1	50–125	250	.60
046202	16–1	220–250	250	.60
046203	32–1	50–125	250	.75
046204	32–1	220–250	250	.75

No. 2—Turn Bulb

046205	8– ½	50–125	250	.60
046206	8– ½	220–250	250	.60
046207	16–1	50–125	250	.60
046208	16–1	220–250	250	.60
046209	32–1	50–125	250	.75
046210	32–1	220–250	250	.75

LONG DISTANCE CARBON LAMPS

No. 6—With 3-foot Cord and Switch

046211	8– ½–out	50–125	250	1.25
046212	8– ½–out	220–250	250	1.25
046213	16–1 –out	50–125	250	1.25
046214	16–1 –out	220–250	250	1.25
046215	32–1 –out	50–125	250	1.35
046216	32–1 –out	220–250	250	1.35

Extra length cords, add 3 cents per foot.

Carbon lamps can be furnished frosted at an additional expense of 5 cents per lamp.

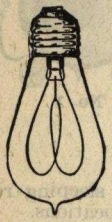


No. 6

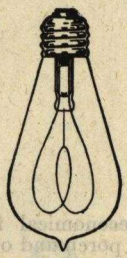
WESTINGHOUSE METALLIZED FILAMENT LAMPS

METALLIZED FILAMENT LAMPS FOR STANDARD LIGHTING SERVICE

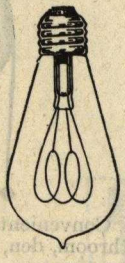
SCHEDULE G-1



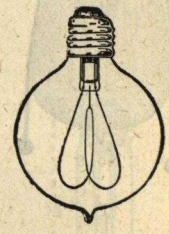
S-17
20 and 30 Watts



S-19
40, 50 and 60 Watts



Mill Type
S-19
60 Watts



G-25
50 Watts

STRAIGHT SIDE BULB—110 TO 125 VOLTS†

Trade No.	Rated Watts	Watts, per Mean Hr. C. P.	Style Bulb	Diam. Inches	Length Inches	Base Regularly Supplied	Std. Pkg. Ship. Qty.	Std. Pkg. Min. No.	Price, Each Clear	Price, Each Frosted
29215	20	4.00	S-17	2⅛	4½	Med. screw	250	200	$0.22	$0.24½
29216	30	3.00	S-17	2⅛	4½	Med. screw	250	200	.22	.24½
29217	40	2.56	S-19	2⅜	5⅛	Med. screw	250	200	.22	.24½
29218	50	2.50	S-19	2⅜	5⅛	Med. screw	250	200	.22	.24½
29219	60	2.50	S-19	2⅜	5⅛	Med. screw	250	200	.22	.24½

STRAIGHT SIDE BULB—MILL TYPE—110 TO 125 VOLTS†

29222	60	2.60	S-19	2⅜	5⅛	Med. screw	250	200	.22	.24½

ROUND BULB—110 TO 125 VOLTS†

29223	50	2.50	G-25	3⅛	4⅝	Med. screw	100	100	.27	.30

†Lamps of voltages of 100 to 109 and 126 to 130, inclusive, are not regularly carried in stock, but may be obtained at the same prices.

The prices given above cover lamps with a tip unless otherwise indicated; for tipless lamps the additional charge is 10 per cent on Metallized Filament lamps.

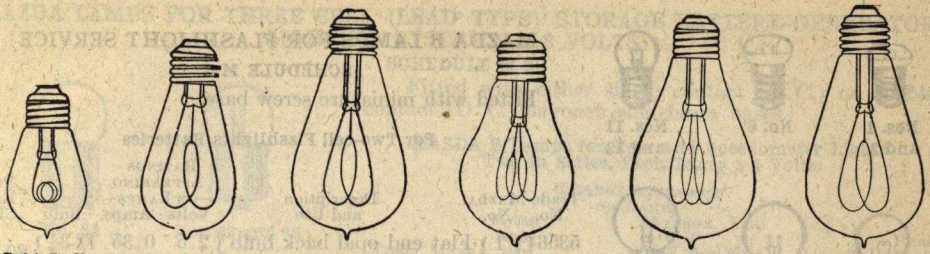
For anchoring filaments to the bulb in Metallized Filament lamps, except in the case of such lamps as are regularly standardized with bulb anchored filaments, an additional charge of $0.03 for each anchor shall be made.

The charge for etching letters or designs on all sizes of Metallized Filament lamps is $0.00¼ net each, subject to no discount.

Standard package discounts on all large style Metallized Filament lamps can be given only on orders for exact standard package quantities or multiples thereof. It is allowable, however, to combine in one standard package all sizes of large style Metallized Filament lamps having the same standard package quantity. Such lamps may be of different voltages and finish of bulb.

Illustrations are one-fourth actual size.

CARBON LAMPS



S-14 Bulb 10 and 20 Watts 105–125 Volts | S-17 Bulb 20 and 30 Watts 105–125 Volts | S-19 Bulb 50 and 60 Watts 105–125 Volts | P-19 Bulb 30 and 35 Watts 220–250 Volts | P-21 Bulb 60 Watts 220–250 Volts | S-19 Bulb 64 Watts 5 in Series

Illustrations are One Fourth Actual Size

EXTRA CHARGES

All extra percentage charges shall be figured on the basic list price of the clear lamps.

Tipless Lamps

The prices given in schedules cover lamps with a tip, unless otherwise indicated; for tipless lamps the additional charge is 10 per cent.

Colored Lamps

For superficial coloring (all schedules), add 25 per cent to list price of clear lamps, subject to discount. For natural colored lamps, add the following percentage charges to the price of clear lamps in the following bulbs: S-14, S-17, S-19, P-19, and P-21 — Green or blue, 50 per cent; purple, 75 per cent; ruby or opal, 100 per cent; amber or canary, 150 per cent.

The extra charges given above cover only standard colored glass. Specially colored glass bulbs will take a higher price, which will be furnished on application.

Special Lamps

As it is impossible always to produce an exact quantity of any lamps to be made tipless (when listed tipped), or of any lamps to be furnished in natural colored bulbs, the right is reserved to fill all such orders either short or in excess, within the limits of 10 per cent, and not more than two lamps short or excess on orders for 20 lamps or less.

Bases

The prices on each schedule cover only the base or bases stated therein. The price of lamps fitted with other bases may be obtained on application.

No reduction in the price of lamps regularly based, when furnished unbased.

Etching Letters

For etching letters or designs on lamps, add ¼ cent per lamp net.

STRAIGHT SIDE TYPE

SCHEDULE C-1

Fitted with Medium Screw Base

Trade No.	Type	Size of Lamp Watts	Efficiency W.P.C.	Mean Hor. C.P.	Standard Package Ship. Qty.	Standard Package Minimum No.	Style Bulb	Bulb Diam. Inches	Length Inches Over All	Price, Each Clear	Price, Each Frosted
				105 to 125 Volts							
27247	Sign	10	5	2	250	200	S-14	1¾	3½	$0.18	$0.21
27248	Sign	20	4.15	4.8	250	200	S-14	1¾	3½	.18	.21
				220 to 250 Volts							
27249	Sign	30	5.9	5.1	250	200	P-19	2⅜	4⅝	.20	.23
				105 to 125 Volts							
27250	Regular	20	4.15	4.8	250	200	S-17	2⅛	4½	.18	.21
27252	Regular	30	3.23	9.3	250	200	S-17	2⅛	4½	.18	.21
27253	Regular	50	2.97	16.8	250	200	S-19	2⅜	5⅛	.18	.21
27254	Regular	60	2.97	20.2	250	200	S-19	2⅜	5⅛	.18	.21
				220 to 250 Volts							
27257	Regular	35	4.40	8	250	200	P-19	2⅜	4⅝	.20	.23
27258	Regular	60	3.69	16.3	200	200	P-21	2⅝	5	.20	.23

ELECTRIC STREET RAILWAY LAMPS

SCHEDULE C-2

Fitted with Medium Screw Base

29194	Regular	64	4	16.3	250	200	S-19	2⅜	5⅛	.18	.21

The lamps listed above are selected for amperes and are labeled for use, five in series, on 525, 550, 575, 600, 625 and 650 volts.

Standard package discounts and allowances for lamps in above schedules can be given on orders for not less than a standard package quantity of one type and size of bulb. For any one type and size of bulb, lamps of different voltages, wattages, efficiencies and finish of bulb may be combined in one package.

MAZDA MINIATURE LAMPS


Nos. 1 and 2

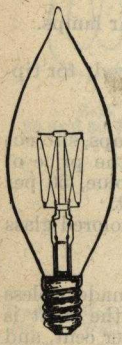

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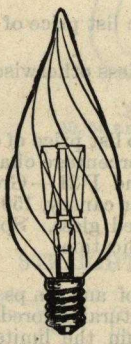

Nos. 11 and 12

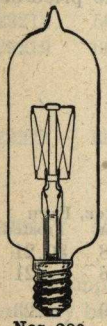

Nos. 16, 17, 18

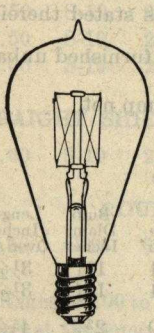

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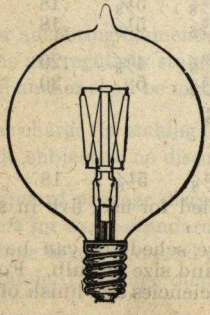

Nos. 32, 33, 34, 35


Nos. 240, 242, 244, 246


Nos. 260, 262, 264, 266


Nos. 280, 282, 284, 286


Nos. 226 228, 230, 232


Nos. 190, 192, 194, 196

MAZDA B LAMPS FOR FLASHLIGHT SERVICE

SCHEDULE M-1

Fitted with miniature screw base.

For Two-cell Flashlights Batteries

Trade No.	Mazda No.	Description and Use	Ratings Appearing on Lamps Volts	Amps.	Bulb	Price Each Clear
53564	1	Flat end opal back bulb for case type battery	2.5	0.35	FE-3¾	$0.15
53565	6		2.5	0.25	FE-4¼	
53598	11	Round clear bulb for tubular type battery	2.7	0.35	G-3½	.15
53599	16		2.9	0.35	G-4½	.15

For Three-cell Flashlight Batteries

53631	2	Flat end opal back bulb for case or tubular type battery	3.8	0.35	FE-3¾	.15
53561	12	Round clear bulb for case or tubular type battery	3.8	0.35	G-3½	.15
53562	17		3.8	0.35	G-4½	.15
53600	18		4.0	0.35	G-4½	.15

For Five-cell Flashlight Batteries

53563	31	Round clear bulb for tubular type battery	6.2	0.35	G-5½	.15

For One-cell Standard Dry Battery (Actual Volts 1.35)

53590	32	Round clear bulb	1.50	0.60	G-5½	.15
45007	33		1.50	0.70		

For Two Cells of Standard Dry Batteries (Actual Volts 2.7-3.0)

53638	34	Round clear bulb	3.0	0.42	G-5½	.15
45008	35		3.0	0.80		

Unit package quantity, 10 lamps.

MAZDA B LAMPS FOR CANDELABRA SERVICE

SCHEDULE M-7

110, 115, 120 and 125 Volts

Fitted with candelabra screw base. Watts per spherical candle power, 1.67.

Volts	Watts	Bulb	Unit Pkg.	Clear Trade No.	Clear Mazda No.	Clear Price Each	Frosted Trade No.	Frosted Mazda No.	Frosted Price Each
110	15	B-9½	5	149922	240	$0.55	149942	241	$0.60
115				149923	242	.55	149943	243	.60
120				149924	244	.55	149944	245	.60
125				149925	246	.55	149945	247	.60
110	15	D-10	5	149926	260	.55	149946	261	.60
115				149927	262	.55	149947	263	.60
120				149928	264	.55	149948	265	.60
125				149929	266	.55	149949	267	.60
110	15	T-8	5	149930	280	.55	149950	281	.60
115				149931	282	.55	149951	283	.60
120				149932	284	.55	149952	285	.60
125				149933	286	.55	149953	287	.60
110	15	G-16½	5	149934	190	.55	149954	191	.60
115				149935	192	.55	149955	193	.60
120				149936	194	.55	149956	195	.60
125				149937	196	.55	149957	197	.60
110	15	S-12½	5	149938	226	.55	149958	227	.60
115				149939	228	.55	149959	229	.60
120				149940	230	.55	149960	231	.60
125				149941	232	.55	149961	233	.60

Order lamps by Mazda numbers.

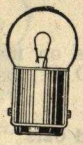
Illustrations are one-half actual size.

MAZDA MINIATURE AUTOMOBILE LAMPS

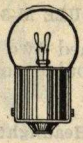
MAZDA LAMPS FOR THREE CELL (LEAD TYPE) STORAGE BATTERY-GENERATOR LIGHTING SYSTEMS (6-8 VOLTS)

SCHEDULE M-2

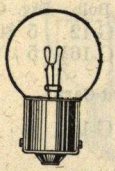
Fitted with either single contact (S. C.) or double contact (D. C.) bayonet candelabra bases.



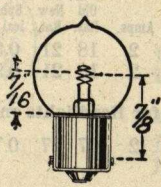
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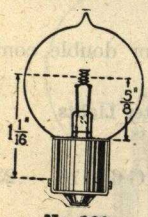
Nos. 63 and 65



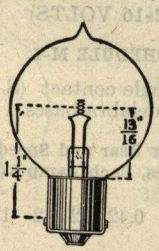
Nos. 81 and 83



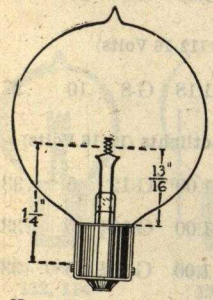
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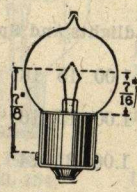
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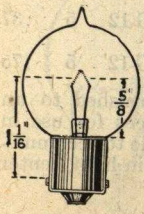
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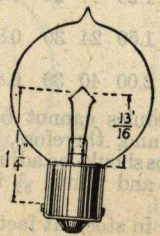
Nos. 165, 167, 169, 171



No. 87



No. 103



Nos. 127, 129, 131, 133

MAZDA B Lamps for Rear and Speedometer Lights (Two in Series, Each Lamp 3-4 Volts)

Trade No.	Mazda No.	Bayonet Candelabra Base	Volts	Ratings Appearing on Lamps: Amps.	Approx. C. P. Old Rat.	Approx. C. P. New Rat.	Watts per Spherical C.P.	Bulb	Unit Pkg.	Price Each Clear
149973	61	*S. C.	3-4	0.84	2	2	1.35	G- 6	10	$0.23
149974	62	D.C.								

MAZDA B Lamps for Rear and Speedometer Lights (6-8 Volts)

149975	63	S. C.	6-8	0.42	2	2	1.35	G- 6	10	.23
149976	64	D.C.								
149977	65	*S. C.	6-8	0.84	4	4	1.35	G- 6	10	.27
149978	66	*D.C.								

MAZDA B Lamps for Side Lights (6-8 Volts)

149979	81	S. C.	6-8	0.84	4	5	1.18	G- 8	10	.23
149980	82	D.C.								
149981	83	*S. C.	6-8	1.25	6	7	1.18	G- 8	10	.27
149982	84	*D C.								
149983	85	*S. C.	6-8	1.00	6	7	1.00	†G- 8	10	.35
149984	86	*D.C.								

MAZDA B Lamps for Headlights and Spotlights (6-8 Volts)

149985	101	*S. C.	6-8	1.5	9	10	1.00	G-10	10	.30
149986	102	*D.C.								
149987	121	*S. C.	6-8	1.5	9	10	1.00	G-12	5	.30
149988	122	*D.C.								
149989	123	*S. C.	6-8	2.0	12	14	0.95	G-12	5	.30
149990	124	*D.C.								
149991	125	S. C.	6-8	2.5	15	17	0.95	G-12	5	.30
149992	126	D.C.								
149993	165	S. C.	6-8	2.5	15	17	0.95	G-16½	5	.30
149994	166	D.C.								
149995	167	*S. C.	6-8	3.0	18	20	0.95	G-16½	5	.30
149996	168	*D.C.								
149997	169	*S. C.	6-8	3.5	21	24	0.95	G-16½	5	.35
149998	170	*D.C.								
149999	171	*S. C.	6-8	4.0	24	27	0.95	G-16½	5	.35
150000	172	*D.C.								

MAZDA C Lamps for Headlights and Spotlights (6-8 Volts)

150001	87	S. C.	6-8	1.5	12	12	0.80	G- 8	10	.40
150002	88	D.C.								
150003	103	*S. C.	6-8	2.5	..	20	0.80	G-10	10	.35
150004	104	D.C.								
150005	127	S. C.	6-8	1.5	12	12	0.80	G-12	5	.40
150006	128	D.C.								
150007	129	S. C.	6-8	2.5	21	20	0.80	G-12	5	.35
150008	130	D.C.								
150009	131	S. C.	6-8	3.5	30	28	0.80	G-12	5	.50
150010	132	D.C.								
150011	133	*S. C.	6-8	4.0	36	32	0.80	G-12	5	.75
150012	134	*D.C.								

Lamps on this schedule cannot be furnished to an exact light center length and, therefore, devices for use in connection with these lamps should be adjustable to accommodate lamps varying plus and minus $\frac{3}{32}$ in. in light center length and focus length.

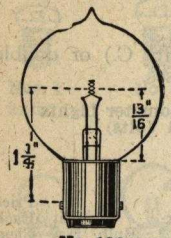
*Not regularly carried in stock at factory.

†Focusing.

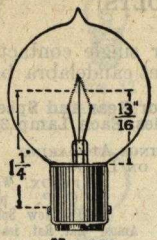
Order lamps by Mazda numbers.

Illustrations are one-half actual size.

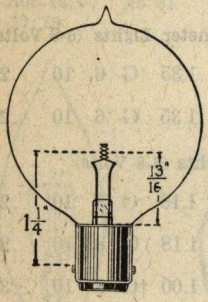
MAZDA MINIATURE AUTOMOBILE LAMPS



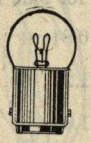
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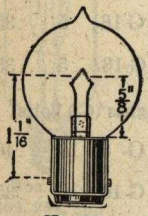


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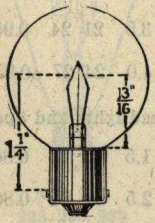

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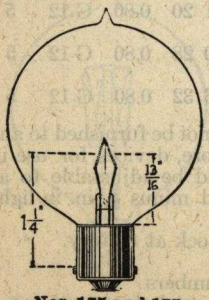

No. 89



No. 106



Nos. 139, 141, 143



Nos. 175 and 177

MAZDA LAMPS FOR HEADLIGHTS ON FORD CARS

SCHEDULE M-3

9-volt lamps to be burned two in series on magneto lighting system fitted with double contact (D. C.) bayonet candelabra base.

MAZDA B Lamps for Headlights on Ford Cars

Trade No.	Mazda No.	Bayonet Candelabra Base	Ratings Appearing on Lamps: Volts	Amps.	Approx. C. P. Old Rat.	Approx. C. P. New Rat.	Watts per Spherical C.P.	Bulb	Unit Pkg.	Price Each Clear
150023	136	D.C.	9	2	18	21	0.90	G-12	5	$0.30
150024	174	D.C.	9	2	18	21	0.90	G-16½	5	.30

MAZDA C Lamps for Headlights on Ford Cars

150025	138	D.C.	9	2	27	27	0.72	G-12	5	.35

MAZDA LAMPS FOR SIX CELL (LEAD TYPE) STORAGE BATTERY-GENERATOR LIGHTING SYSTEMS (12-16 VOLTS)

SCHEDULE M-4

Fitted with either single contact (S. C.) or double contact (D. C.) bayonet candelabra bases.

MAZDA B Lamps for Rear and Speedometer Lights (Two in Series, Each Lamp 6-8 Volts)

150026	63	S. C.	6-8	0.42	2	2	1.35	G-6	10	.23
150027	64	D.C.								

MAZDA B Lamps for Rear and Speedometer Lights (12-16 Volts)

150028	67	S. C.	12-16	0.26	2	3	1.35	G-6	10	.27
150029	68	D.C.								

MAZDA B Lamps for Side Lights (12-16 Volts)

150030	89	S. C.	12-16	0.42	4	6	1.18	G-8	10	.27
150031	90	D.C.								

MAZDA B Lamps for Headlights and Spotlights (12-16 Volts)

150032	139	S. C.	12-16	1.00	15	16	1.00	G-12	5	.33
150033	140	D.C.								
150034	175	S. C.	12-16	1.00	15	16	1.00	G-16½	5	.33
150035	176	D.C.								
150036	177	*S. C.	12-16	1.00	21	24	1.00	G-16½	5	.33
150037	178	*D.C.								

MAZDA C Lamps for Headlights and Spotlights (12-16 Volts)

150038	105	*S. C.	12-16	1.25	..	25	0.80	G-10	10	.37
150039	106	D.C.								
150040	141	S. C.	12-16	1.50	24	30	0.80	G-12	5	.37
150041	142	D.C.								
150042	143	*S. C.	12-16	2.00	40	39	0.80	G-12	5	.75
150043	144	*D.C.								

Lamps on these schedules cannot be furnished to an exact light center length and, therefore, devices for use in connection with these lamps should be adjustable to accommodate lamps varying plus and minus $\frac{3}{32}$ inch in light center length and focus length.

*Not regularly carried in stock at factory.

Order lamps by Mazda numbers.

Illustrations are one-half actual size.

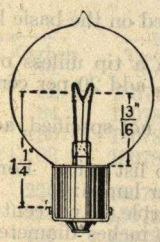
MAZDA MINIATURE AUTOMOBILE LAMPS



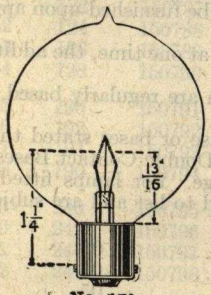
Nos. 69, 71



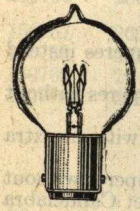
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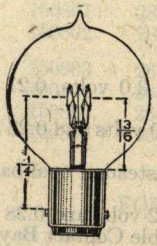
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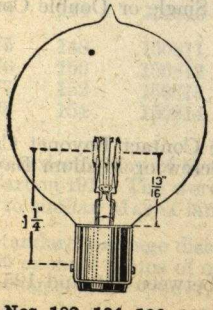
No. 179



Nos. 108, 110, 112, 114



Nos. 148, 150, 152, 154



Nos. 182, 184, 186, 188

MAZDA LAMPS FOR NINE CELL (LEAD TYPE) STORAGE BATTERY-GENERATOR LIGHTING SYSTEMS (18-24 VOLTS)

SCHEDULE M-5

Fitted with either single contact (S. C.) or double contact (D. C.) bayonet candelabra bases.

MAZDA B Lamps for Rear and Speedometer Lights (Two in Series, Each Lamp 10 Volts)

Trade No.	Mazda No.	Bayonet Candelabra Base	Rating Appearing on Lamps: Volts	Amps.	Approx. Watts per C. P. Old Rat	Approx. Watts per C. P. New Rat.	Approx. Watts per Spherical C. P.	Bulb	Unit Pkg.	Price Each Clear
150051	69	*S. C.	10	0.26	2	2	1.35	G- 6	10	$0.30
150052	70	*D.C.								

MAZDA B Lamps for Rear and Speedometer Lights (18-24 Volts)

150053	71	*S. C.	18-24	0.17	2	3	1.35	G- 6	10	.35
150054	72	*D.C.								

MAZDA B Lamps for Side Lights (18-24 Volts)

150055	91	*S. C.	18-24	0.26	4	5	1.18	G- 8	10	.40
150056	92	*D.C.								

MAZDA B Lamps for Headlights and Spotlights (18-24 Volts)

150057	179	*S. C.	18-24	1.00	21	22	1.00	G-16½	5	.50
150058	180	*D.C.								

MAZDA C Lamps for Headlights and Spotlights (18-24 Volts)

150059	145	*S. C.	18-24	1.00	24	47	0.80	G-12	5	.75
150060	146	*D.C.								

*None of the above lamps are regularly carried in stock.

MAZDA LAMPS FOR USE ON ELECTRIC VEHICLES

SCHEDULE M-6

Fitted with bayonet candelabra double contact base.

MAZDA B Lamps for Rear and Speedometer Lights

Trade No.	Mazda No.	Volts	Watts	Bulb	Watts per Spherical C. P.	Unit Pkg.	Price Each Clear
150061	108	30–34	8	G-10	1.31	10	$0.60
150062	110	40–44					
150063	112	60–64					
150064	114	80–84					

MAZDA B Lamps for Side Lights

150065	148	30–34	15	G-12	1.20	5	.60
150066	150	40–44					
150067	152	60–64					
150068	154	80–84					

MAZDA B Lamps for Headlights

150069	182	30–34	25	G-16½	1.15	5	.60
150070	184	40–44					
150071	186	60–64					
150072	188	80–84					

Lamps on these schedules cannot be furnished to an exact light center length and, therefore, devices for use in connection with these lamps should be adjustable to accomodate lamps varying plus and minus $\frac{3}{32}$ inch in light center length and focus length.

Order lamps by Mazda numbers.

Illustrations are one-half actual size.

MAZDA MINIATURE LAMPS FOR SPECIAL SERVICE

INTERMEDIATE PRICE SCHEDULE

This schedule covers lamps that can be supplied but have to be specially made and are not regularly carried in stock. As these lamps are not covered by MAZDA numbers, orders should give complete detailed information such as bulb, base, volts, amperes, candlepower, watts, color (whether superficially colored bulb or natural colored glass bulb), clear or opal back or frosted, tipped or tipless, etc.

As it is impossible to always produce an exact quantity of any special lamps referred to in this schedule, the right is reserved to fill such orders either short or in excess on orders for 20 lamps or less.

PERCENTAGE CHARGES.—All extra percentage charges shall be figured on the basic list price of the clear lamps.

TIPLESS LAMPS.—The prices given in schedules cover lamps with a tip unless otherwise indicated. For tipless miniature lamps, except where otherwise specified, add 20 per cent to list prices.

FROSTED LAMPS.—For frosting lamps given in the schedules, where not specified, add $0.03 additional to list prices.

COLORED LAMPS.— For superficial coloring add $0.06 additional to list price. For natural colored lamps add the following percentage charges to the price of clear lamps:

Bulbs of 2 5/16 inches or larger diameter: green or blue, 50 per cent; purple, 75 per cent; ruby or opal, 100 per cent; amber or canary, 150 per cent. Bulbs of less than 2 5/16 inches diameter: green or blue, 25 per cent; purple, 35 per cent; ruby or opal, 50 per cent; amber or canary, 60 per cent.

The extra charges given above cover only bulbs of the manufacturers' standard colored glass. Specially colored glass bulbs will take a higher price, which will be furnished upon application.

When 200 or more lamps of one color and size of bulb are ordered at one time, the additional charges for natural colored lamps are one-half the above percentages.

BASES.—There shall be no reduction in the price of lamps which are regularly based when furnished unbased.

The prices in each schedule cover only lamps fitted with the base or bases stated therein. All lamps listed in the Schedules with Bayonet Candelabra Single or Double Contact Bases may be supplied fitted with Candelabra Screw Base without extra charge. For lamps fitted with other bases the following additional charges per lamp are to be added to list and are subject to discount.

German Candelabra	$0.05
French Miniature	.05
French Candelabra	.05
Miniature Screw with Spring Contact	.03

Schedule M-1

Lamps on this schedule can be supplied as follows:

Lamps for 2-cell flashlight batteries can be supplied 2.5 to 3.0 volts, 0.21 amperes instead of 0.25 and 0.28 instead of 0.35 amperes without extra charge.

Lamps for 3-cell flashlight batteries can be supplied 3.5 to 4.0 volts and 0.28 amperes without extra charge.

Lamps in FE-3¾ and FE-4¼ bulbs can be supplied clear instead of opal back without extra charge.

Lamps for 5-cell flashlight batteries can be supplied 5.5 to 6.2 volts and 0.28 amperes without extra charge, but if fitted with Candelabra Screw, Single or Double Contact Bayonet Candelabra Bases, $0.10 list additional.

Lamps for 1-cell standard dry battery can be supplied in G-4½ instead of G-5½ bulb without extra charge.

Lamps for 1 or 2-cell standard dry batteries if fitted with either Single or Double Contact Bayonet Candelabra Bases, $0.08 list additional.

Schedule M-6

Lamps on this schedule can be supplied as follows:

15 and 25-watt lamps can be fitted with Candelabra Screw or Single Contact Bayonet Candelabra Base without extra charge, but if fitted with either Medium Screw or Medium Bayonet Base, $0.05 list additional.

Schedule M-7

Lamps on this schedule can be supplied for any single voltage between 110 and 125 volts at the same prices.

CARBON MINIATURE LAMPS

FOR CANDELABRA AND ELECTRIC VEHICLE SERVICE

SCHEDULE MC-1

Fitted with candelabra screw base.

FOR CANDELABRA SERVICE

Clear Trade No.	Clear Carbon No.	Frosted Trade No.	Frosted Carbon No.	Rating Appearing on Lamps Volts	C. P.	Bulb	Diam. Bulb Inches	Max. Lgth. Over All Inches	Price, Each Clear	Price, Each Frosted
150743	82	150779	83	110						
150744	84	150780	85	115						
150745	86	150781	87	120	4	S- 9	1⅛	2½	$0.25	$0.27
150746	88	150782	89	125						
150747	226	150783	227	110						
150748	228	150784	229	115						
150749	230	150785	231	120	8	S-12½	1⅜	3¼	.25	.27
150750	232	150786	233	125						
150751	122	150787	123	110						
150752	124	150788	125	115						
150753	126	150789	127	120	4	G-12	1½	2⅜	.28	.30
150754	128	150790	129	125						
150755	190	150791	191	110						
150756	192	150792	193	115						
150757	194	150793	195	120	8	G-16½	2⅛	3⅛	.28	.30
150758	196	150794	197	125						
150759	240	150795	241	110						
150760	242	150796	243	115						
150761	244	150797	245	120	8	B- 9½	1⅜	4	.28	.30
150762	246	150798	247	125						
150763	280	150799	281	110						
150764	282	150800	283	115						
150765	284	150801	285	120	8	T- 6	¾	3⅜	.28	.30
150766	286	150802	287	125						
150767	260	150803	261	110						
150768	262	150804	263	115						
150769	264	150805	265	120	8	D-10	1¼	3⅞	.34	.36
150770	266	150806	267	125						

FOR ELECTRIC VEHICLE SERVICE

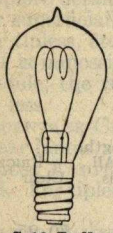
150771	108	150807	109	30–34						
150772	110	150808	111	40–44						
150773	112	150809	113	60–64	6	S- 9	1⅛	2½	.25	.27
150774	114	150810	115	80–84						
150775	148	150811	149	30–34						
150776	150	150812	151	40–44						
150777	152	150813	153	60–64	8	G-12	1½	2⅜	.32	.34
150778	154	150814	155	80–84						

In ordering any of the lamps listed above, specify quantity and Carbon No., for example: 100 Carbon-191. The word "Carbon" must be used as indicated, as the same numbers are applied to similar Mazda lamps.

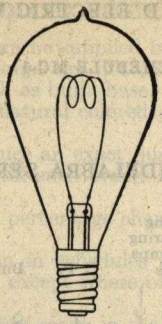
Standard package discounts for lamps in the above schedule can be given only on orders for 100 or more lamps of one size and type of bulb. On orders for 200 or more lamps, assorted wattage, candle power, voltage, size, type and finish of bulb may be combined in one package.

MINIATURE CARBON LAMPS

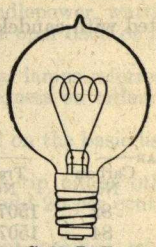
FOR CANDELABRA SERVICE



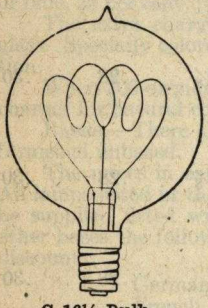
S-19 Bulb
Carbon Nos. 82-89



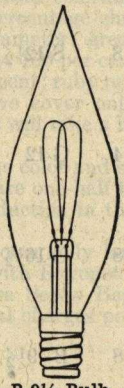
S-12½ Bulb
Carbon Nos. 226-233



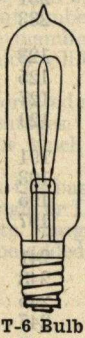
G-12 Bulb
Carbon Nos. 122-129



G-16½ Bulb
Carbon Nos. 190-197



B-9½ Bulb
Carbon Nos. 240-247



T-6 Bulb
Carbon Nos. 280-287



D-10 Bulb
Carbon Nos. 260-267

EXTRA CHARGES

Tipless Lamps

The prices given in schedules cover lamps with a tip, unless otherwise indicated. For carbon tipless miniature lamps, 10 per cent list additional.

Anchors

For anchoring filaments to the bulb, except in the case of such lamps as are regularly standardized with bulb anchored filament, an additional charge of 3 cents list for each anchor shall be made.

Frosted and Colored Lamps

For frosting and superficial coloring, add 2 cents list additional. For natural colored lamps, excepting ruby, opal, amber and canary, add 50 per cent to list prices of clear lamps. For ruby and opal, add 100 per cent, and for amber and canary, add 150 per cent to list prices of clear lamps.

These extra charges cover only bulbs of standard colored glass. Specially colored glass bulbs will take a higher price, which will be furnished upon application.

Bases

There shall be no reduction in the price of lamps which are regularly based, when furnished unbased. The price in each schedule covers only the base or bases stated therein. For lamps fitted with other bases, the following list additional charges per lamp are to be added: German Candelabra, French Miniature and Candelabra, 5 cents; Bayonet Candelabra, no charge.

Special Lamps

The price of any lamp not listed in the schedules may be obtained upon application.

As it is impossible always to produce an exact quantity on any special lamps ordered, or of any lamps to be made tipless (when listed as tipped), or of any lamps to be furnished with natural colored bulbs, or of those lamps listed in Schedule MC-1, the right is reserved to fill all such orders either short or in excess, within the limits of 10 per cent, and not more than 2 lamps short or in excess on orders of 20 lamps or less.

Above Illustrations Are One-Half Actual Size

DECORATIVE MAZDA LAMPS

CHRISTMAS TREE OUTFITS

SERIES TYPES—PARALLEL CORD

Made for use on 100-120 volt regular lighting circuits, with 8-foot leader, green composition sockets, porcelain junction boxes, and Benjamin swivel attachment plugs.

Complete Outfits with 1-inch Round 14-volt Mazda Lamps in Assorted Colors

Description	Mercerized Cotton Covered Parallel Cord Trade No.	Mfrs. No.	Price Each	Silk Covered Parallel Cord Trade No.	Mfrs. No.	Price Each
8-light outfit complete with 9 lamps	134608	2330	$4.00	134618	2301	$4.50
16-light outfit complete with 18 lamps	134609	2331	8.00	134619	2302	9.00
24-light outfit complete with 27 lamps	134610	2332	12.00	134620	2303	13.50
32-light outfit complete with 36 lamps	134611	2333	16.00	134621	2304	18.00
8-light extra festoon complete with 9 lamps	134612	2334	4.00	134622	2305	4.50
Strings only, without Lamps						
8-light string	134613	2364	....	134623	2354	....
16-light string	134614	2365	....	134624	2355	....
24-light string	134615	2366	....	134625	2356	....
32-light string	134616	2367	....	134626	2357	....
8-light extra festoon	134617	2368	....	134627	2358	....

SERIES TYPES—32 VOLTS

Mercerized, Cotton Covered, Parallel Cord

Made for use on 32-volt house lighting systems, with 8-foot leader, green composition sockets, porcelain junction boxes and Benjamin swivel attachment plugs.

Complete Outfits with 1-inch Round 4-volt Mazda Lamps in Assorted Colors

Trade No.	Mfrs. No.	Description	Price Each
145159	2370	8-light outfit complete with 9 lamps	$4.00
145160	2371	16-light outfit complete with 18 lamps	8.00
145161	2372	24-light outfit complete with 27 lamps	12.00
145162	2373	32-light outfit complete with 36 lamps	16.00
145163	2374	8-light extra festoon complete with 9 lamps	4.00

BATTERY TYPES—MULTIPLE BURNING

Mercerized, Cotton Covered, Twisted Cord

134628	2325	8-light battery outfit, one branch complete with eight 3½-volt 1-inch round Mazda lamps, assorted colors, with box for carrying three standard 6-inch dry cells, less batteries	3.00
134629	2310	8-light storage battery outfit, one branch complete with eight 6-volt 1-inch round Mazda lamps, assorted colors, less battery	3.50

All outfits are packed in holly paper boxes with lamps inserted in sockets for convenience of testing and proper display.

DECORATIVE MAZDA LAMPS

Series Type Lamps

1-inch round, 3 C. P., 14-volt, clear and superficially colored lamps intended for use only on electric lighting circuits of 100-120 volts. 8 lamps in a series.

134630	01315	Style G-8 bulb, miniature base, clear	$0.18
134632	01317	Style G-8 bulb, miniature base, red	.20
134633	01318	Style G-8 bulb, miniature base, blue	.20
134634	01319	Style G-8 bulb, miniature base, green	.20

1-inch round 1 C. P. 4-volt, clear and superficially colored lamps intended for use only on 32-volt house lighting systems. 8 lamps in series.

145164	01337	Style G-8 bulb, miniature base, clear	.16
145165	01338	Style G-8 bulb, miniature base, red	.18
145166	01339	Style G-8 bulb, miniature base, blue	.18
145167	01340	Style G-8 bulb, miniature base, green	.18

Battery Type Lamps—Multiple Burning

1-inch round, 1 C. P. 3½-volt, clear and superficially colored lamps intended for use only on three standard 6-inch dry cells.

134635	045	Style G-8 bulb, miniature base, clear	.16
134636	046	Style G-8 bulb, miniature base, red	.18
134637	048	Style G-8 bulb, miniature base, blue	.18
134638	047	Style G-8 bulb, miniature base, green	.18

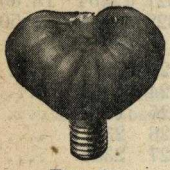
1-inch round, 2 C. P. 6-volt, clear and superficially colored lamps for use on 6-volt storage batteries.

145168	01332	Style G-8 bulb, miniature base, clear	.16
145169	01333	Style G-8 bulb, miniature base, red	.18
145170	01334	Style G-8 bulb, miniature base, blue	.18
145171	01340	Style G-8 bulb, miniature base, green	.18

DECORATIVE MAZDA LAMPS

FRUIT, FLOWER AND ANIMAL DESIGNS IN COLORS

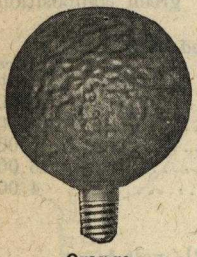
For Use on Lighting Circuits of 100 to 120 Volts for Christmas Tree Outfits, Decorations, Etc.


Tomato

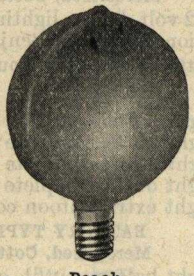

Raspberry

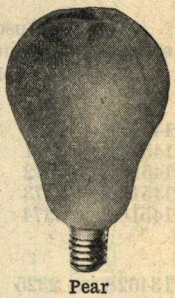

Strawberry


Banana

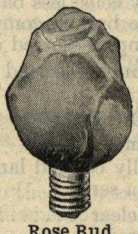

Orange


Apple


Peach

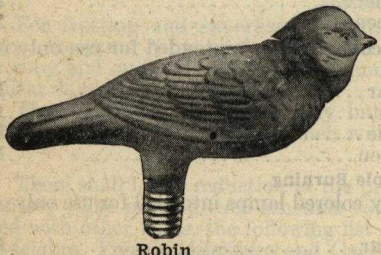

Pear

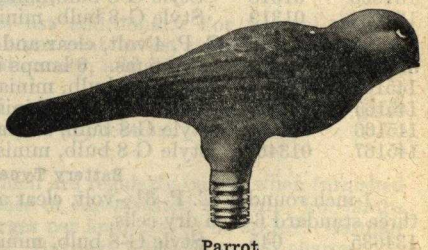

Rose

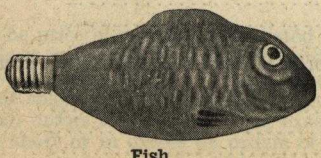

Rose Bud


Lily


Chicken


Robin


Parrot


Fish


Frog

Prices on above lamps are given on the following page.

DECORATIVE MAZDA LAMPS

FRUIT, FLOWER AND ANIMAL DESIGNS IN COLORS

For Use on Lighting Circuits of 100 to 120 Volts for Christmas Tree Outfits, Decorations, Etc.



Lion



Cat



Monkey



Cat and Fiddle



Dog



Santa Claus



Snowman



Dutch Girl



Policeman



St. Peter



Clown



Trumpeter Girl

SMALL FRUIT

Trade No.	Mfrs. No.	Style	Price Each
145104	01401	Peach	$0.35
145105	01402	Orange	.35
145106	01403	Tomato	.35
145107	01404	Apple	.35
145108	01405	Raspberry	.35
145109	01406	Strawberry	.35
145110	01407	Pear	.35

LARGE FRUIT

145111	01410	Banana	.40
145112	01411	Orange	.40
145113	01412	Plum	.40
145114	01413	Apple	.40
145115	01414	Peach	.40
145116	01415	Pear	.40

ROSES

145117	01420	Red	.40
145118	01421	Yellow	.40
145119	01422	Pink	.40
145120	01423	White	.40

ROSEBUDS

145121	01425	Red	.40
145122	01426	Yellow	.40
145123	01427	Pink	.40
145124	01428	White	.40

LILIES

Trade No.	Mfrs. No.	Style	Price Each
145125	01430	Purple	.40
145126	01431	Red	.40
145127	01432	Pink	.40
145128	01433	Yellow	.40

BIRDS

145129	01435	Canary	.60
145130	01436	Blue Bird	.60
145131	01437	Robin	.60
145132	01438	Chicken	.60
145133	01439	Parrot	.60

ANIMALS

145134	01440	Fish	.50
145135	01441	Lion	.50
145136	01442	Frog	.50
145137	01443	Cat	.50
145138	01444	Monkey	.50
145139	01445	Cat and Fiddle	.50
145140	01446	Dog	.50

FIGURES

145141	01450	Santa Claus	.50
145142	01451	Snowman	.50
145143	01452	Dutch Girl	.50
145144	01453	Policeman	.50
145145	01454	St. Peter	.50
145146	01455	Clown	.50
145147	01456	Trumpeter Girl	.50
145148	01457	St. Patrick	.50

3 C.P. 14-volt lamps, minature base packed in holly paper boxes, 10 lamps of one type in a box.

LAMP COLORING



Cefco Lamp Coloring

COMMERCIAL LAMP COLORING

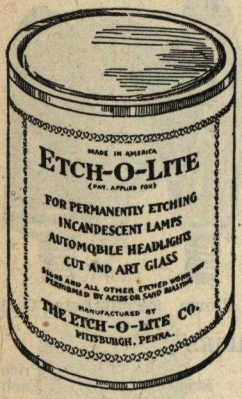
A can for dipping furnished with each bottle of lamp coloring.

Trade No.	Color	Price, Each 1 Gal.	½ Gal.	1 Quart	1 Pint	½ Pint
55466	Blue	$12.00	$6.50	$3.50	$2.00	$1.30
55462	Green	12.00	6.50	3.50	2.00	1.30
55463	Purple	12.00	6.50	3.50	2.00	1.30
55464	Amber	12.00	6.50	3.50	2.00	1.30
55465	Red	12.00	6.50	3.50	2.00	1.30
040982	Ruby	12.00	6.50	3.50	2.00	1.30
040983	Violet	12.00	6.50	3.50	2.00	1.30
040984	Canary	12.00	6.50	3.50	2.00	1.30
040985	Pink	12.00	6.50	3.50	2.00	1.30
040986	Frosting	12.00	6.50	3.50	2.00	1.30

CEFCO WEATHERPROOF LAMP COLORING

A transparent coloring—guaranteed not to chip, blister or wash off during the life of any lamp outdoors.

Color	7-ounce Cans Trade No.	Price Each	15-ounce Cans Trade No.	Price Each	30-ounce Cans Trade No.	Price Each
Red	41799	$1.50	41805	$2.50	41811	$4.50
Blue	41800	1.50	41806	2.50	41812	4.50
Green	41801	1.50	41807	2.50	41813	4.50
Amber	41802	1.50	41808	2.50	41814	4.50
Canary	41803	1.50	41809	2.50	41815	4.50
White Opal Frosting	41804	1.50	41810	2.50	41816	4.50



Etch-O-Lite

ETCH-O-LITE

A new compound for permanently etching or frosting glass, replacing acid and sand blasting.

Etch-O-Lite is far superior to anything ever put on the market. It is cleaner and gives the glass a soft, velvet finish. It does the work of acid, yet absolutely harmless and can be handled by unskilled operators, as it will not harm the skin or clothes.

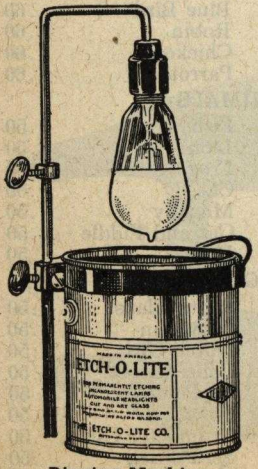
By dipping the article to be frosted or etched in Etch-O-Lite for a certain length of time, then scraping back into the can that which still adheres, and washing, you will find the glass frosted or etched smoother and better than when done in any other manner.

Etch-O-Lite can be used on glass in any form or shape, and is especially recommended for frosting lamps, dimming auto lenses, etching photographers' plates, glass novelties, lighting glassware, etc.

Etch-O-Lite is put up in convenient 2½, 5 and 10-pound containers. Also sold in bulk to large users.

Directions are shown on each can. It has been shown that ten pounds of Etch-O-Lite will bowl frost 1400 40-watt Mazda lamps.

For dipping lamps, we recommend the use of dipping machine, as shown in illustration, which regulates depth of dip, and makes the operation entirely mechanical; can be handled by a boy.



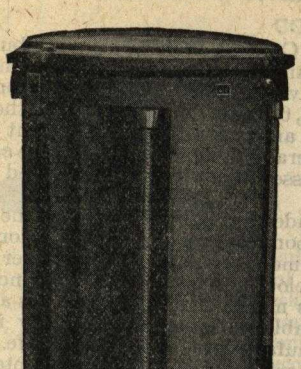
Dipping Machine

Trade No.	Size, Can Pounds	Price per Pound
141508	2½	$1.25
141509	5	1.20
141510	10	1.10
141511	25	1.05
141512	50	1.00

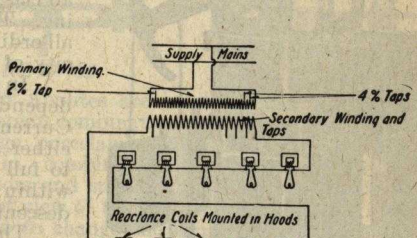
Dipping Machines

Trade No.	For Size Can, Lbs.	Price Each
141513	5	$2.25
141514	10	2.50

ADJUSTER SOCKET SYSTEM



Transformer for
Adjuster Socket System



Adjuster Socket System Showing
Operation of Reactance Coils
to Replace Lamps

The adjuster socket system operates only on constant-potential circuits. It consists of a simple series of lamps connected across constant-potential alternating current mains, or across the secondary terminals of a constant-potential transformer. A reactance coil is connected in shunt across the terminals of each lamp and operates in a well-known manner to maintain the continuity and normal voltage of the circuit in case of burnouts or lamp removals.

REACTANCE COIL.—The reactance coil is one of the simplest and most economical devices ever developed for maintaining the continuity of a lamp circuit. It has an effective reactance voltage equivalent to the voltage of a burning lamp, but the loss of energy sustained by its use is only about 4 or 5 per cent of that taken by a lamp. Taking this loss into consideration the adjuster socket system has an efficiency of 95 or 96 per cent with all lamps burning. The coils are so designed that lamps of increased efficiency can be used without change. This drop created by the coil when a lamp is out is such that the current is not greatly altered until about 20 per cent of the lamps on the circuit are out. Lamps of larger candle power may be used with the standard reactance coils so long as the voltage per lamp does not greatly exceed the voltage of the lamp for which the coil is listed.

MAXIMUM NUMBER OF LAMPS.—Since the lamps are operated in series from a constant potential source of supply, all the lamps in one circuit must be of the same ampere capacity, though not necessarily of the same candle power. The sum of the lamp voltages should equal the supply voltage. Consequently, it is necessary to use a definite number of lamps on a given supply voltage.

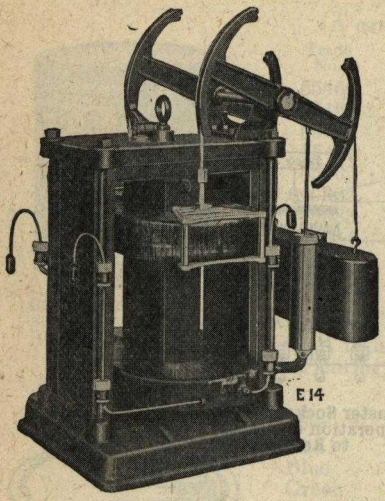
FLEXIBILITY.—With the adjuster-socket system, a great flexibility is possible through the use of standard transformers. These provide several different ranges of voltages for lamp circuits. Where the supply circuit voltage differs from that for which the standard apparatus is listed, or where the number of lamps would be better served by a different range of voltages, special transformers adapted to the existing conditions can be furnished on order.

TRANSFORMERS.—On supply circuits up to 550 volts, it is possible to connect the lamps in series with a control switch, directly across the mains. On higher voltages, however, the supply mains should ordinarily be properly insulated from the lamp circuits by means of suitable transformers. Transformers for this purpose are regularly furnished for 2200-volt supply circuits. Standard transformers are designed to feed one circuit of lamps. All transformers are provided with weatherproof cast-iron cases suitable for indoor use, or for outdoor mounting on poles at a distance from the power station, at any advantageous point.

VOLTAGE VARIATIONS.—Taps are provided in the primary winding by means of which any secondary voltage may be raised 2, 4, 6, 8 or 10 per cent if operating on a 2200-volt circuit. By this arrangement any voltage within one per cent of that required by the circuit may be obtained All taps on both windings are brought to terminal blocks, inside the transformer case. No soldered connections need to be changed in adjusting taps.

A-B CONSTANT CURRENT TRANSFORMERS

PERFORMING THE FUNCTION OF CONSTANT CURRENT REGULATOR AND CONSTANT POTENTIAL TRANSFORMER



A-B Constant Current Transformers are built in 4, 8, 12, 16, 22 and 32-kilowatt sizes as standard. Standard primary voltage 2200, 60 cycles; secondary currents 3.5, 4, 5.5, 6.6 and 7.5, which adapts them to all classes of series arc and series incandescent lighting. They are liberally designed and will take care of all ordinary line losses in addition to full rated capacity of lamps.

In series incandescent lighting the life of the lamp depends largely upon close regulation. A-B Constant Current Transformers regulate within 1 per cent either above or below normal current from no load to full load. This means that the current is always within the allowable variation specified by incandescent lamp manufacturers for long lamp life.

The constant current regulators are adapted for every type of series mazda lighting. They are up to date both in mechanical and electrical construction; simplicity and close regulation with rugged construction are consistent characteristics.

Control equipments and panels made for all types of these circuits. Prices on application.

Data and Specifications for Series Mazda Lighting
Single Circuit, Primary Voltage, 2200, 60 Cycles

Trade No.	Kilowatt Capacity	Number of Mazda Lamps that can be Operated: 32 C. P. 40 Watts	40 C. P. 50 Watts	60 C. P. 47 Watts	80 C. P. 59 Watts	100 C. P. 72 Watts	250 C. P. 170 Watts	400 C. P. 272 Watts	600 C. P. 384 Watts	Approx. Ship. Wt., Lbs.	Price Each
116139	4	100	80	85	68	56	23	14	10	350	$284.00
116140	8	200	160	190	136	112	46	28	20	750	360.00
116141	12	300	240	255	200	167	70	44	32	900	450.00
116142	16	400	320	340	270	223	94	59	41	1100	530.00
116143	22	550	440	468	370	306	130	81	57	1300	640.00
116144	32	800	640	680	542	444	188	118	83	1650	830.00

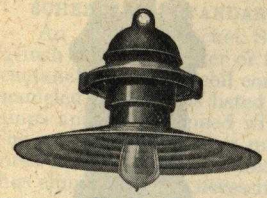
Additional Data

Kilowatt Capacity 60 Cycles	Approximate Gen. K. V. A.	Efficiency: Full Load	¾ Load	½ Load	¼ Load	Power Factor: Full Load	¾ Load	½ Load	¼ Load	Secondary Amperes	Ampere Range	Secondary Volts
4	5.7	95	93	90	83	86	66	45	24	3.5	3 to 3.8	1240
										4	3.8 to 4.3	1080
										5.5	5.1 to 5.9	790
										6.6	6.1 to 6.9	660
										7.5	7 to 8	580
8	11	96	95	92	87	87.2	66.2	45.2	24.2	3.5	3 to 3.8	2480
										4	3.8 to 4.3	2170
										5.5	5.1 to 5.9	1580
										6.6	6.1 to 6.9	1320
										7.5	7 to 8	1160
12	16	96.2	95.5	93	87.5	87.9	66.6	45.2	24.3	3.5	3 to 3.8	3850
										4	3.8 to 4.3	3380
										5.5	5.1 to 5.9	2450
										6.6	6.1 to 6.9	2050
										7.5	7 to 8	1800
16	21	96.5	96	94	88	88.5	67	45.3	24.5	3.5	3 to 3.8	4960
										4	3.8 to 4.3	4340
										5.5	5.1 to 5.9	3160
										6.6	6.1 to 6.9	2640
										7.5	7 to 8	2300
22	29	97.2	96.2	94.4	89.4	88.6	67.1	45.4	24.5	4	3.8 to 4.3	5970
										5.5	5.1 to 5.9	4340
										6.6	6.1 to 6.9	3620
										7.5	7 to 8	3190
32	42	97.4	96.4	95	90.5	88.8	67.2	45.5	24.5	5.5	5.1 to 5.9	6320
										6.6	6.1 to 6.9	5280
										7.5	7 to 8	4640

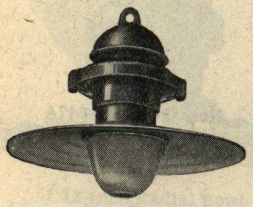
Our standard transformers are furnished without partial load taps. Where specifically called for partial load taps for 80 per cent and 90 per cent of full load will be furnished.

Above data based upon full winding. Dimension data furnished upon request.

ABOLITES FOR SERIES STREET LIGHTING



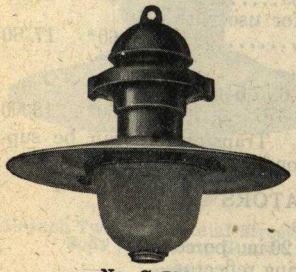
No. G-732



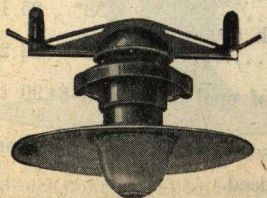
No. G-733



No. G-750

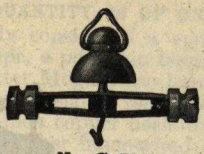


No. G-734



No. G-733C

COMBINATION ABOLITES



No. G-784



No. G-785

Combination Abolites are so designated because they are made up of different combinations of standard parts. A standard high voltage porcelain insulator carrying a film cut-out socket is used in combination with different A-B porcelain enameled reflectors and suspension castings. This is desirable from the point of view of the user, because should it at any time become desirable to change the candle power of the lamp or method of suspension, this can be done by interchanging the parts, making a new combination suitable for the new size of lamp or method of suspension.

In the AB Streethoods the features of complete enclosure and proper ventilation have been well taken care of and attention is directed to the fact that cool air is free to flow upward over the lamp bulb and through the porcelain insulator, coming out under the cast iron canopy at the top of the hood. Simplicity, durability of construction and safety are prominent characteristics. The refractor furnishes a complete enclosure for the lamp bulb and at the same time increases the extensive light flux. The skirted band refractors can also be used.

Combination Abolites are designed for straight series burning lamps. They can be furnished with reflectors only or with reflectors and double prismatic refractors.

EYE SUSPENSION UNITS

Trade No.	Mfrs. No.	C. P. of Series Lamps	Approx. Wt., Lbs. 20 Units	Price Each
116122	G-732	60, 80, 100	400	$6.30

No. G-732 unit consists of hood with socket and 18-inch concentric ring reflector.

116123	G-733	60, 80, 100	485	10.90

No. G-733 unit consists of hood with socket, an 18-inch concentric ring reflector, a refractor holder and prismatic refractor.

116125	G-750	250, 400, 600	420	6.65

No. G-750 consists of hood with socket and 20-inch concentric ring reflector.

116126	G-734	250, 400, 600	590	16.15

No. G-734 unit consists of hood with socket, 20-inch concentric ring reflector, a refractor holder and a prismatic refractor.

For above Abolites with spreader arm hanger add $1.50 list for insulated spreader arm No. G-784 and 75 cents list for spreader arm No. G-785.

Any of the above Abolites can be furnished with the standard center suspension as shown on unit No. G-733C. Prices quoted on request.

The above Abolites can be furnished with bosses for ¾ or 1¼-inch pipe at an additional list price of 25 cents.

CENTER SPAN SUSPENSION UNITS

116127	G-733C	60, 80, 100	545	11.35

No. G-733C unit consists of hood with socket, 18-inch concentric ring reflector, a refractor holder and prismatic refractor.

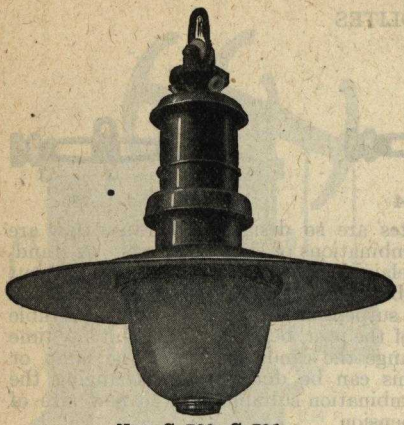
116128	G-734C	250, 400, 600	650	16.60

No. G-734C unit consists of hood with socket, 20-inch concentric ring reflector, a refractor holder and prismatic refractor.

Size of lamp must be specified in ordering. Any of the above Abolites can be furnished with multiple sockets if specified.

For Abolites equipped with opal diffuser instead of prismatic refractor deduct $2.25 from Nos. G-733 and G-733C and $4.50 from Nos. G-734 and G-734C list prices.

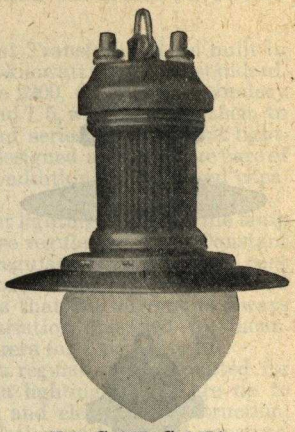
ABOLITES FOR SERIES STREET LIGHTING



Nos. G-789, G-791 and G-756



Series Transformer



Nos. G-847, G-847A and G-847B

SERIES TRANSFORMER ABOLITES

For 5.5, 6.6 and 7.5-ampere Lamps

Nos. G-790 and G-791 Abolites may be used for 300, 400 and 500-watt multiple lamps.

Trade No.	Mfrs. No.	C. P. of Series Lamps	Description	Approx. Wt., Lbs. 20 Units	Price Each
116286	G-788	60, 80, 100	With 18-in. concentric ring reflector only.	230	$5.50
116287	G-789	60, 80, 100	With 18-in. concentric ring reflector and prismatic refractor and refractor holder	325	10.50
116288	G-790	250, 400, 600	With 20-in. concentric ring reflector only.	260	5.65
116289	G-791	250, 400, 600	With 20-in. concentric ring reflector and prismatic refractor and refractor holder	430	15.50
		For 400 C. P., 15-ampere, and 600 C. P. 20-ampere Lamps			
116290	G-756	400, 600	With 20-in. concentric ring reflector and prismatic refractor and refractor holder	435	15.60

SERIES TRANSFORMERS FOR ABOVE ABOLITES

For 5.5, 6.6 and 7.5-ampere Lamps

116291	E-299	40, 60, 80, 100	Ratio of transformation 1:1; for use with Nos. G-787, G-788 and G-789.....	40*	10.00
116292	E-300	40, 60, 80, 100 250, 400, 600	Ratio of transformation 1:1; for use with Nos. G-790 and G-791.....	60*	17.80
		For 15 and 20-ampere Lamps			
116293	E-282	400, 600	Ratio of transformation 5.5, 6.6, 7.5 to 15 and 20; for use with No. G-576.....	60*	18.00

Primary line current must be specified in ordering the above. Transformers can be supplied with taps for furnishing either 15 amperes or 20 amperes secondary current.

PENDENT ABOLITES FOR COMPENSATORS

Especially for 15 and 20-ampere Lamps

116294	G-847	400	With 225-watt compensator, 20-in. porcelain enameled concentric ring reflector, copper case, cast iron top, bug screen and opal globe.....	35*	24.20
116295	G-847A	600	Same as No. G-847, but with 300-watt compensator.....	38*	25.10
116296	G-847B	1000	Same as No. G-847, but with 500-watt compensator.....	40*	26.20

For above pendent fixtures with pneumatic refractor in place of opal globe, add $4.90 to the price.

Prices on fixture without compensators, either with multiple or series socket, on application.

Abolites are available for every street lighting pendent fixture need.

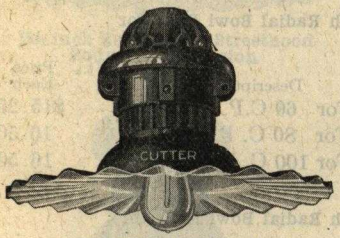
*One unit.

CUTTER ADJUSTER SOCKET STREETHOOD BODIES

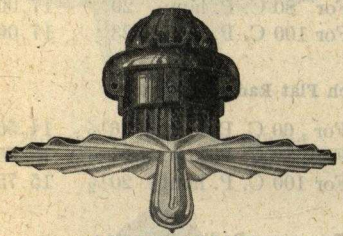
FOR 60, 80 AND 100 C. P. 6.6-AMPERE, 60-CYCLE SERIES MAZDA C LAMPS

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER

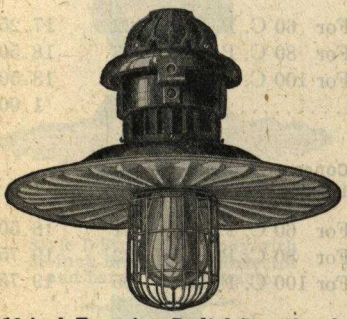
An Adjuster Socket Streethood Body consists of a ventilated iron canopy threaded for ¾-inch pipe or adapter or for 1¼-inch pipe, a porcelain housing with cast iron reflector holder reactance (adjuster) coil connected to Cutter Mogul Base Lamp Grip Socket, and with porcelain enameled reflector as listed. Reflectors are designed for correct light distribution with Type C lamps and are equipped with standard 4-inch copper heels to prevent chipping of the enamel. The porcelain housing is made for use on either inner-wired or outer-wired fixtures. The line wires on outer-wired fixtures may be tied in the projections on the sides of the porcelain housing, thus eliminating the necessity of a cross-arm. Prices below include everything shown except the lamps. Bracket and center suspension fittings are listed separately on other pages.



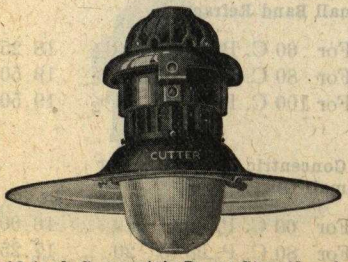
18-inch Radial Bowl Streethood Body



20-inch Flat Radial Streethood Body



18-inch Two-piece Radial Streethood Body with Lamp Guard



18-inch Concentric Dome Streethood with Small Holophane Refractor

With 18-inch Radial Bowl Reflector

Trade No. For ¾-in. Pipe	Trade No. For 1¼-in. Pipe	Description	Ship. Wt. Lbs.	Price Each
22373	22374	For 60 c. p. lamp	18	$14.00
22375	22376	For 80 c. p. lamp	19	15.10
22377	22378	For 100 c. p. lamp	22	15.10

With 20-inch Radial Bowl Reflector

22379	22380	For 60 c. p. lamp	19	14.50
22381	22382	For 80 c. p. lamp	20	15.60
22383	22384	For 100 c. p. lamp	23	15.60

With 20-inch Flat Radial Reflector

22385	22386	For 60 c. p. lamp	16½	13.30
22387	22388	For 80 c. p. lamp	17½	14.40
22389	22390	For 100 c. p. lamp	20½	14.40

With 18-inch Two-piece Radial Hood with Lamp Guard

22391	22392	For 60 c. p. lamp	22	16.00
22393	22394	For 80 c. p. lamp	23	17.10
22395	22396	For 100 c. p. lamp	26	17.10
Deduct for lamp guard				1.00

With 18-inch Concentric Dome Reflector and Small Holophane Refractor

22397	22398	For 60 c. p. lamp	21	17.30
22399	22412	For 80 c. p. lamp	22	18.40
22413	22414	For 100 c. p. lamp	25	18.40

With 18-inch Concentric Dome Reflector and Small Band Refractor

22417	22418	For 60 c. p. lamp	20½	17.05
22419	22424	For 80 c. p. lamp	21½	18.15
22425	22426	For 100 c. p. lamp	24½	18.15

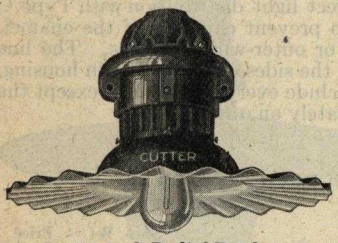
With 18-inch Concentric Dome Reflector and Small Opal Diffuser

22455	22456	For 60 c. p. lamp	19	14.80
22457	22458	For 80 c. p. lamp	20	15.90
22459	22460	For 100 c. p. lamp	23	15.90

CUTTER ADJUSTER SOCKET STREETHOOD BODIES

For 60, 80 and 100 C. P. 6.6 Ampere, 25-cycle Lamps

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER



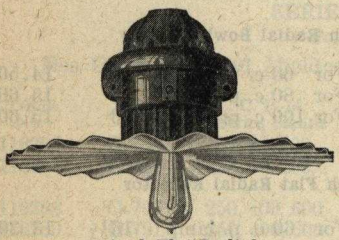
18-inch Radial Bowl Streethood Body

The Adjuster Socket Streethood Bodies listed on this page have reactance coils of the 25-cycle type. Otherwise they are exactly the same as those listed on previous page.

25-CYCLE ADJUSTER STREETHOOD BODIES

With 18-inch Radial Bowl Reflector

Trade No. For ¾ in. Pipe	Trade No. For 1¼ in. Pipe	Description	Ship. Wt., Lbs.	Price Each
22501	22502	For 60 C.P. lamp	18	$15.25
22503	22504	For 80 C. P. lamp	19	16.50
22507	22508	For 100 C. P. lamp	22	16.50



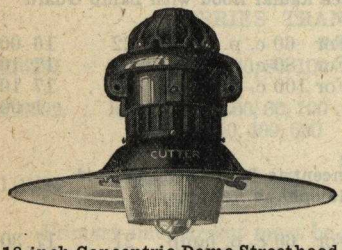
20-inch Flat Radial Streethood Body

With 20-inch Radial Bowl Reflector

22509	22510	For 60 C. P. lamp	19	15.75
22511	22512	For 80 C. P. lamp	20	17.00
22517	22518	For 100 C. P. lamp	23	17.00

With 20-inch Flat Radial Reflector

22519	22520	For 60 C. P. lamp	16½	14.50
22521	22522	For 80 C. P. lamp	17½	15.75
22523	22524	For 100 C. P. lamp	20½	15.75



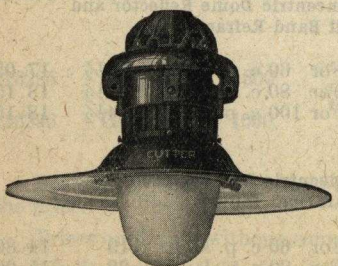
18-inch Concentric Dome Streethood Body with Small Band Refractor

With 18-inch Two-piece Radial Reflector and Lamp Guard

22525	22528	For 60 C. P. lamp	22	17.25
22529	22532	For 80 C. P. lamp	23	18.50
22567	22568	For 100 C. P. lamp	26	18.50
Deduct for lamp guard				1.00

With 18-inch Concentric Dome Reflector and Small Holophane Refractor

22569	22570	For 60 C. P. lamp	21	18.50
22571	22572	For 80 C. P. lamp	22	19.75
22575	22578	For 100 C. P. lamp	25	19.75



18-inch Concentric Dome Streethood Body with Small Opal Diffuser

With 18-inch Concentric Dome Reflector and Small Band Refractor

22581	22582	For 60 C. P. lamp	20½	18.25
22583	22584	For 80 C. P. lamp	21½	19.50
22585	22588	For 100 C. P. lamp	24½	19.50

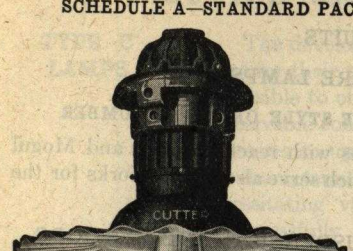
With 18-inch Concentric Dome Reflector and Small Opal Diffuser

22589	22590	For 60 C. P. lamp	19	16.00
22591	22592	For 80 C. P. lamp	20	17.25
22593	22596	For 100 C. P. lamp	23	17.25

CUTTER ADJUSTER SOCKET STREETHOOD BODIES

FOR 250 C. P. 6.6-AMPERE, 60-CYCLE SERIES MAZDA LAMPS

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER



20-inch Radial Bowl Streethood Body with Extension



18-inch Radial Bowl Streethood Body with Large Bowl Refractor



18-inch Radial Bowl Streethood Body with Large Sol-Lux Diffuser



Style D Streethood Body with 18-inch Radial Bowl Reflector and Large Band Refractor



Style F Streethood Body with 20-inch Radial Bowl Reflector with Extension

Adjuster Socket Streethood Bodies listed and illustrated on this page are similar to those listed on the previous pages. The cast iron reflector support is made longer to bring the lamp filament center of the 250 c. p. lamp in proper position with respect to the reflector and glassware. Shipped complete as illustrated (less lamp) with canopy threaded for either ¾ or 1¼-in. pipe, porcelain housing with projections for holding line wires, reactance (adjuster) coil with Cutter Mogul Base Lamp Grip Socket, Porcelain Enameled Reflector with standard 4-inch copper heel and glassware as listed. For bare 250 c.p. lamp, order 20-inch radial bowl reflector with extension.

ADJUSTER SOCKET STREETHOOD BODIES

Trade No. For ¾-in. Pipe	Trade No. For ¼-in. Pipe	Description	Ship. Wt. Lbs.	Price Each
22597	22598	With 20-inch radial bowl reflector with extensions	24	$17.50
22599	22600	With 18-inch radial bowl reflector and large holophane refractor	30	24.75
22657	22658	Same, with skirted refractor	30	24.25
22659	22660	Same, with band refractor	28	24.25
22661	22662	Same, with Sol-Lux Diffuser	26	19.25
22663	22664	With 20-inch concentric dome reflector and large holophane refractor	30½	24.50
22665	22666	Same, with skirted refractor	30½	24.00
22667	22668	Same, with band refractor	28½	24.00
22669	22676	Same, with Sol-Lux Diffuser	26½	19.00

How to Order Complete Adjuster Socket Streethoods

When the size of lamp has been determined, select the type of reflector with or without glassware that will produce the results in illumination desired. Brackets for supporting streethood bodies are listed on another page. After selecting the bracket, order the streethood body with a canopy corresponding to size of pipe in the bracket.

CENTER SUSPENSION PARTS

Center Suspension Fixtures consist of streethood bodies having ¾-inch canopies and parts listed below.

Trade No.	Style	Description	Ship. Wt. Lbs.	Price Each
20754	D	Arc ring with stud	¼	$0.10
20753	..	¾x7/16 in. adapter	½	.15
20757	F	Cable grip clamps	2¼	.50
20753	..	¾x7/16 in. adapter	½	.15

Other styles of suspension as listed on other pages, may be used by the addition of the parts described on those pages.

INVERTED CONE STREETHOOD BODIES WITH ADJUSTER SOCKETS

FOR 60 AND 25-CYCLE CIRCUITS

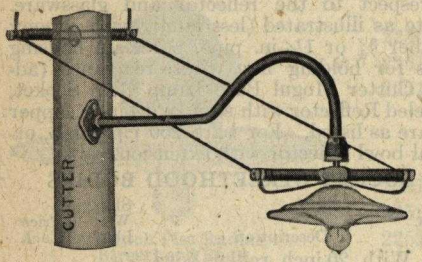
FOR 60, 80 AND 100 C. P. 6.6-AMPERE LAMPS

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER

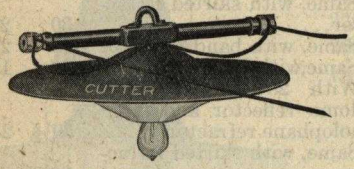
These fixtures consist of inverted cone streethood bodies with reactance coils and Mogul Screw Lamp Grip Sockets. The coils are mounted in yokes which serve also as hood forks for the sockets.



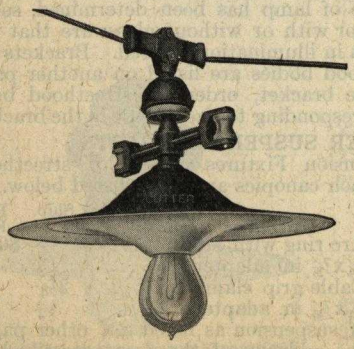
18-inch Inverted Cone Streethood Body



High Voltage Bracket



Looped Hood



Cable Grip Suspension Streethood

BRACKET SUSPENSION STREETHOODS

To be used with high voltage or Eastern brackets.

With 18-inch Paint Enameled Hoods

For Lamp C. P.	60 Cycles Trade No.	Ship. Wt., Lbs.	Price Each	25 Cycles Trade No.	Ship. Wt., Lbs.	Price Each
60	22336	10	$10.50	22345	12	$11.75
80	22337	12	11.75	22346	14	13.00
100	22338	14	11.75	22347	16	13.00

With 18-inch Porcelain Enameled Hoods

60	22348	11	12.00	22353	13	13.25
80	22349	13	13.25	22354	15	14.50
100	22350	15	13.25	22355	17	14.50

LOOPED HOODS

Same as above with looped cross-arm.

With 18-inch Paint Enameled Hoods

60	22356	13	11.00	22397	15	12.25
80	22357	15	12.25	22398	17	13.50
100	22358	17	12.25	22399	19	13.50

With 18-inch Porcelain Enameled Hoods

60	22402	14	12.50	22417	16	13.75
80	22403	16	13.75	22418	18	15.00
100	22404	18	13.75	22419	20	15.00

CABLE GRIP SUSPENSION STREETHOODS

A center span fixture with a cross-arm, high voltage insulator and cable clamp supporting inverted cone streethood.

With 18-inch Paint Enameled Hoods

60	22422	18	12.60	22605	20	13.85
80	22423	20	13.85	22606	22	15.10
100	22424	22	13.85	22607	24	15.10

With 18-inch Porcelain Enameled Hoods

60	22677	19	14.10	22686	21	15.35
80	22678	21	15.35	22687	23	16.60
100	22680	23	15.35	22688	25	16.60

22-inch Hoods

For paint enameled hoods 22 inches in diameter add 60 cents to the above prices on fixtures with 18-inch paint enameled hoods.

For porcelain enameled hoods 22 inches in diameter add 80 cents list to the above prices on fixtures with 18-inch porcelain enameled hoods.

EFFICIENT AND ARTISTIC LIGHTING WITH CUTTER STREETHOODS AND BRACKETS

TYPE C LAMPS

The development of the Type C lamps and the design of reflector equipment for their proper application to specific lighting requirements, have made it possible to obtain high efficiency and pleasing effects under almost every conceivable condition. The shape of the filaments of these new lamps permits of greater accuracy in light distribution than formerly obtained. Their operating characteristics, however, in the large sizes, have presented new problems necessitating ventilation and elimination of glare. These have been solved so successfully that it is possible to secure light of any desired intensity and so distributed over a given area, that a well lighted street is now easily realized and at a low cost.

CUTTER REFLECTORS

As no single unit or lamp has been found applicable to all lighting requirements, we have designed a complete line of reflectors in several shapes and sizes to accommodate different sizes of lamps and to accomplish varied results. Characteristic curves for each style of reflector as shown on the following pages, will assist the illuminating engineer in selecting proper equipment for any particular installation.

The size of lamp is given for each style and size of reflector. Where several reflectors are recommended for a lamp of given candle power rating, one should be guided by the distribution curves. Expert engineering advice will be given upon request.

EFFICIENCY AND DISTRIBUTION

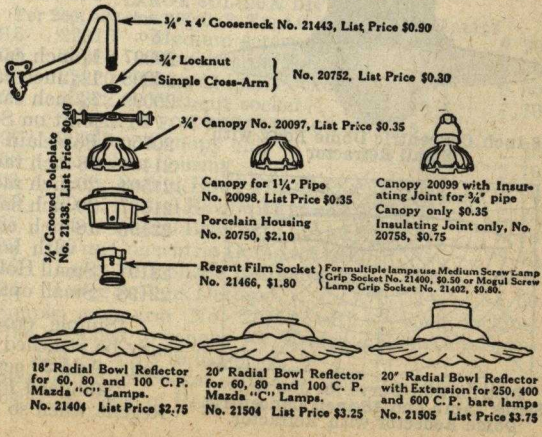
While lamp efficiency is a very important consideration in street lighting, proper distribution of the light is even more important in affording useful illumination. Therefore, the value of a reflector is determined principally by the way in which the light is distributed over a given area. With the Radial Bowl and Inverted Cone Reflectors, the maximum amount of light is directed into planes where it is most needed to obtain uniform illumination. Enough light passes above the horizontal plane of the lamp to show the outlines of building fronts.

SPACING AND MOUNTING HEIGHTS

Local conditions govern spacing and mounting heights. Where there are shade trees, the fixtures should be hung low enough for the light to clear the foliage, otherwise they should be placed well above the ground. The size of lamp and style of reflector determine the actual heights as follows: 15 to 18 feet for Radial Bowl Reflectors with 100 candle power and smaller lamps; 20 to 25 feet with 250 candle power and larger lamps; 12 to 15 feet for Flat Radial Wave Reflectors; 10 to 15 feet for 18-inch Inverted Cone Reflectors, and 12 to 20 feet for 22-inch Inverted Cone Reflectors.

CUTTER BRACKETS

Reflectors with suspension parts are listed in this catalogue as streethood bodies. Interchangeable parts make it easy to convert from one style to another. Brackets for supporting the streethood bodies are listed separately. These are made in plain and ornamental types and of such a variety of designs that it is possible to select a complete fixture to meet any requirement for efficient and for artistic lighting.

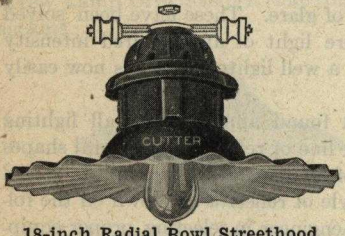


CUTTER STREETHOOD BODIES

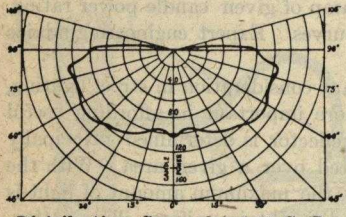
FOR 60, 80 AND 100 C. P. SERIES AND SMALL MULTIPLE MAZDA LAMPS

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER

A Streethood Body consists of a ventilated iron canopy threaded for ¾-inch pipe or adapter or for 1¼-inch pipe; a porcelain housing with attachments for either multiple or series sockets and a porcelain enameled reflector with 4-inch copper heel and with or without diffusing glassware. The porcelain housing is made for use with either inner-wired or outer-wired fixtures and is covered with a weatherproof glaze. Wires leading to the socket may be tied securely in the rim of the porcelain, thus eliminating the necessity of a cross-arm.‡ Where list prices include sockets, Cutter Lamp Grip Multiple Sockets or Regent Film Sockets* will be supplied. Concentric reflectors are recommended only for use with refractors and diffusers.



18-inch Radial Bowl Streethood Body, Showing use of Simple Cross-Arm and Locknut for ¾-inch Gooseneck Suspension



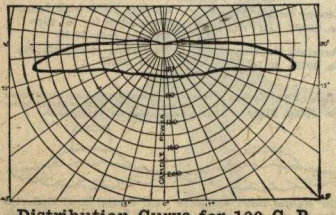
Distribution Curve for 100 C. P. Lamp and 18-inch Radial Bowl Reflector



20-inch Flat Radial Streethood Body



18-inch Concentric Dome Body with Small Refractor



Distribution Curve for 100 C. P. Series Lamp and 18-inch Concentric Dome Reflector with Refractor

18-INCH RADIAL BOWL STREETHOOD BODIES

For 60, 80 and 100 C. P. Series and 300-watt or Smaller Multiple Type C Mazda Lamps

Trade No. For ¾-inch Pipe	Trade No. For 1¼-inch Pipe	Description	Ship. Wt., Lbs.	Price Each
20001	20002	Medium screw socket	13⅝	$5.70
20003	20004	Mogul Screw Socket	14	6.00
20005	20006	*Regent Film Socket	14¼	7.00
20007	20008	Without socket	12¾	5.20

20-INCH RADIAL BOWL STREETHOOD BODIES

For 60, 80 and 100 C. P. Series and 300-watt or Smaller Multiple Type C Mazda Lamps

20009	20010	Medium screw socket	14⅞	6.20
20011	20012	Mogul Screw Socket	15¼	6.50
20013	20014	*Regent Film Socket	15½	7.50
20015	20016	Without socket	14	5.70

20-INCH FLAT RADIAL STREETHOOD BODIES

For Old Style Series and Small Multiple Lamps

20033	20034	Medium screw socket	12⅛	4.95
20035	20036	Mogul Screw Socket	12½	5.25
20037	20038	*Regent Film Socket	12¾	6.25
20039	20040	Without socket	11⅞	4.45

18-INCH CONCENTRIC DOME BODIES WITH SMALL HOLOPHANE REFRACTOR

For 60, 80 and 100 C. P. Type C Series Mazda Lamps

22177	22178	Medium screw socket	16⅝	8.95
22179	22180	Mogul Screw Socket	17	9.25
22181	22182	*Regent Film Socket	17¼	10.25
22183	22184	Without socket	15¾	8.45

18-INCH CONCENTRIC DOME BODIES WITH SMALL OPAL DIFFUSER

For 60, 80 and 100 C. P. Type C Series Mazda Lamps

22185	22186	Medium screw socket	14⅝	6.45
22187	22188	Mogul Screw Socket	15	6.75
22189	22190	*Regent Film Socket	15¼	7.75
22191	22192	Without socket	13¾	5.95

PARTS FOR STREETHOOD BODIES

Trade No.	Description	Ship. Wt., Lbs.	Price Each
20097	¾-inch canopy only	1¾	$0.35
20098	1¼-inch canopy only	1¾	.35
20099	¾-inch canopy only for insulating joint on Style B bracket	1¾	.35
20750	Porcelain housing	6¼	2.10
21404	18-inch radial bowl reflector	4¾	2.75
21504	20-inch radial bowl reflector	6	3.25
21507	20-inch flat radial reflector	3⅞	2.00
22196	18-inch concentric dome reflector with holder	4¼	3.25
22197	Small Holophane refractor	3½	3.25
22198	Small opal diffuser	1½	.75

‡Simple cross-arm No. 20752 with ¾-inch locknut may be attached to canopy for ¾-inch gooseneck suspension. Add 30 cents to list price.

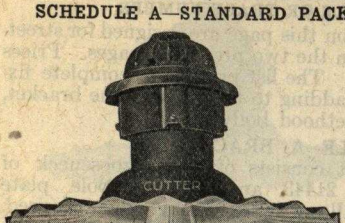
*Standard Film Socket will be furnished in place of Regent when so ordered.

CUTTER STREETHOOD BODIES

RADIAL AND CONCENTRIC

For 250, 400 and 600 C. P. Series and Large Multiple Type C Mazda Lamps

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER



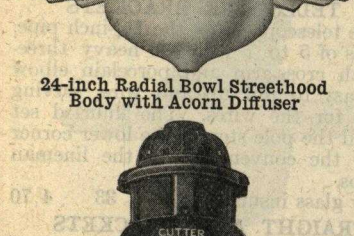
20-inch Radial Bowl Streethood Body, with Extension



18-inch Radial Bowl Streethood Body with Large Sol-Lux Diffuser



24-inch Radial Bowl Streethood Body with Acorn Diffuser



20-inch Concentric Dome Streethood Body with Large Refractor



Distribution Curve for 250 C. P. Lamp and 18-inch Radial Bowl Reflector with Large Refractor

Streethood bodies listed on this page are similar to those listed on the previous page, but the reflectors are designed for larger lamps. The 20-inch Radial Bowl Reflector with extension is used without refractor or diffuser. Other reflectors shown on this page are equipped with hinged holders and are listed with large Holophane Refractor or Sol-Lux Diffuser. Where list prices include sockets, Cutter Lamp Grip Multiple Sockets or Regent Film Series Sockets will be supplied.*

20-INCH RADIAL BOWL STREETHOOD BODIES WITH EXTENSION

For 250, 400 and 600 C. P. Series and 400-watt or Larger Multiple Type C Mazda Lamps

Trade No. For ¾-in. Pipe	Trade No. For 1¼-in. Pipe	Description	Ship. Wt., Lbs. Each	Price Each
20017	20018	Medium screw socket.	15⅞	$6.70
20019	20020	Mogul Screw Socket...	16¼	7.00
20021	20022	*Regent Film Socket...	16½	8.00
20023	20024	Without socket.....	15	6.20

18-INCH RADIAL BOWL BODIES WITH LARGE HOLOPHANE REFRACTOR

For 250, 400 and 600 C. P. Type C Series Mazda Lamps

20049	20050	Medium screw socket.	21½	13.95
20051	20052	Mogul Screw Socket...	21¾	14.25
20053	20054	*Regent Film Socket...	22	15.25
20055	20056	Without socket.....	21	13.45

18-INCH RADIAL BOWL BODIES WITH LARGE SOL-LUX DIFFUSER

For 250, 400 and 600 C. P. Type C Series Mazda Lamps

22199	22200	Medium screw socket.	17½	8.45
22201	22202	Mogul Screw Socket...	17¾	8.75
22203	22204	*Regent Film Socket...	18	9.75
22205	22206	Without socket.....	17	7.95

24-INCH RADIAL BOWL STREETHOOD BODIES WITH ACORN DIFFUSER

For 250, 400 and 600 C. P. Series and 400, 500, 750 and 1000-watt Multiple Type C Mazda Lamps

20025	20026	Medium screw socket.	26⅞	11.20
20027	20028	Mogul Screw Socket...	27¼	11.50
20029	20030	*Regent Film Socket...	27½	12.50
20031	20032	Without socket.....	26	10.70

If Acorn Diffuser is not wanted, deduct $3.75 list.

20-INCH CONCENTRIC DOME BODIES WITH LARGE HOLOPHANE REFRACTOR

For 250, 400 and 600 C. P. Type C Series Mazda Lamps

22207	22208	Medium screw socket.	21⅝	13.70
22209	22210	Mogul Screw Socket...	22	13.95
22211	22212	*Regent Film Socket...	22¼	15.00
22213	22214	Without socket.....	20¾	13.20

20-INCH CONCENTRIC DOME BODIES WITH LARGE SOL-LUX DIFFUSER

For 250, 400 and 600 C. P. Type C Series Mazda Lamps

22215	22216	Medium screw socket.	17⅝	8.20
22217	22218	Mogul Screw Socket...	18	8.50
22219	22220	*Regent Film Socket...	18¼	9.50
22221	22222	Without socket.....	16¾	7.70

PARTS FOR STREETHOOD BODIES

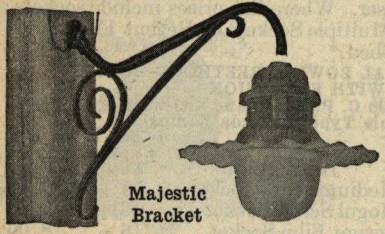
20097	20098	Canopy only.....	1¾	.35
20750		Porcelain housing.....	6¼	2.10
21502		18-in. Radial Bowl with holder.	7¾	4.00
21505		20-in. Radial Bowl with extension...	7	3.75
22225		24-in. Radial Bowl with holder..	9	5.75
21503		20-in. Concentric Dome with holder.	7½	3.75
22223		Large Holophane Refractor.....	5¼	7.00
22224		Large Sol-Lux Diffuser.....	1¼	1.50

Simple cross-arm No. 20752 with ¾-inch locknut may be attached to canopy for ¾-inch gooseneck suspension. Add 30 cents to list price.

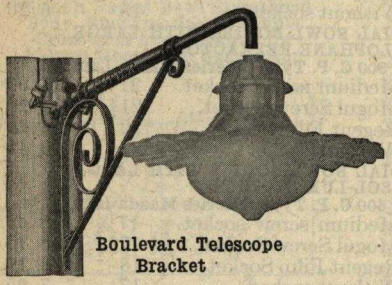
*Standard Film Socket shown on another page will be furnished in place of Regent when so ordered.



Style A Bracket



Majestic Bracket



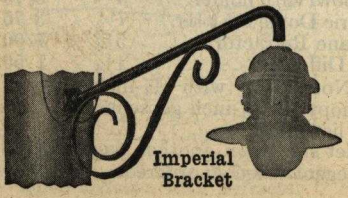
Boulevard Telescope Bracket



Spartan Straight Arm Bracket



Arcadian Bracket



Imperial Bracket

CUTTER INCANDESCENT BRACKETS

FOR STREETHOOD BODIES

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER

Brackets listed on this page are designed for streethood bodies listed on the two preceding pages. Prices cover brackets only. The list price of a complete fixture is obtained by adding to the price of the bracket, the price of the streethood body selected.

STYLE A BRACKETS

Style A bracket consists of 4-foot gooseneck of ¾-inch pipe No. 21443 and grooved pole plate No. 21438 which allows inner wiring when desired. Brace arm on back of pole guides the line wires to the streethood body, where they may be fastened in holes in the rim of the porcelain housing or to cross-arm No. 20752.

Trade No.	Description	Ship. Wt., Lbs. Each	Price Each
21521	With brace arm	10	$1.85
21522	Without brace arm	7	1.30

STYLE B BRACKETS

Similar to Style A, with a Cutter High Voltage Insulating Joint to separate gooseneck and canopy. This insulating joint allows inner wiring. When outside wires are used, they are tied in holes in the rim of the porcelain housing. When ordering streethood bodies for Style B brackets, specify three-hole canopy No. 20099.

21523	With brace arm	13	2.60
21524	Without brace arm	10	2.05

MAJESTIC BRACKETS

Made of 1¼-inch pipe with flat iron scroll and fancy grooved pole plate. Holds the lamp 4 feet from the pole. Scroll will be made of channel iron instead of flat iron when so ordered, at $1.00 list additional.

21525	Bracket, scroll and pole plate only	26	4.00

BOULEVARD TELESCOPE BRACKETS

The ¾-inch pipe telescopes into the 1¼-inch pipe, allowing adjustments of 5 to 7 feet. A heavy three-hole pole plate with cross-arm and porcelain elbow makes the bracket easy to put up and wire, serving also as a protection for the wires. The knurled set screw in the pipe and the pole step in the lower corner of the scroll are for the convenience of the lineman when renewing lamps.

21526	With pony glass insulators	33	4.70

SPARTAN STRAIGHT ARM BRACKETS

Consists of grooved pole plate, 4-foot arm of 1¼-inch pipe, fancy headpiece and artistic flat iron scroll. Channel iron scroll, $1.00 list extra.

21527	With ¾-inch nipple	24	3.25

ARCADIAN BRACKETS

A substantial 3-foot fixture made of 1¼-inch (bore) pipe with three-hole pole plate, insulators, porcelain elbow (to prevent abrasion of wires) wrought iron scroll and cast iron headpiece.

21528	With 1¼-inch nipple	17	3.25

ARCADIAN JUNIOR BRACKETS

Similar to Arcadian, with 20-inch extension and pole plate used on Spartan Straight Arm Bracket.

21529	With 1¼-inch nipple	14	2.25

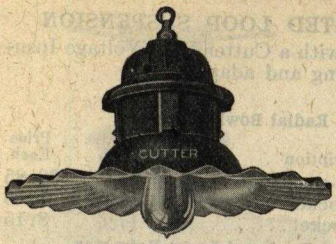
IMPERIAL BRACKETS

A 4-foot arm of 1¼-inch pipe with a quarter bend is threaded on the outer end for supporting streethood bodies with 1¼-inch canopies. A channel iron scroll will be furnished in place of flat iron for $1.00 list additional.

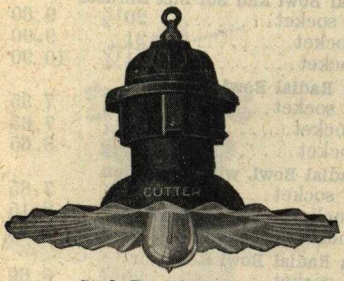
21530	With grooved pole plate	20	3.00

CUTTER CENTER SUSPENSION STREETHOODS

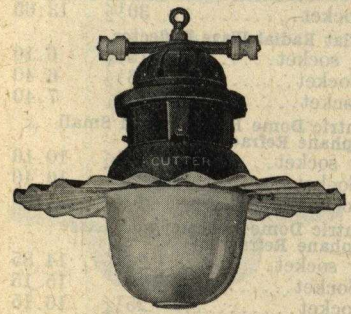
SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER



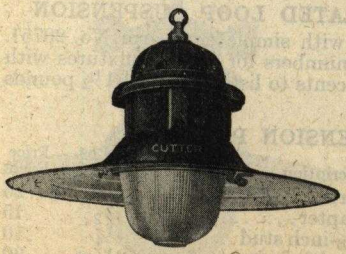
Style D with 18-inch Radial Bowl Reflector



Style D with 20-inch Radial Bowl Reflector with Extension



Style DX with 18-inch Radial Bowl Reflector and Refractor



Style D with 18-inch Concentric Dome Reflector and Small Refractor

STYLE D—LOOP SUSPENSION

A simple form of suspension fixture consisting of a streethood body without cross-arm, a ¾x7/16-inch adapter and a malleable iron arc ring.

Trade No.	Description	Wt., Lbs. Each	Price Each
	With 18-inch Radial Bowl Reflector		
21531	Medium screw socket	14¼	$5.95
21532	Mogul Screw Socket	14¾	6.25
21533	* Regent Film Socket	15	7.25
	With 18-inch Radial Bowl and Large Refractor		
21534	Medium screw socket	22¼	14.20
21535	Mogul Screw Socket	22¾	14.50
21536	* Regent Film Socket	23	15.50
	With 18-inch Radial Bowl and Large Sol-Lux Diffuser		
21515	Medium screw socket	18¼	8.70
21516	Mogul Screw Socket	18¾	9.00
21474	*Regent Film Socket	19	10.00
	With 20-inch Radial Bowl Reflector		
21540	Medium screw socket	15½	6.45
21541	Mogul Screw Socket	16	6.75
21542	*Regent Film Socket	16¼	7.75
	With 20-inch Radial Bowl, with Extension		
21543	Medium screw socket	16½	6.95
21544	Mogul Screw Socket	17	7.25
21545	*Regent Film Socket	17¼	8.25
	With 24-inch Radial Bowl Reflector		
21546	Medium screw socket	18½	7.70
21547	Mogul Screw Socket	19	8.00
21548	*Regent Film Socket	19¼	9.00
	With 24-inch Radial Bowl and Acorn Diffuser		
21549	Medium screw socket	27½	11.45
21550	Mogul Screw Socket	28	11.75
21552	*Regent Film Socket	28¼	12.75
	With 20-inch Flat Radial Wave Reflector		
21553	Medium screw socket	13	5.20
21554	Mogul Screw Socket	13½	5.50
21555	*Regent Film Socket	13¾	6.50
	With 18-inch Concentric Dome Reflector and Small Holophane Refractor		
21475	Medium screw socket	17¼	9.20
21519	Mogul Screw Socket	17¾	9.50
21551	*Regent Film Socket	18	10.50
	With 20-inch Concentric Dome Reflector and Large Holophane Refractor		
21562	Medium screw socket	22¼	13.95
21563	Mogul Screw Socket	22¾	14.25
21564	*Regent Film Socket	23	15.25
	With 20-inch Concentric Dome Reflector and Large Sol-Lux Diffuser		
21477	Medium screw socket	18¼	8.45
21478	Mogul Screw Socket	18¾	8.75
21479	*Regent Film Socket	19	9.75

STYLE DX—LOOP SUSPENSION

Similar to Style D, with Simple Cross-Arm No. 20751, which fits between the canopy and the ¾-inch adapter. In ordering, use same trade number as for Style D, but with prefix "DX." Add 25 cents to list prices and 1½ pounds to shipping weights.

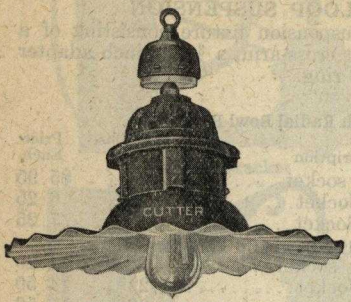
SUSPENSION PARTS

Trade No.	Description	Wt., Lbs. Each	Price Each
20751	Simple cross-arm	1½	$0.25
20753	¾x7/16-inch adapter	½	.15
20754	Arc ring with 7/16-inch stud	¼	.10
20755	H.V. insulator with 7/16-in. studs.	2¼	.90

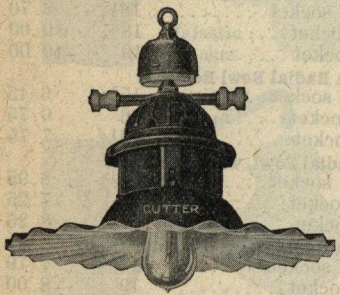
* Standard Film Socket furnished in place of Regent when so ordered.

CUTTER CENTER SUSPENSION STREETHOODS

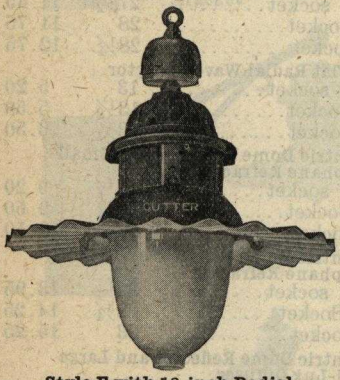
SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER



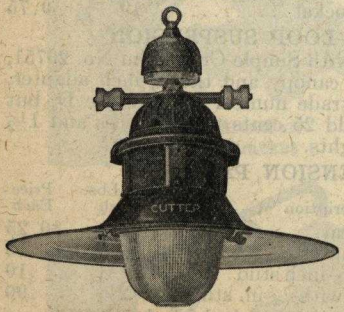
Style E with 18-inch Radial Bowl Reflector



Style EX with 18-inch Radial Bowl Reflector and Simple Cross-arm



Style E with 18-inch Radial Bowl Reflector and Sol-Lux Diffuser



Style EX with 18-inch Concentric Dome Reflector and Small Refractor

STYLE E—INSULATED LOOP SUSPENSION

Consists of Style D, with a Cutter High Voltage Insulator between the arc ring and adapter.

Trade No.	Description	Wt., Lbs. Each	Price Each
	With 18-inch Radial Bowl Reflector		
21571	Medium screw socket	16½	$6.85
21572	Mogul Screw Socket	17	7.15
21573	*Regent Film Socket	17¼	8.15
	With 18-inch Radial Bowl and Large Refractor		
21574	Medium screw socket	24½	15.10
21575	Mogul Screw Socket	25	15.40
21576	*Regent Film Socket	25¼	16.40
	With 18-inch Radial Bowl and Sol-Lux Diffuser		
21568	Medium screw socket	20½	9.60
21569	Mogul Screw Socket	21	9.90
21570	*Regent Film Socket	21¼	10.90
	With 20-inch Radial Bowl Reflector		
21580	Medium screw socket	17¾	7.35
21581	Mogul Screw Socket	18¼	7.65
21582	*Regent Film Socket	18½	8.65
	With 20-inch Radial Bowl, with Extension		
21583	Medium screw socket	18¾	7.85
21584	Mogul Screw Socket	19¼	8.15
21587	*Regent Film Socket	19½	9.15
	With 24-inch Radial Bowl Reflector		
21588	Medium screw socket	20¾	8.60
21589	Mogul Screw Socket	21¼	8.90
21590	*Regent Film Socket	21½	9.90
	With 24-inch Radial Bowl and Acorn Diffuser		
21591	Medium screw socket	29¾	12.35
21592	Mogul Screw Socket	30¼	12.65
21593	*Regent Film Socket	30½	13.65
	With 20-inch Flat Radial Wave Reflector		
21594	Medium screw socket	15¼	6.10
21595	Mogul Screw Socket	16½	6.40
21596	*Regent Film Socket	16¾	7.40
	With 18-inch Concentric Dome Reflector and Small Holophane Refractor		
21601	Medium screw socket	19½	10.10
21602	Mogul Screw Socket	20	10.40
21603	*Regent Film Socket	20¼	11.40
	With 20-inch Concentric Dome Reflector and Large Holophane Refractor		
21607	Medium screw socket	24½	14.85
21608	Mogul Screw Socket	25	15.15
21609	*Regent Film Socket	25¼	16.15
	With 20-inch Concentric Dome Reflector and Large Sol-Lux Diffuser		
21613	Medium screw socket	20¼	9.35
21614	Mogul Screw Socket	20¾	9.65
21615	*Regent Film Socket	21	10.65

STYLE EX—INSULATED LOOP SUSPENSION

Consists of Style E with simple cross-arm No. 20751. In ordering, use trade numbers for Style E fixtures with prefix "EX." Add 25 cents to list prices and 1½ pounds to shipping weights.

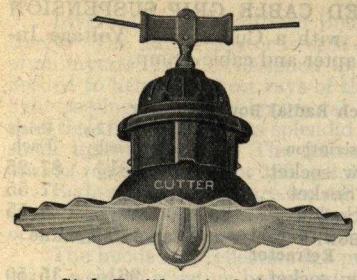
SUSPENSION PARTS

Trade No.	Description	Wt., Lbs. Each	Price Each
20751	Simple cross-arm	1½	$0.25
20753	¾x⅞-inch adapter	½	.15
20754	Arc ring with ⅞-inch stud	¼	.10
20755	H.V. insulator with ⅞-in. studs.	2¼	.90

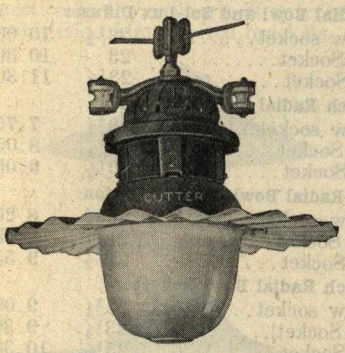
* Standard Film Socket furnished in place of Regent when so ordered.

CUTTER CENTER SUSPENSION STREETHOODS

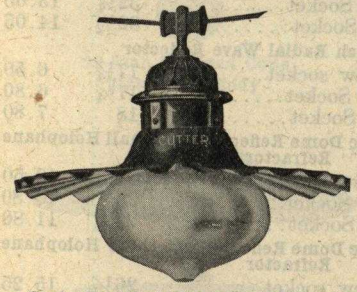
SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER



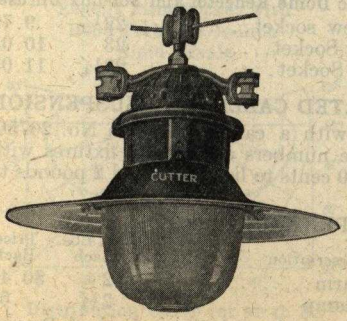
Style F with 18-inch Radial Bowl Reflector



Style FX with 18-inch Radial Bowl Reflector and Large Refractor



Style F with 24-inch Radial Bowl Reflector and Acorn Diffuser



Style FX with 20-inch Concentric Dome Reflector and Large Refractor

STYLE F—CABLE GRIP SUSPENSION

Consists of a streethood body with ¾-inch adapter and cable clamp. This clamp permits the cable to enter at one point on one side and at a higher or lower point on the other side so the fixture can be made level irrespective of the varying heights of cable attachments.

With this style of fixture, no cross-arm is used. The line wires are looped into holes in the rim of the porcelain and tied securely in place.

Trade No.	Description	Wt., Lbs. Each	Price Each
	With 18-inch Radial Bowl Reflector		
21843	Medium screw socket	16¼	$6.35
21844	Mogul Screw Socket	16¾	6.65
21845	*Regent Film Socket	17	7.65
	With 18-inch Radial Bowl and Large Refractor		
21846	Medium screw socket	24¼	14.60
21847	Mogul Screw Socket	24¾	14.90
21848	*Regent Film Socket	25	15.90
	With 18-inch Radial Bowl and Sol-Lux Diffuser		
21616	Medium screw socket	20¼	9.10
21617	Mogul Screw Socket	20¾	9.40
21618	*Regent Film Socket	21	10.40
	With 20-inch Radial Bowl Reflector		
21852	Medium screw socket	17½	6.85
21853	Mogul Screw Socket	17¾	7.15
21854	*Regent Film Socket	18	8.15
	With 20-inch Radial Bowl with Extension		
21855	Medium screw socket	18½	7.35
21856	Mogul Screw Socket	19	7.65
21857	*Regent Film Socket	19¼	8.65
	With 24-inch Radial Bowl Reflector		
21858	Medium screw socket	20½	8.10
21859	Mogul Screw Socket	21	8.40
21862	*Regent Film Socket	21¼	9.40
	With 24-inch Radial Bowl and Acorn Diffuser		
21863	Medium screw socket	29½	11.85
21864	Mogul Screw Socket	30	12.15
21865	*Regent Film Socket	30¼	13.15
	With 20-inch Flat Radial Wave Reflector		
21866	Medium screw socket	15	5.60
21867	Mogul Screw Socket	15½	5.90
21868	*Regent Film Socket	15¾	6.90
	With 18-inch Concentric Dome Reflector and Small Holophane Refractor		
21619	Medium screw socket	19¼	9.60
21620	Mogul Screw Socket	19¾	9.90
21621	*Regent Film Socket	20	10.90
	With 20-inch Concentric Dome Reflector and Large Holophane Refractor		
21622	Medium screw socket	24¼	14.35
21623	Mogul Screw Socket	24¾	14.65
21624	*Regent Film Socket	25	15.65
	With 20-inch Concentric Dome Reflector and Large Sol-Lux Diffuser		
21763	Medium screw socket	20¼	8.85
21764	Mogul Screw Socket	20¾	9.15
21765	*Regent Film Socket	21	10.15

STYLE FX—CABLE GRIP SUSPENSION

Consists of Style F with a cable cross-arm No. 20756. In ordering use trade numbers of Style F fixtures with prefix "FX." Add 40 cents to list and 2 pounds to shipping weights.

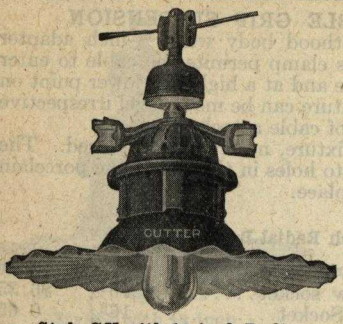
SUSPENSION PARTS

20756	Cable cross-arm	2	.40
20757	Cable grip clamp	2¼	.50

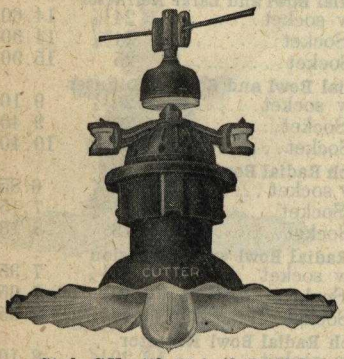
* Standard Film Socket furnished in place of Regent when so ordered.

CUTTER CENTER SUSPENSION STREETHOODS

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER



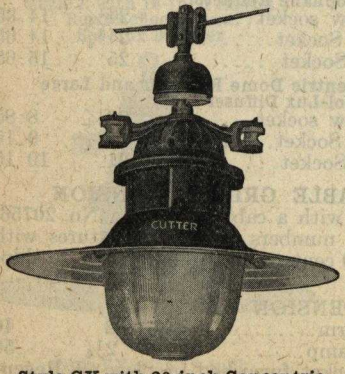
Style GX with 18-inch Radial Bowl Reflector



Style GX with 20-inch Radial Bowl Reflector with Extension



Style GX with 20-inch Flat Radial Wave Reflector



Style GX with 20-inch Concentric Dome Reflector and Large Refractor

STYLE G—INSULATED CABLE GRIP SUSPENSION

Similar to Style F, with a Cutter High Voltage Insulator between the adapter and cable clamp.

Trade No.	Description	Wt., Lbs. Each	Price Each
	With 18-inch Radial Bowl Reflector		
21884	Medium screw socket	18½	$7.25
21885	Mogul Screw Socket	19	7.55
21886	*Regent Film Socket	19¼	8.55
	With 18-inch Radial Bowl Reflector and Large Holophane Refractor		
21887	Medium screw socket	26½	15.50
21888	Mogul Screw Socket	27	15.80
21889	*Regent Film Socket	27¼	16.80
	With 18-inch Radial Bowl and Sol-Lux Diffuser		
21770	Medium screw socket	22½	10.00
21771	Mogul Screw Socket	23	10.30
21772	*Regent Film Socket	23¼	11.30
	With 20-inch Radial Bowl Reflector		
21893	Medium screw socket	19¾	7.75
21894	Mogul Screw Socket	20¼	8.05
21895	*Regent Film Socket	20½	9.05
	With 20-inch Radial Bowl, with Extension		
21896	Medium screw socket	20¾	8.25
21897	Mogul Screw Socket	21¼	8.55
21898	*Regent Film Socket	21½	9.55
	With 24-inch Radial Bowl Reflector		
21899	Medium screw socket	22¾	9.00
21900	Mogul Screw Socket	23¼	9.30
21901	*Regent Film Socket	23½	10.30
	With 24-inch Radial Bowl and Acorn Diffuser		
21902	Medium screw socket	31¾	12.75
21903	Mogul Screw Socket	32¼	13.05
21904	*Regent Film Socket	32½	14.05
	With 20-inch Radial Wave Reflector		
21905	Medium screw socket	17¼	6.50
21906	Mogul Screw Socket	17¾	6.80
21907	*Regent Film Socket	18	7.80
	With 18-inch Concentric Dome Reflector and Small Holophane Refractor		
21773	Medium screw socket	21½	10.50
21774	Mogul Screw Socket	22	10.80
21775	*Regent Film Socket	22¼	11.80
	With 20-inch Concentric Dome Reflector and Large Holophane Refractor		
21776	Medium screw socket	26½	15.25
21777	Mogul Screw Socket	27	15.55
21778	*Regent Film Socket	27¼	16.55
	With 20-inch Concentric Dome Reflector and Sol-Lux Diffuser		
21779	Medium screw socket	22½	9.75
21780	Mogul Screw Socket	23	10.05
21781	*Regent Film Socket	23¼	11.05

STYLE GX—INSULATED CABLE GRIP SUSPENSION

Same as Style G, with a cable cross-arm No. 20756. In ordering, use trade numbers of Style G fixtures with prefix "GX." Add 40 cents to list prices and 2 pounds to shipping weights.

SUSPENSION PARTS

Trade No.	Description	Wt., Lbs. Each	Price Each
20756	Cable cross-arm	2	$0.40
20757	Cable grip clamp	2¼	.50

* Standard Film Socket furnished in place of Regent when so ordered.

CUTTER INVERTED CONE STREETHOOD BODIES

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER

Inverted Cone Streethood Bodies are made in two sizes with 18 and 22-inch hoods, respectively. The same reflector is used with both. The reflector shape, which resembles the frustrum of an inverted cone, is designed to throw the reflected rays out at a distance where they are needed to help the direct rays of the lamp. The hood overlaps the reflector so that most of the light passing above the horizontal is redirected into useful planes. Distribution curves show that the 18-inch size gives splendid results with 60, 80 and 100 candle power series lamps and small multiple lamps. The 22-inch size gives higher efficiency with the same lamps and is always recommended for 100 and 250 candle power series lamps.

Bodies listed below are for use with brackets illustrated on pages next following. An Inverted Cone Body consists of a hood top, reflector, hood fork with ¾-inch rigid male nipple and with or without socket, according to list. Hood flanges for ½ and ¾-inch pipe are extra.

The hoods and reflectors are made of special deep drawing steel and finished in either high grade weather-resisting baked paint enamel or porcelain enamel.

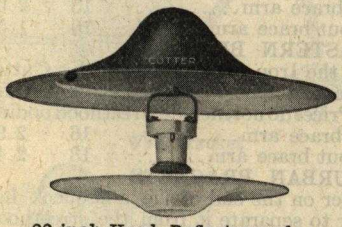
The hood fork has a flange near the top which fits directly beneath the upper portion of the hood. The ¾-inch nipple is made a rigid part of the flange, projecting above it for connection to the cross-arm of outer-wired brackets or to the hood flange which is screwed on the outer end of inner-wired brackets. Prices of hood flanges listed under extra parts below.



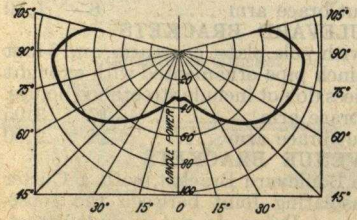
18-inch Inverted Cone Streethood Body



22-inch Inverted Cone Streethood Body



22-inch Hood, Reflector and Regent Film Socket with Hood Fork and ¾-inch Rigid Nipple



Distribution Curve for 80 C. P. Lamp and 18-inch Inverted Cone Streethood Body

CUTTER INVERTED CONE STREETHOOD BODIES

Trade No.	Description	Wt., Lbs. Each	Price Each
	With 18-inch Hood—Paint Enamel Finish		
21682	Medium screw socket	5½	$1.90
21683	Mogul Screw Socket	5¾	2.20
21684	*Regent Film Socket	6	3.20
21685	Without socket	4¾	1.40
	With 18-inch Hood—Porcelain Enamel Finish		
21686	Medium screw socket	6¾	3.40
21687	Mogul Screw Socket	7	3.70
21688	*Regent Film Socket	7¼	4.70
21689	Without socket	6½	2.90
	With 22-inch Hood—Paint Enamel Finish		
21690	Medium screw socket	7¾	2.50
21691	Mogul Screw Socket	8	2.80
21692	*Regent Film Socket	8¼	3.80
21693	Without socket	7	2.00
	With 22-inch Hood—Porcelain Enamel Finish		
21694	Medium screw socket	9¾	4.20
21695	Mogul Screw Socket	10	4.50
21696	*Regent Film Socket	10¼	5.50
21697	Without socket	9	3.70

EXTRA PARTS AND SPECIAL FINISHES

21517	Hood flange for ½-in. pipe, ¾-in. nipple	½	.15
21518	Hood flange for ¾-in. pipe, ¾-in. nipple	½	.15
21698	18-inch hood, paint enameled	2⅝	.60
21699	18-inch hood, porcelain enameled	3	1.50
21705	18-inch hood, galvanized and painted	2⅝	1.00
21706	18-inch hood, copper	3	3.00
21707	22-inch hood, paint enameled	4¾	1.20
21708	22-inch hood, porcelain enameled	6¼	2.30
21709	22-inch hood, galvanized and painted	4¾	1.65
21710	Reflector, paint enameled	2⅛	.60
21711	Reflector, porcelain enameled	2⅛	1.20
21712	Reflector, nickeled copper	2⅝	3.50
21713	Hood fork, ¾-inch rigid nipple	¼	.20

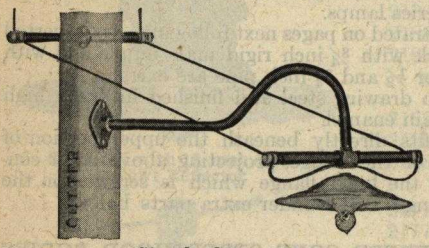
*Regent Film Socket described on another page. Standard Film Sockets will be furnished when so ordered.

CUTTER INCANDESCENT BRACKETS

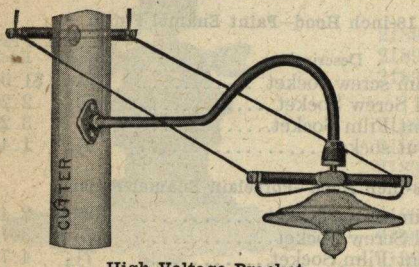
FOR STREETHOOD BODIES

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER

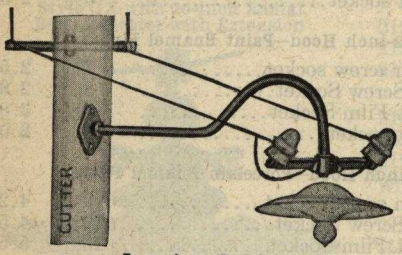
Brackets listed on this page are designed for use with Inverted Cone Streethood Bodies shown on preceding page. Prices include cross-arms which are threaded underneath for ¾-inch nipple. Hood forks furnished with sockets for 18 and 22-inch Inverted Cone Streethood Bodies have rigid ¾-inch nipples. The flanged portion of the hood fork fits the lower surface of the hood top, clamping it securely to the cross-arm. Prices do not include hoods, reflectors or sockets. Order Inverted Cone Streethood Bodies separately as listed on preceding page.



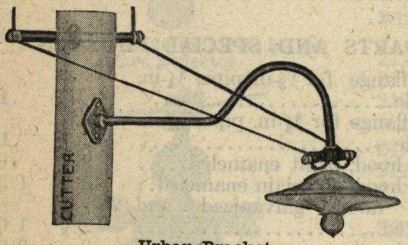
Standard Bracket



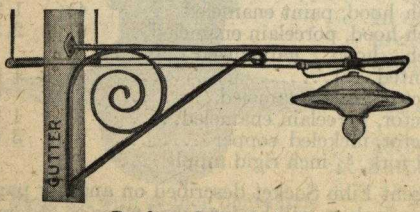
High Voltage Bracket



Iron Arm Bracket



Urban Bracket



Boulevard Bracket

STANDARD BRACKETS

Has a 3-foot gooseneck of ½-inch pipe, pole plate and enameled wood cross-arm with metal bound ends (to prevent splitting) and with wireable waste nut fastened to the arm. The brace arm shown on the back of the pole is used to guide the line wires to the cross-arm. This method of wiring holds the fixture steady in stormy weather.

Trade No.	Description	Wt., Lbs. Each	Price Each
21923	With brace arm.....	10	$1.75
21924	Without brace arm.....	7	1.20

RAILWAY BRACKETS

Similar to the Standard Bracket, with a clamp for iron pipe in place of the pole plate. Prices below do not include brace arm.

21925	For 2½-inch (bore) pipe...	8	1.35
21926	For 3-inch (bore) pipe.....	9	1.45
21927	For 4-inch (bore) pipe.....	10	1.65
21928	For 5-inch (bore) pipe.....	11	1.85

HIGH VOLTAGE BRACKETS

Consists of the Standard Bracket with a Cutter High Voltage Insulator between the gooseneck and cross-arm. This prevents grounds and leakage of current on high potential circuits. Prices below do not include streethood bodies.

21929	With brace arm.....	12½	2.65
21930	Without brace arm.....	9½	2.10

IRON ARM BRACKETS

Similar to the Standard Bracket, with an iron cross-arm supporting glass insulators. Prices do not include streethood bodies.

21931	With brace arm.....	13	2.05
21932	Without brace arm.....	10	1.50

EASTERN BRACKETS

Consists of the Iron Arm Bracket with a Cutter High Voltage Insulator between the gooseneck and iron cross-arm. Prices do not include streethood bodies.

21933	With brace arm.....	16	2.95
21934	Without brace arm.....	13	2.40

URBAN BRACKETS

The spreader on the end of the gooseneck has a fiber insulator to separate it from the streethood proper, thus reducing the risk of leakage on circuits up to 600 volts. Furnished with 3-foot gooseneck of ½-inch pipe. Prices do not include streethood bodies.

21935	With brace arm.....	11	2.25
21936	Without brace arm	8	1.70

BOULEVARD BRACKETS

Furnished with pole plate, cross-arm, and 5-foot gooseneck of ½-inch pipe ornamented with wrought iron scrolls. Prices do not include streethood bodies.

21937	With brace arm.....	17	3.05
21938	Without brace arm.....	14	2.50

AVENUE BRACKETS

Same as the Boulevard Bracket, with a Cutter High Voltage Insulating Joint between the gooseneck and cross-arm. Prices do not include streethood bodies.

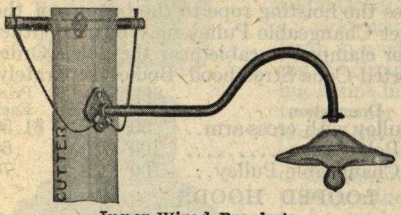
21939	With brace arm.....	20	3.95
21940	Without brace arm.....	17	3.40

CUTTER INCANDESCENT BRACKETS

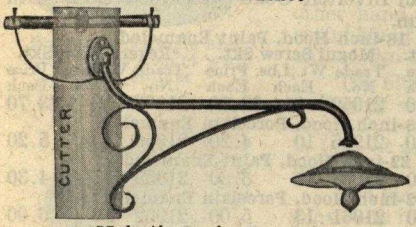
FOR STREETHOOD BODIES

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER

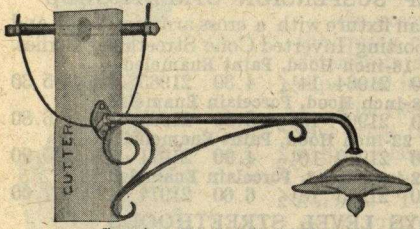
Brackets listed on this page are designed for inner-wired fixtures using Inverted Cone Streethood Bodies described and listed on a preceding page. The outer end of the gooseneck is fitted with a hood flange tapped for the ¾-inch hood fork nipple. Prices of brackets do not include hoods, reflectors, sockets or hood forks.



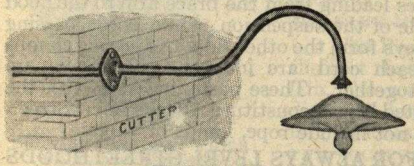
Inner-Wired Bracket



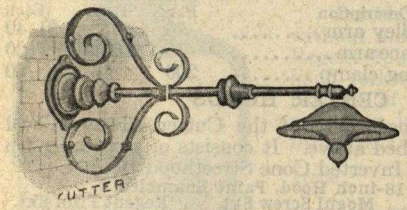
Majestic Junior Bracket



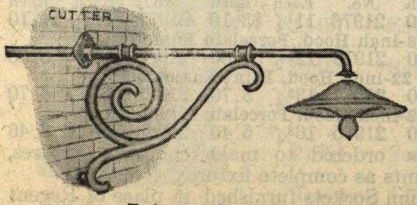
Spartan Junior Bracket



Wall Bracket



Corinthian Bracket



Entrance Bracket

INNER-WIRED BRACKETS

Consists of a 3-foot gooseneck of ½-inch pipe, ½-inch by ¾-inch hood flange, and grooved pole plate.

Trade No.	Description	Wt., Lbs. Each	Price Each
21941	With brace arm.....	8½	$1.50
21942	Without brace arm.....	5½	.95

MAJESTIC JUNIOR BRACKETS

A highly artistic fixture built on the same lines as Majestic Bracket (Trade No. 21525) but smaller, having a reach of 3 feet from pole to lamp and with the arm made of ½-inch pipe. Designed for either inner or outer wiring.*

21943	With hood flange	15¼	2.75
21944*	Without hood flange...	15	2.60

SPARTAN JUNIOR BRACKETS

A single bend bracket of ½-inch pipe which holds the lamp 3 feet from the pole. Designed for either inner or outer wiring.*

21945	With hood flange.....	13¼	2.45
21946*	Without hood flange...	12	2.30

WALL BRACKETS

Has a 4-foot gooseneck of ½-inch pipe so the pipe can extend 1 foot inside the flange and hold the lamp 3 feet from the wall. Furnished with wall flange and ½-inch by ¾-inch hood flange.

21947	.....	6¼	1.10

CORINTHIAN BRACKETS

A 3-foot bracket of ¾-inch pipe with heavy wall plate and wrought iron trimmings. The headpiece is threaded for ¾-inch nipple and has a flange to fit the top of the streethood body.

21948	.....	19½	3.35

ENTRANCE BRACKETS

Has a 4-foot gooseneck of ¾-inch pipe and a wall flange with set screw, which allows the pipe to extend 1 foot inside the flange and 3 feet outside. Furnished with cast iron scroll and hood flange to fit streethood bodies. This bracket may be used with all Cutter Streethood Bodies having fittings for ¾-inch pipe. Furnished with hood flange or plain threaded end for Radial Streethood Bodies with ¾-inch canopies.

21949	With hood flange.....	25	3.70
21950	Without hood flange...	23½	3.55

CAST SCROLL BRACKETS

Similar to the Entrance Bracket, but with a 4-foot gooseneck of ¾-inch pipe (Style B, Trade No. 21443) and with a grooved wall plate to replace the wall flange and inside pipe. This allows the wires to be brought out of the building at any desired point and guided along the wall to the place where the fixture is located. Furnished with hood flange for Inverted Cone Streethood Bodies or with plain threaded end for ¾-inch streethood canopies.

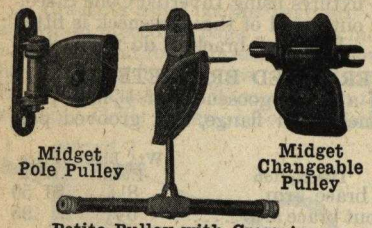
21987	With hood flange.....	24	3.45
21988	Without hood flange...	22½	3.30

*Majestic and Spartan Junior Brackets will be furnished with grooved pole plates unless otherwise specified. For outer-wired fixtures, order Standard Cross-Arm No. 21496 or Iron Cross-Arm No. 21497 in place of hood flange. For outer-wired brackets on series circuits, order ½-inch Hood Insulator No. 21494 to separate gooseneck from cross-arm.

CUTTER CENTER SUSPENSION STREETHOODS

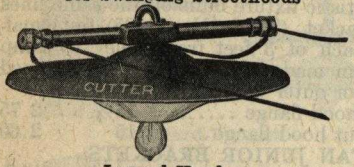
WITH INVERTED CONE STREETHOOD BODIES

SCHEDULE A—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER

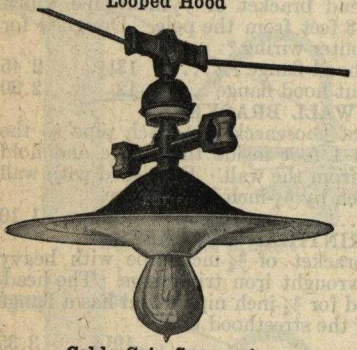


Midget Pole Pulley — Midget Changeable Pulley

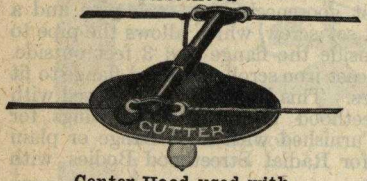
Petite Pulley with Cross-Arm for Swinging Streethoods



Looped Hood



Cable Grip Suspension Streethood



Center Hood used with Always Level Streethoods



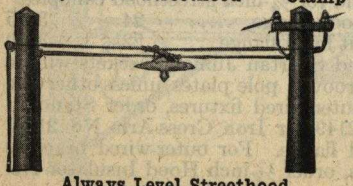
Iron Pulley Arm for Always Level Streethood



Iron Brace Arm for Always Level Streethood



Adjusting Clamp



Always Level Streethood Assembled Complete

SWINGING STREETHOODS

Consists of a Cutter Inverted Cone Streethood Body supported by a Petite Lamp-Supporting Pulley. A Midget Pole Pulley guides the hoisting rope to the bottom of the pole. The Midget Changeable Pulley may be used either as a pole pulley or clamped to cable near the pole. Order pulleys and Inverted Cone Streethood Bodies separately.

Trade No.	Description	Std. Pkg.‡	Wt., Lbs. Each	Price Each
20413	Petite Pulley with cross-arm..	50	6½	$1.50
20414	Midget Pole Pulley.....	100	2¼	.60
20415	Midget Changeable Pulley...	100	2½	.70

LOOPED HOODS

Consists of an Inverted Cone Streethood Body with Looped Cross-Arm.

Medium Screw Skt. Trade No.	Wt.,Lbs. Each	Price Each	Mogul Screw Skt. Trade No.	Wt.,Lbs. Each	Price Each	*Regent Film Skt. Trade No.	Wt.,Lbs. Each	Price Each
With 18-inch Hood, Paint Enameled								
21951	8½	$2.40	21952	8¾	$2.70	21953	9	$3.70
With 18-inch Hood, Porcelain Enameled								
21954	9¾	3.90	21955	10	4.20	21956	10¼	5.20
With 22-inch Hood, Paint Enameled								
21957	10¾	3.00	21958	11	3.30	21959	11¼	4.30
With 22-inch Hood, Porcelain Enameled								
21960	12¾	4.70	21961	13	5.00	21962	13¼	6.00

CABLE GRIP SUSPENSION STREETHOODS

A center span fixture with a cross-arm, insulator and cable clamp supporting Inverted Cone Streethood Bodies.

With 18-inch Hood, Paint Enameled								
21963	14	4.00	21964	14¼	4.30	21965	14½	5.30
With 18-inch Hood, Porcelain Enameled								
21966	15¼	5.50	21967	15½	5.80	21968	15¾	6.80
With 22-inch Hood, Paint Enameled								
21969	16¼	4.60	21970	16½	4.90	21971	17	5.90
With 22-inch Hood, Porcelain Enameled								
21972	18¼	6.30	21973	18½	6.60	21974	19	7.60

ALWAYS LEVEL STREETHOODS

The two wires leading from the brace arm to the hood make up one side of the suspension, while cords passing over covered pulleys form the other side. Adjusting clamps at the end of each cord are independently drawn up taut and locked together. These parts, together with the Center Hoods listed below, constitute Always Level Streethoods. Prices do not include rope, lamps or wires.

EXTRA PARTS FOR ALWAYS LEVEL STREETHOODS

Trade No.	Description	Std. Pkg.	Wt., Lbs. Each	Price Each
20399	Iron pulley arm.....	75	6	$1.40
20400	Iron brace arm.....	75	6	1.20
20401	Adjusting clamp	200	½	.30

CENTER HOODS

The center part only of the Cutter Always Level Streethood described above. It consists of a spreader tip cross-arm and an Inverted Cone Streethood Body.

Medium Screw Skt. Trade No.	Wt.,Lbs. Each	Price Each	Mogul Screw Skt. Trade No.	Wt.,Lbs. Each	Price Each	*Regent Film Skt. Trade No.	Wt.,Lbs. Each	Price Each
With 18-inch Hood, Paint Enameled								
21975	11	$2.80	21976	11¼	$3.10	21977	11½	$4.10
With 18-inch Hood, Porcelain Enameled								
21978	12¼	4.30	21979	12½	4.60	21980	13	5.60
With 22-inch Hood, Paint Enameled								
21981	13½	3.40	21982	13¾	3.70	21983	14	4.70
With 22-inch Hood, Porcelain Enameled								
21984	16½	5.10	21985	16¾	5.40	21986	17	6.40

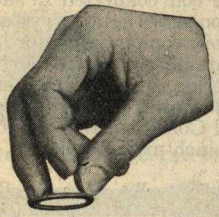
‡Extra parts ordered to make complete fixtures, take same discounts as complete fixtures.

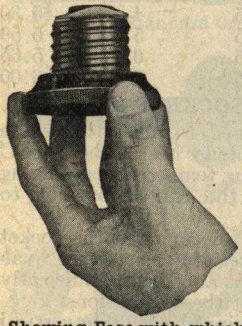
*Standard Film Sockets furnished in place of Regent when so ordered.



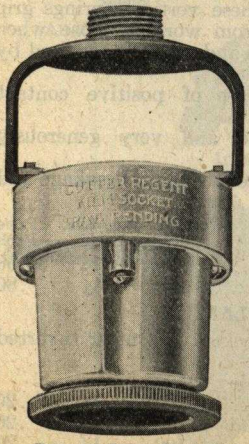


Regent Receptacle and Mogul Base Socket with Film Holder





Showing Ease with which Films are Removed



Regent Film Socket No. 21467 Complete

CUTTER REGENT FILM SOCKETS

THE SAFETY VALVE FOR STREET SERIES SYSTEMS

SCHEDULE A

THE FILM SOCKET IS THE VITAL PART OF THE REGULATING MECHANISM OF A SERIES LIGHTING SYSTEM, AND IT MUST CONSTANTLY PERFORM ITS FUNCTION RELIABLY AND ACCURATELY. When one lamp in a circuit burns out, the dielectric film must puncture, allowing the circuit to re-establish itself instantly. Otherwise, the remaining lamps in the circuit will cease to burn. The constant current transformer regulates the voltage to compensate for burned-out lamps, but as each lamp burns out there is a momentary rise of potential across the terminals of that lamp. If the dielectric strength of the film be too great, the rise of voltage may not be sufficient to puncture the film at all, or until such time as will permit ill effects to be produced along the line and in auxiliary apparatus. On the other hand, if the film is weak, it may break down before the useful life of the lamp is secured. THE FILM SOCKET IS THE SAFETY VALVE AND MUCH DEPENDS UPON ITS RELIABILITY.

The film cut-out used in the Regent Film Socket punctures uniformly and accurately at rated voltage. It is enclosed in the socket and protected against climatic conditions. It cannot creep or fall out as a result of the vibration of the fixture and lamp in service.

The film holder is so designed that it is impossible to use any substitute in place of the regular film. Wood splinters, paper, etc., cannot be used. Films are easily renewed.

On account of wind action and changing climatic conditions, the spring clips commonly used to support the socket and lamp deteriorate and allow the lamp to fall out—there are no spring clips used in the Regent Socket.

The two screw shells and the center post form a combination that grips the lamp base and holds it securely in position, greatly reducing lamp breakage during inclement weather.

WHEN RENEWING LAMPS, THE FILM IS PLACED IN THE FILM HOLDER. THE LOWER SOCKET SHELL IS THEN SCREWED IN AS FAR AS IT WILL GO EASILY, THEN GIVEN AN EXTRA HALF TURN WHICH LOCKS IT. THE LAMP IS THEN SCREWED INTO THE LOWER SHELL IN THE SAME MANNER.

The Regent Film Socket is only 3½ inches over all, and due to the fact that all contacts and live parts are covered by the porcelain, the socket can be mounted in a very small space. The distance between supporting screws and nearest live terminal is 1½ inches. THERE ARE NO LIVE METAL PARTS EXPOSED BACK OF THE SOCKET. CORROSION AND DANGER OF SHORT CIRCUITS ARE ELIMINATED.

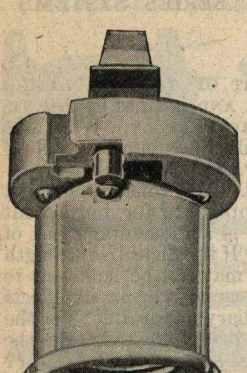
Porcelain housings furnished with streethood bodies listed without socket are supplied with screws and nuts for supporting Regent Film Socket No. 21466. This socket is listed also with hood fork and ¾-inch rigid male nipple for making combination fixtures of the inverted cone type, and with other fittings for mounting in old style fixtures previously installed. Three films furnished free with each socket.

Trade No.	Description	Std. Pkg.	Ship. Wt., Lbs. Each	Price Each
21466	Receptacle, Mogul Base Socket and film holder	50	1½	$1.80
21467	Same, with ¾-inch hood fork, rigid male nipple	50	1¾	2.00
21468	Same, with ¾-inch hood fork, female thread	50	1⅞	2.00
21469	Same, with ⅜-inch hood fork, female thread	50	1¾	2.00
21481	Same, with ⅜-inch low flange, female thread	50	1⅝	2.00
21482	Lamp socket only, with film holder	50	¼	.40
21483	Package of 50 silk films	500 films		.75

CUTTER STREETHOOD SOCKETS

FOR STREET SERIES AND MULTIPLE LAMPS

SCHEDULE A



Standard Film Receptacle and Mogul Base Socket

STANDARD FILM SOCKETS

Have a porcelain receptacle with wire terminals and spring clips to hold the projecting fingers of the socket part. These fingers hold the dielectric film. The receptacle fits in the porcelain housing of Cutter Radial Streethood Bodies listed on other pages. Screws and nuts for holding the receptacle in place are included with the streethood bodies and with the hood forks furnished with Inverted Cone Streethood Bodies listed on another page.

Trade No.	Description	Std. Pkg.	Wt., Lbs. Each	Price Each
21462	Receptacle and socket, Mogul Screw Base..	50	1¼	$1.80
21434	Receptacle only.....	100	½	.80
20480	Socket part only, Mogul Screw Base.....	75	¾	1.00
20481	Socket part only, medium screw base.....	100	½	.50
21451	Package of 15 films.....	500	films	.15

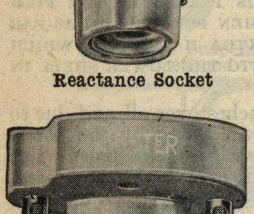


Reactance Socket

REACTANCE SOCKETS

Consist of Cutter Mogul Screw Base Streethood Socket with special hood fork supporting a reactance coil connected in shunt with the lamp. These sockets are for use on series lighting systems, and when a lamp fails, the reactance coil compensates for the voltage drop through the lamp, thus maintaining constant current without the use of a regulator. In ordering, state voltage and amperes of circuit and voltage and candle power rating of lamp. Designed only for use with Cutter Inverted Cone Streethood Bodies listed on another page. Furnished with ¾-inch male nipple.

Trade No. 3.5 or 4 Amps. 60 Cycles	Trade No. 6.6 Amps. 60 Cycles	Candle Power Lamp	Std. Pkg.	Wt., Lbs. Each	Price Each
20487	20491	32	25	4	$5.30
20488	20492	40	25	5	5.50
20489	20493	60	25	6	5.65
20490	20494	80	25	7	6.00



Medium Screw Base Lamp Grip Socket

LAMP GRIP MULTIPLE SOCKETS

Cutter Lamp Grip Sockets are designed to meet the severe conditions found in outside service. The intense heat of the Type C lamps subjects the socket to greatly varying temperatures, ranging from several hundred degrees Fahr. when the lamp is burning, to below zero when the lamp is out.

These changes in temperature, taking place while the socket shells are under tension, will quickly depreciate their spring qualities and cause them to split, unless they are made sufficiently strong and some provision provided to meet these conditions.

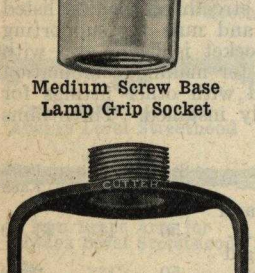
The Cutter Lamp Grip Sockets are equipped with two vertical springs which engage the threads of the lamp collar, re-enforce the socket shells and relieve the tension. These vertical springs grip the lamp base and prevent the lamp from working loose when subjected to vibration and the contraction and expansion caused by the variations in temperature.

These springs also create an increase of positive contact between the lamp terminal and the socket.

The terminals are easily accessible and very generously designed.

The use of these sockets will greatly reduce lamp breakage and outages.

Trade No.	Description	Std. Pkg.	Wt., Lbs. Each	Price Each
21400	Medium screw base.....	200	⅞	$0.50
21402	Mogul Screw Base.....	150	1¼	.80



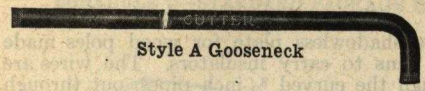
No. 21713 Hood Fork Complete

HOOD FORKS AND FLANGES

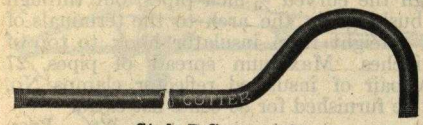
With screws and nuts for fastening sockets in Cutter Inverted Cone Streethood Bodies.

21713	Hood fork with ¾-in. rigid male nipple.....	100	⅜	.20
21484	Hood fork with ¾-in. female thread	100	½	.20
21485	Hood fork with ⅜-in. female thread	100	½	.20
21486	Low flange with ⅜-in. female thread	100	¼	.20

PARTS FOR CUTTER BRACKETS



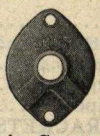
Style A Gooseneck



Style B Gooseneck



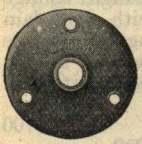
½-in. Pole Plate



½-in. Grooved Pole Plate



¾-in. Grooved Pole Plate



¾-in. Wall Flange



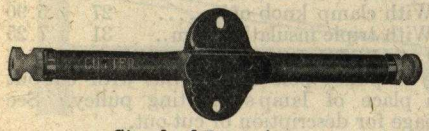
Corner Plate



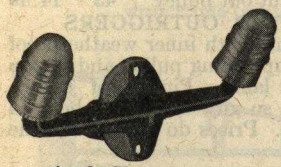
Hood Insulator



Standard Cross-Arm



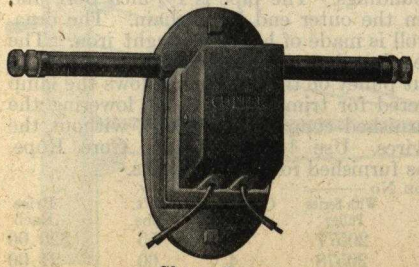
Standard Brace Arm



Angle Change Brace Arm



Iron Cross-Arm



Shunt Box

SCHEDULE A

GOOSENECKS

Trade No. Style A	Trade No. Style B	Length Feet	Size of Pipe Inches	Std. Pkg.	Wt., Lbs. Each	Price Each
21362	21365	3	½	200	2⅞	$0.50
21363	21366	4	½	150	3⅞	.65
21364	21367	5	½	125	4⅞	.80
21439	21442	3	¾	150	3¾	.75
21440	21443	4	¾	125	4¾	.90
21441	21444	5	¾	100	5¾	1.15

CURVED POLE PLATES

Trade No.	Description	Std. Pkg.	Wt.,Lbs. Each	Price Each
20512	For ½-inch pipe.....	500	1	$0.20
21487	Grooved, for ½-inch pipe	400	1¼	.30
21438	Grooved, for ¾-inch pipe	400	2¼	.40

WALL FLANGES

21488	Threaded for ½-inch pipe	500	1	.20
21489	To slip over ½-inch pipe	500	1	.30
21490	Threaded for ¾-inch pipe	400	2	.30
21491	To slip over ¾-inch pipe	400	2	.40

CORNER PLATES

21492	For ½-inch pipe.....	300	2½	.70
21493	For ¾-inch pipe.....	200	2½	.70

HOOD INSULATORS

With pipe cap above, ½-inch stud below. Used on High Voltage and Eastern Brackets.

21494	With ½-inch pipe cap...	100	3	.90
21495	With ¾-inch pipe cap...	100	3	.90

STANDARD CROSS-ARMS

An enameled wood cross-arm with metal bound ends (to prevent splitting) and with the fittings bolted to the arm. This arm is used on the Cutter Standard and High Voltage Brackets.

21496	With ½-inch pipe fitting (female thread) above and ¾-inch wireable waste nut below.....	200	2	.50

STANDARD BRACE ARMS

An enameled and metal bound wood arm for guiding the wires to streethoods.

20507	With curved pole plate..	200	3	.55

IRON CROSS-ARMS

Used on the Cutter Iron Arm and Eastern Brackets. Tapped in the top for ½-inch pipe. Has a wireway underneath threaded for ¾-inch nipple.

21497	With glass insulators ...	150	5	.80

ANGLE CHANGE BRACE ARMS

Made of cast iron with curved pole plate and fixed pins. May be used on front or back of pole.

21498	With glass insulators ...	150	6	.80

SHUNT BOXES

Pole Type, with Brace Arm

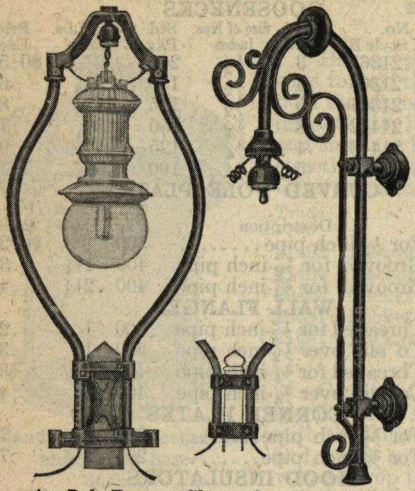
Has a reactance coil mounted in a weatherproof case insulated from the pole plate. The coil is for connecting in parallel with the Mogul Multiple Socket in the streethood and is designed to maintain constant current in a circuit without a regulator. Prices below are for 60-cycle coils. Prices for 25-cycle coils will be furnished on application.

Trade No. 3.5 or 4 Amps.	Trade No. 6.6 Amps.	C. P. Lamp	Std. Pkg.	Wt., Lbs. Each	Price Each
20495	20501	32	15	10	$5.65
20496	20502	40	15	11	5.80
20497	20503	60	15	12	5.95
20498	20504	80	15	13	6.20
20499	20505	100	15	14	6.50
20500	20506	250	15	16	9.40

An assortment of Cutter Streethood and Bracket Parts amounting to $150.00 or over, constitutes a standard package.

CUTTER ARC FIXTURES AND BRACKETS

SCHEDULE C—STANDARD PACKAGE QUANTITY, 15 OF ONE STYLE OR TRADE NUMBER



Arc Pole Top for Wood Poles | Clamp for Iron Pole | Crook Bracket

ARC POLE TOPS

Has a shadowless plate for wood poles made for wood pins to carry insulators. The wires are run through the curved ¾-inch pipes, out through porcelain bushings in the arch to the terminals of the lamp. Height from insulator hook to top of pole, 42 inches. Maximum spread of pipes, 27 inches. A pair of insulated reflector clamps No. 21989 will be furnished for 80 cents list extra.

Trade No.	Description	Wt. Lbs.	Price Each
21990	For wood poles	28	$6.00
21991	For 2½-inch bore pipe	34	6.00
21992	For 3-inch bore pipe	35	6.10
21993	For 4-inch bore pipe	36	6.30
21994	For 5-inch bore pipe	37	6.40

CROOK BRACKETS

An ornamental arc lamp bracket made of 1¼-inch pipe with cast iron and wrought iron trimmings. Fitted with outlet bell and high voltage insulator on the outer end and with porcelain bushings in the plates for inner wiring. Holds the lamp 31½ inches from the wall. Over all height, 5 feet 1½ inches. Distance between centers of supporting plates, 29½ inches.

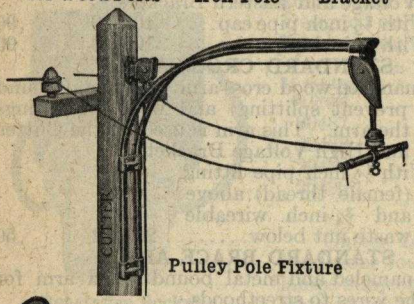
21995	With high voltage insulator	43	13.00

PULLEY POLE FIXTURES

A 3-foot fixture complete, with lamp-supporting and pole pulleys, enabling the lamp to be lowered for trimming. A good substitute for a short mast arm.

Furnished with flat plates for attaching to walls or square poles, when so ordered.

20537	With clamp knob only	27	5.90
20538	With triple insulation arm	31	7.25



Pulley Pole Fixture

SAFETY POLE FIXTURES

Same as pulley pole fixture, but with cut-out pulley in place of lamp-supporting pulley. See another page for description of cut-out.

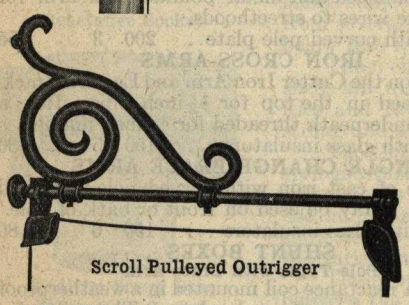
20759	With series cut-out pulley	43	14.45
20760	With multiple cut-out pulley	43	14.45

SCROLL PULLEYED OUTRIGGERS

An ornamental fixture with inner weatherproof pulley and outer lamp-supporting pulley and clamp knob for lowering the lamp. Pipe is of ¾-inch bore. Head piece made so guy wires may be used for steadying the fixture. Prices do not include the rope.

Trade No. — With Wall Plate	Trade No. — With Pole Plate	Description	Wt. Lbs.	Price Each
21996	21997	3 ft., with clamp knob	36	$5.25
21998	21999	4 ft., with clamp knob	37	5.90

For triple insulation arm, add $1.65 list.

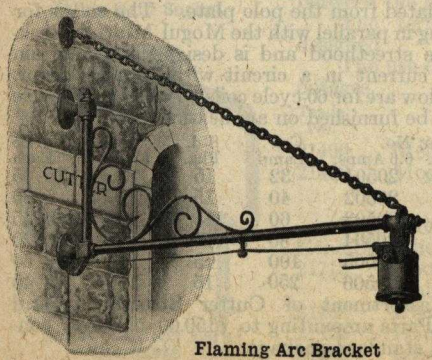


Scroll Pulleyed Outrigger

FLAMING ARC BRACKETS

Designed for supporting heavy arc lamps in front of buildings. The pipe is 1¼-inch bore and guyed from the outer end by a chain. The ornamental scroll is made of heavy wrought iron. The lower pole plate has a pulley built in the casing. The cut-out pulley on the outer end allows the lamp to be lowered for trimming without lowering the wires. Furnished complete, as shown, without the rope or wires. Use ⅜-inch Banner Core Rope. Two chains furnished for 5-foot lengths.

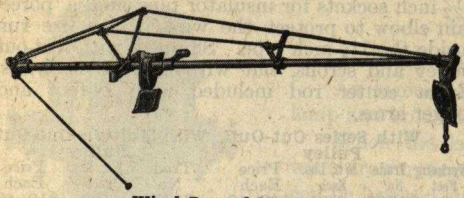
Trade No. — With Multiple Pulley	Trade No. — With Series Pulley	Overhang Feet	Wt. Lbs.	Price Each
20574	20577	3	55	$20.00
20575	20578	4	60	21.00
20576	20579	5	65	23.50



Flaming Arc Bracket

CUTTER MAST ARMS

SCHEDULE C—STANDARD PACKAGE QUANTITY, 15 OF ONE STYLE OR TRADE NUMBER



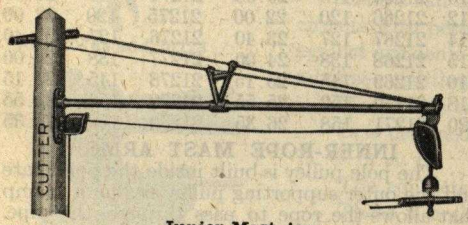
Wind-Braced Mast Arm with Clamp Knob

WIND-BRACED MAST ARMS

The only side mast arms having braces to prevent the arm from rocking on the pole. They have two strain rods run over a wrought iron truss at the pole and through the eyes of a stiffening triangle.

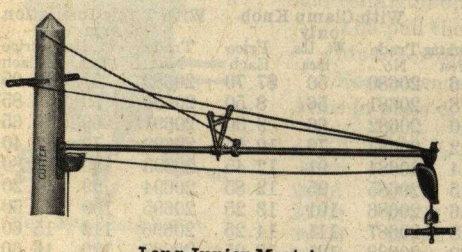
The base of the wrought iron truss has an extension brace which is bolted to the pole, while a similar brace (clamped to the piping) is bolted to the other side of the pole. These braces anchor the pipe firmly, and keep the fixture from swaying sideways in the wind.

The mast arm proper can be partly assembled on the ground. The pole plate has a weatherproof pulley fastened to it, and the lamp-supporting pulley at the outer end makes this mast arm unusually complete.



Junior Mast Arm with Triple Insulation Arm

Overhang Feet	With Clamp Knob only: Trade No.	Wt., Lbs. Each	Price Each	With Triple Insulation Arm: Trade No.	Wt., Lbs. Each	Price Each
8	20586	79	$14.80	20594	83	$16.15
10	20587	86	15.80	20595	90	17.15
12	20588	93	17.75	20596	97	19.10
14	20589	103	18.75	20597	106	20.15
15	20590	113	19.25	20598	116	20.60
16	20591	123	19.75	20599	126	21.10
18	20592	133	20.75	20600	136	22.10
20	20593	143	21.75	20601	146	23.10

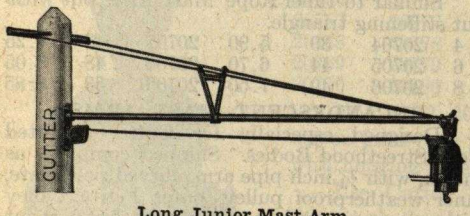


Long Junior Mast Arm with Triple Insulation Arm

JUNIOR MAST ARMS

Designed to meet the demand for low priced, yet complete and well braced mast arms. They have pole plates with weatherproof pulleys fitted direct to them and mast arm pulleys for lowering the lamps. Shipped complete with strain rods, strain arm, pipe and pulleys.

6	20618	48	7.70	20623	51	9.05
8	20619	57	8.50	20624	60	9.85
10	20620	60	9.30	20625	63	10.65
12	20621	67	10.10	20626	70	11.45
14	20622	72	10.85	20627	75	12.20



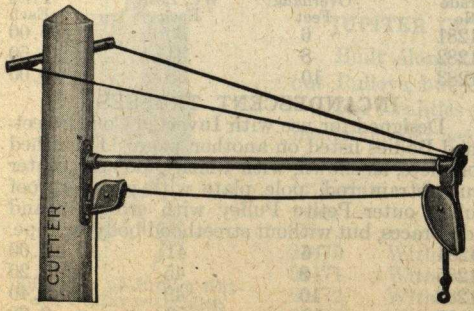
Long Junior Mast Arm with Cut-Out Pulley

LONG JUNIOR MAST ARMS

Similar to the Junior, but with double-braced strain arm. An extra support for the center of the pipe is furnished on 14-foot and longer arms.

Furnished with cut-out pulley in place of lamp-supporting pulley with clamp knob, for $8.35 list additional.

6	20628	52	8.50	20637	55	9.85
8	20629	61	9.30	20638	64	10.65
10	20630	64	10.05	20639	67	11.40
12	20631	70	10.85	20640	73	12.20
14	20632	79	12.05	20641	83	13.40
15	20633	85	12.45	20642	89	13.80
16	20634	90	12.85	20643	93	14.20
18	20635	94	13.80	20644	98	15.15
20	20636	100	14.80	20645	104	16.15



Cadet Mast Arm

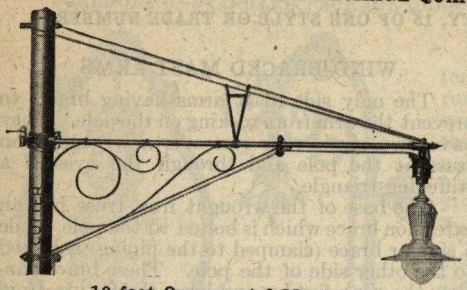
CADET MAST ARMS

Similar to Junior Mast Arms, but without the stiffening triangle.

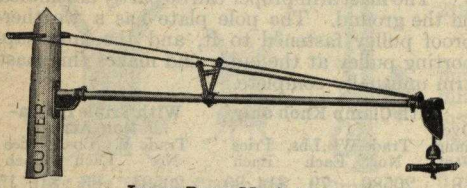
4	20698	35	5.90	20701	39	7.25
6	20699	40	6.70	20702	44	8.05
8	20700	49	7.50	20703	53	8.85

CUTTER MAST ARMS

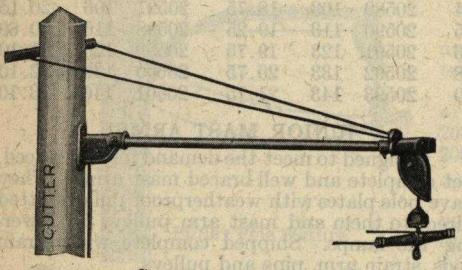
SCHEDULE C—STANDARD PACKAGE QUANTITY, 15 OF ONE STYLE OR TRADE NUMBER



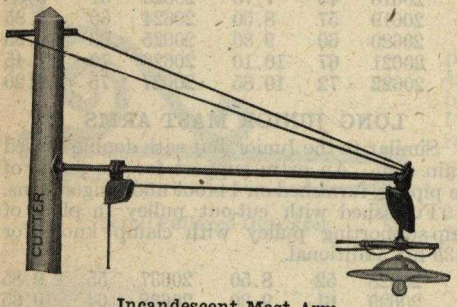
10-foot Ornamental Mast Arm for 5-inch Iron Poles



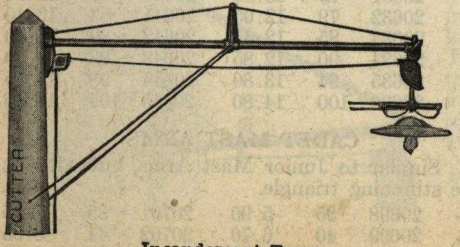
Inner-Rope Mast Arm with Triple Insulation Arm



Corporal Mast Arm



Incandescent Mast Arm



Incandescent Truss

ORNAMENTAL MAST ARMS

For 5-inch (Bore) Iron Poles

The 5-inch pole clamp has an arm with 1½-inch sockets for insulator pins and a porcelain elbow to protect the wires which are run inside the 1¼-inch pipe. Shipped with cut-out pulley and scrolls, but without rope or wires. Extra center rod included with 14-foot and longer arms.

	With Series Cut-Out Pulley			With Multiple Cut-Out Pulley		
Overhang Feet	Trade No.	Wt., Lbs. Each	Price Each	Trade No.	Wt., Lbs. Each	Price Each
6	21263	100	$19.40	21272	100	$19.40
8	21264	110	20.15	21273	110	20.15
10	21265	115	20.95	21274	115	20.95
12	21266	120	22.00	21275	120	22.00
14	21267	127	23.40	21276	127	23.40
15	21268	138	24.00	21277	138	24.00
16	21269	145	25.15	21278	145	25.15
18	21270	152	25.55	21279	152	25.55
20	21271	158	26.35	21280	158	26.35

INNER-ROPE MAST ARMS

The pole pulley is built inside the pole plate and the outer supporting pulley fits in a clamp that allows the rope to pass through the pipe. Extra center rod and double braced strain arm furnished with 14-foot and longer arms.

	With Clamp Knob only			With Triple Insulation Arm		
Overhang Feet	Trade No.	Wt., Lbs. Each	Price Each	Trade No.	Wt., Lbs. Each	Price Each
6	20680	50	$7.70	20689	53	$9.05
8	20681	56	8.50	20690	59	9.85
10	20682	66	9.30	20691	69	10.65
12	20683	76	10.05	20692	79	11.40
14	20684	91	12.45	20693	89	13.80
15	20685	95	12.85	20694	99	14.20
16	20686	101	13.25	20695	109	14.60
18	20687	111	14.25	20696	119	15.60
20	20688	121	15.25	20697	129	16.60

CORPORAL MAST ARMS

Similar to Inner-Rope Mast Arm, but without stiffening triangle.

4	20704	39	5.90	20707	43	7.25
6	20705	44	6.70	20708	48	8.05
8	20706	49	7.50	20709	53	8.85

INCANDESCENT MAST ARMS

Designed especially for Cutter Inverted Cone Streethood Bodies. Shipped complete, as shown, with ¾-inch pipe arm, curved pole plate, inner weatherproof pulley, outer Petite Pulley with cross-arm, strain arm and rods, but without streethood body or rope.

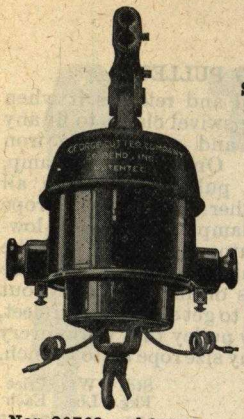
Trade No.	Overhang Feet	Wt., Lbs. Each	Price Each
21281	6	30	$5.00
21282	8	34	5.50
21283	10	38	6.00

INCANDESCENT TRUSSES

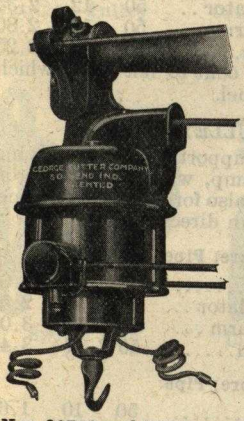
Designed for use with Inverted Cone Streethood Bodies listed on another page. Furnished complete, as shown, with 1-inch pipe arm, center truss, strain rod, pole plate with weatherproof pulley, outer Petite Pulley with cross-arm, and side braces, but without streethood body or rope.

21284	6	41	6.00
21285	8	45	7.20
21286	10	49	8.40
21287	12	53	9.60

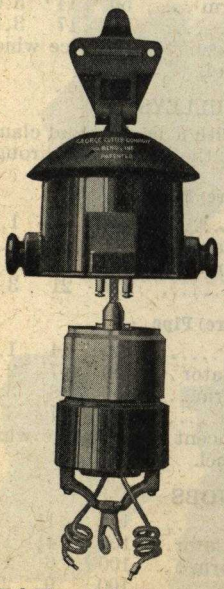
CUTTER CUT-OUT PULLEYS



Nos. 20763 and 20773



Nos. 20768 and 20778



End View of Jupiter Cut-out Pulley with Mast Arm Clamp

SCEHDULE D—STANDARD PACKAGE QUANTITY, 10

STANDARD CUT-OUT PULLEYS FOR SERIES OR MULTIPLE CIRCUITS

An ingenious, simple and positive device which sustains the lamp and holds it in contact independent of the hoisting rope.

When the lamp is lowered, the circuit is closed. The circuit wires are run taut to the pulley and are never lowered. The lamp can be lowered straight down without interfering with trolley wires or other obstacles.

Lamps can be cleaned, trimmed, adjusted or replaced on live circuits with perfect safety. The pulley acts as a positive insurance against accidents and protects expensive lamps from damage under adverse conditions.

No ladders or poles to climb.

It is designed particularly for use on high voltage circuits either D. C. or A. C.

The contacts are self-cleaning.

There is nothing about the pulley to wear or get out of order.

The switching and supporting features are entirely automatic and certain in operation.

You pull the rope—the pulley does the rest.

Made for rope or chain, as ordered.

Recommended for use with Wind-braced and Long Junior Mast Arms in place of outer mast arm pulleys.

Trade No. For Series Circuits	Trade No. For Multiple Circuits	Description	Wt. Lbs.	Price Each
20761	20771	Threaded for 1¼-inch pipe	25	$10.00
20762	20772	Threaded for 2-inch pipe	25	10.00
20763	20773	With cable clamp	25	10.00
20764	20774	With ¾-inch sleeve clamp	25	10.00
20765	20775	With 1-inch sleeve clamp	25	10.00
20766	20776	With 1¼-inch sleeve clamp	25	10.00
20767	20777	With 1½-inch sleeve clamp	25	10.00
20768	20778	With 1¼-inch mast arm clamp	25	10.00
20769	20779	With 1½-inch mast arm clamp	25	10.00
20770	20780	With ceiling plate	25	10.00

Nos. 20761, 20762, 20771 and 20772 are rigid and designed for use on inner-rope fixtures. Other styles are free to swing into line with hoisting rope.

Use Cutter ⅜-inch Hoisting Rope or ¼-inch Ebony Wire Rope with these pulleys. Made for use with galvanized chain when so ordered.

JUPITER CUT-OUT PULLEYS FOR SERIES CIRCUITS

Built along the same general lines as Cutter Standard Cut-out Pulleys, but designed for extra heavy duty service.

For localities where atmospheric conditions demand extra high insulation and heavy current carrying parts, the Jupiter Pulley is recommended for both D. C. and A. C. series circuits of 2300 volts or higher. Made for rope or chain as ordered.

Trade No.	Description	Wt. Lbs.	Price Each
21470	With cable clamp	65	$14.00
21471	With 1¼-inch mast arm clamp	65	14.00
21472	With 1½-inch mast arm clamp	65	14.00
21473	With 2-inch mast arm clamp	65	14.00

CUTTER PULLEYS

SCHEDULE D



Lamp-supporting Pulley with Clamp Knob



Clamp Knob

LAMP-SUPPORTING PULLEYS

Holds the lamp when raised and releases it when about to be lowered. Has a long swivel clamp to fit any size suspension wire or cable and a malleable iron clamp knob to hold the lamp. On raising the lamp, this knob is engaged by the pulley and takes all the strain off the rope. Another pull at the rope guides the knob out so that the lamp can be readily lowered. The action is entirely automatic. You pull the rope till it reaches a dead stop, and the pulley does the rest. There are no extra catches or fingers to bend out of shape or bind on the casing or to get clogged with sleet. It is the only weatherproof safety pulley that works every time. The clamp knob clamps any size rope up to ½-inch.

Trade No.	Description	Std. Pkg.	Wt. Lbs.	Price Each
20782	With clamp knob only	50	9	$1.45
20783	With high voltage insulator ..	50	12	2.35
20784	With triple insulation arm ...	50	13	2.80
20785	With Jupiter Cross-arm.....	50	16	3.25

For galvanizing, add 50 per cent to list price which includes final coat of black enamel.



Mast Arm Pulley



Clamp Knob with High Voltage Insulator

MAST ARM PULLEYS

A modification of the lamp-supporting pulley, having an extra strong single piece clamp, which fits the iron pipe of a mast arm and which also forms the headpiece, so that the strain rods can be run direct to it.

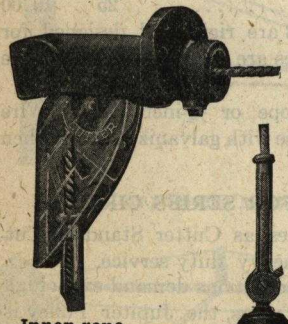
For 1¼-inch (Bore) Pipe

20786	With clamp knob only	50	10	1.65
20787	With high voltage insulator ..	50	13	2.55
20788	With triple insulation arm ...	50	14	3.00
20789	With Jupiter Cross-arm.....	50	17	3.45

For 1½-inch (Bore) Pipe

20790	With clamp knob only	50	10	1.65
20791	With high voltage insulator ..	50	13	2.55
20792	With triple insulation arm ...	50	14	3.00
20793	With Jupiter Cross-arm.....	50	17	3.45

For galvanizing, add 50 per cent to list price which includes final coat of black enamel.



Inner-rope Pulley



Clamp Knob with Triple Insulation Arm

INNER-ROPE PULLEYS

A lamp-supporting pulley with a hooded end clamp for use with mast arms in which the rope runs through the pipe.

For 1¼-inch (Bore) Pipe

20794	With clamp knob only	50	14	1.80
20795	With high voltage insulator ..	50	17	2.70
20796	With triple insulation arm ...	50	18	3.15
20797	With Jupiter Cross-arm.....	50	21	3.60

For 1½-inch (Bore) Pipe

20798	With clamp knob only	50	14	1.80
20799	With high voltage insulator ..	50	17	2.70
20800	With triple insulation arm ...	50	18	3.15
20801	With Jupiter Cross-arm.....	50	21	3.60

For galvanizing, add 50 per cent to list price which includes final coat of black enamel.

CLAMP KNOBS

20802	With hook only.....	100	1½	.30
20803	With high voltage insulator..	100	4½	1.20
20804	With triple insulation arm ...	100	6	1.65
20805	With Jupiter Cross-arm.....	100	9	2.10

For galvanizing, add 50 per cent to list price which includes final coat of black enamel.

CUTTER PULLEYS

SCHEDULE D



Outrigger Pulley



Ceiling Pulley

OUTRIGGER PULLEYS

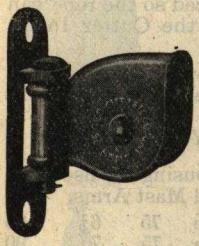
A form of the lamp-supporting pulley, with a clamp to fit the pipe. Furnished with clamp knob.

Trade No.	Description	Std. Pkg.	Wt. Lbs.	Price Each
20806	For ¾-inch (bore) pipe....	50	9	$1.45
20807	For 1-inch (bore) pipe.....	50	9	1.50
20808	For 1¼-inch (bore) pipe...	50	10	1.60
20809	For 1½-inch (bore) pipe...	50	10	1.65

CEILING PULLEYS

A form of the lamp-supporting pulley, with a plate for use on bridges or under beams in shops or yards.

20810	With clamp knob only	50	9	1.65
20811	With triple insulation arm	50	13	3.00
20812	With Jupiter Cross-Arm..	50	16	3.45



Swivel Pole Pulley



Interchangeable Pulley

SWIVEL POLE PULLEYS

A weatherproof pole pulley, swiveled so that it can swing sideways and keep in line with the hoisting rope. Has a strong malleable iron pole plate.

20813	.....	100	4¼	.75

JUMBO POLE PULLEYS

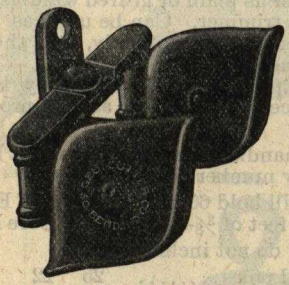
Similar to the above, but larger, to take ¾-inch rope.

20814	.....	75	5½	1.10

DUPLEX POLE PULLEYS

Consists of a pair of swivel pole pulleys fastened to a simple malleable iron pole plate.

20815	.....	50	8	1.50



Duplex Pole Pulley

INTERCHANGEABLE PULLEYS

A weatherproof pulley with a universal clamp made of malleable iron, which will grip any standard size of suspension wire or cable. By taking out the two bolts the clamp can be opened out so as to form a wall plate, which fits the curved surface of a pole and which is easily fastened in place by lag screws. When so used, it makes a swiveled pole pulley similar in action to the Cutter Swivel Pole Pulley.

20816	.....	100	4¼	.75

JUMBO CHANGEABLE PULLEYS

Similar to the interchangeable pulley, but larger, to take ¾-inch rope.

20817	.....	75	5½	1.10



Sleeve Pulley



Plain Roof Pulley

SLEEVE PULLEYS

A weatherproof pulley with a sleeve clamp to grip iron pipe.

20818	For ¾-inch (bore) pipe....	100	5¼	.80
20819	For 1-inch (bore) pipe	100	5½	.85
20820	For 1¼-inch (bore) pipe...	100	5¾	.90
20821	For 1½-inch (bore) pipe...	100	6	.95

PLAIN ROOF PULLEYS

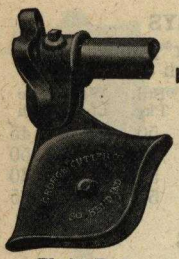
A companion to the ceiling pulley, with a ceiling plate for bridges, beams, etc.

20822	.....	100	5½	.90

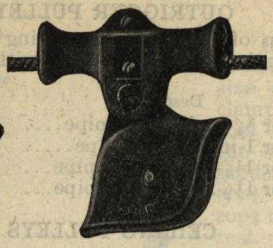
For galvanizing any of the above, add 50 per cent to list price.

CUTTER PULLEYS AND WINDLASSES

SCHEDULE D



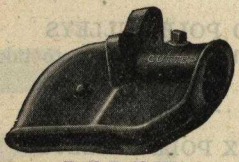
Plain End Pulley



Medium Pulley



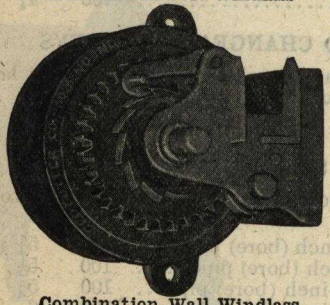
Pole Housing



Tail Pulley



Combination Pole Windlass



Combination Wall Windlass



Pinion Handle

PLAIN END PULLEYS

A plain weatherproof pulley with an end clamp to fit mast arm pipes.

Trade No.	Description	Std. Pkg.	Wt. Lbs.	Price Each
20823	For 1¼-inch (bore) pipe	100	6½	$0.90
20824	For 1½-inch (bore) pipe	100	6¾	.90

MEDIUM PULLEYS

A center suspension pulley with long supporting clamp and weatherproof casing, but with no safety features. Takes any size rope up to ½ inch in diameter and is second only to the Cutter Lamp-supporting Pulley.

20825	.....	100	5½	.75

POLE HOUSING

The pole plate and pulley casing are made in one piece, with the sheaves placed so the rope can run through the pipe, as with the Cutter Inner-rope and Corporal Mast Arms.

20826	For 1¼-inch (bore) pipe	75	6½	1.20
20827	For 1½-inch (bore) pipe	75	6¾	1.20

TAIL PULLEYS

A companion to the pole housing for use with Cutter Inner-rope and Corporal Mast Arms.

20828	For 1¼-inch (bore) pipe	75	6¾	.90
20829	For 1½-inch (bore) pipe	75	7	.90

COMBINATION POLE WINDLASSES

These are self-locking safety windlasses which can be used either as plain or geared windlasses at the option of the trimmer. Can be used as plain windlass to lower the lamp quickly, and then as a geared windlass to raise the lamp. These windlasses are perfectly safe for heavy lamps, the whole device being made as fool-proof as possible.

The pinion handle is detachable so that it can be used with any number of windlasses.

The drum will hold 60 feet of ¼-inch Ebony Wire Rope or 40 feet of ⅜-inch Banner Core Rope.

Prices below do not include handle.

20830	For wood poles.....	25	22	4.25
20831	For 5-inch (bore) pipe..	25	24	4.50
20832	For 6-inch (bore) pipe..	25	25	4.75
20833	For 7-inch (bore) pipe..	25	27	5.00

COMBINATION WALL WINDLASSES

Similar to the combination pole windlass, but with a side plate for fastening to walls.

20834	.....	25	24	4.50

PINION HANDLES

For combination pole and wall windlasses.

20835	.....	25	4	1.50

For galvanizing any of the above, add 50 per cent to list price which includes final coat of black enamel.

CUTTER INSULATORS AND CROSS-ARMS



No. 20836



No. 20837



No. 20838



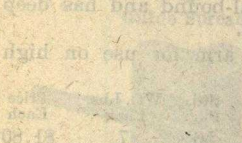
No. 20839



No. 20841



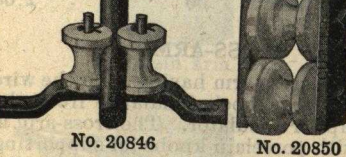
No. 20844



No. 20846



No. 20850



No. 20847

SCHEDULE E

HIGH VOLTAGE INSULATORS

High voltage insulators have a double petticoat porcelain bell, which forms a good watershed and gives high insulation even in wet weather. The rivets which fasten the metal cap to the porcelain pass under the elongated head of the bolt which supports the hook. The cap is sealed with insulating material and the extra petticoat gives a large surface insulation, making the device well suited for use on arc circuits exposed to weather, smoke or fumes.

While designed especially for use on arc circuits of high voltage, the extra protection and the elimination of leakage afforded by this insulator make it a desirable one, even for circuits of comparatively low voltage.

Trade No.	Description	Std. Pkg.	Wt., Lbs. Each	Price Each
20836	With ring above and sister hook below	100	4	$0.90
20837	With ring above and ring below	100	4	.80
20838	With clamp for wire rope above and with sister hook below	100	4	1.10
20839	With clamp for wire rope above and with ring below	100	4	1.00
20840	With clamp for chain above and sister hook below	100	4	1.10
20841	With clamp for chain above and ring below	100	4	1.00

For galvanizing all iron parts, add 20 cents each to list price, which includes final coat of black enamel.

JUPITER INSULATORS

Built on the same lines generally as high voltage insulators, but with a greatly enlarged series of petticoats to give higher surface insulation. Therefore it has the same high breakdown insulation (ample for 12000-volt circuits) and an extra large surface to reduce the leakage in wet weather.

20844	With ring above and sister hook below	75	6	1.35
20845	With ring above and ring below	75	6	1.25

For galvanizing all iron parts, add 20 cents each to list price, which includes final coat of black enamel.

TREE INSULATORS

A simple, strong tree insulator with wrought iron base, galvanized. Will take wires up to ¾ inch in diameter.

Trade No.	Std. Pkg. Dozen	Wt., Lbs. per Doz.	Price per Doz.
20846	25	12	$3.60

MAMMOTH TREE INSULATORS

Similar to the above, but for wires up to 1¼ inches in diameter.

20847	12	40	8.00

SWINGING INSULATORS

Swinging insulators allow the wire to move freely between porcelain rollers without chafing the insulation. Being hung from the loop, it is free to adapt itself to any strains, and therefore will not cramp the wire, as the bracket base tree insulators often do. Strongly made of malleable iron, takes wires up to ¾ inch in diameter.

Trade No.	Finish	Std. Pkg. Dozen	Wt., Lbs. per Doz.	Price per Doz.
20848	Painted	25	15	$3.60
20849	*Galvanized	20	15	4.50

JUMBO SWINGING INSULATORS

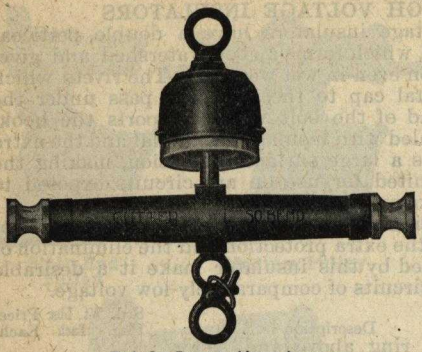
Similar to the above, but for wires up to 1¼ inches in diameter.

20850	Painted	12	55	8.00
20851	*Galvanized	6	55	14.50

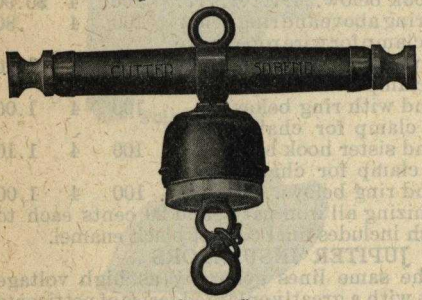
*Includes final coat of black enamel.

CUTTER INSULATORS AND CROSS-ARMS

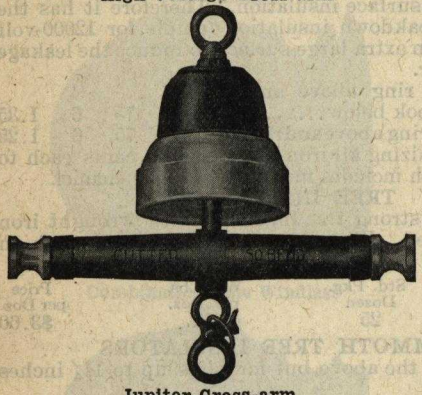
SCHEDULE E



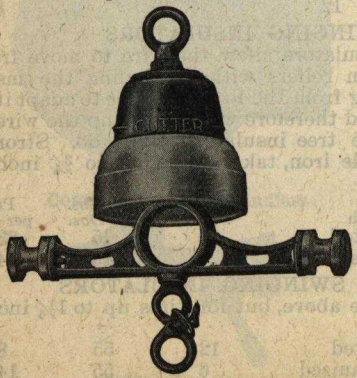
Triple Insulation Arm



High Voltage Cross-arm



Jupiter Cross-arm



Ajax Cross-arm

TRIPLE INSULATION ARMS

Triple insulation arms have a high voltage insulator above an enameled wood arm, thus giving a triple insulation between the line wire and the supporting ring.

The arm is coated with a baked enamel, which outwears paint in the weather, and has its ends bound by strong metal ferrules to prevent their splitting. Every part of the whole device is built for fine wear and high insulation, making it a fine insulating arm for all high voltage lamps, and the only low priced one adapted for use with alternating series lamps. It is second only to the Jupiter Cross-arm.

Trade No.	Finish	Std. Pkg.	Wt., Lbs. Each	Price Each
20852	Enameled	75	5	$1.35
20853	*Galvanized	75	5	1.60

HIGH VOLTAGE CROSS-ARMS

High voltage cross-arms combine the high voltage insulator with a well-built insulating spreader arm, making a fine insulating arm for use over arc lamps. The arm proper is of wood, coated with a baked enamel, which keeps it dry and high insulating. Each end is bound by a malleable iron ferrule, which keeps the wood from splitting in case a heavy strain is put on the screws holding the porcelain insulators in place. The latter are deep grooved as illustrated.

The supporting ring is of malleable iron and all the parts are built just right to make this a good insulating arm, though not equal to the Triple Insulation Arm or Jupiter Cross-arm.

Trade No.	Finish	Std. Pkg.	Wt., Lbs. Each	Price Each
20854	Enameled	75	5	$1.25
20855	*Galvanized	75	5	1.50

JUPITER CROSS-ARMS

An insulating cross-arm having both the wire supports and the lamp hook insulated from the support by Cutter Jupiter Insulator. The cross-arm is enameled and metal-bound and has deep grooved knobs at each end.

The ideal insulating arm for use on high voltage circuits.

Trade No.	Finish	Std. Pkg.	Wt., Lbs. Each	Price Each
20856	Enameled	50	7	$1.80
20857	*Galvanized	50	7	2.05

AJAX CROSS-ARMS

An insulating cross-arm having both the wire supports and the lamp hook insulated from the support by a Jupiter Insulator. The cross-arm is of iron, fitted with porcelain knobs for supporting the line wires and a locking sister hook for the lamp.

Trade No.	Finish	Std. Pkg.	Wt., Lbs. Each	Price Each
20858	Enameled	50	10	$1.80
20859	*Galvanized	50	10	2.25

*Includes final coat of black enamel.

CUTTER INSULATORS AND CROSS-ARMS

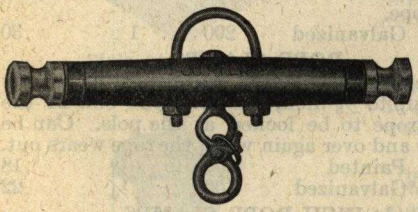
SCHEDULE E



Plain Arm



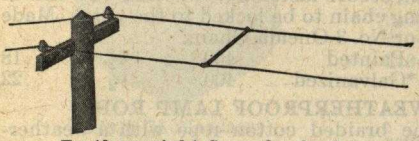
Grip Arm



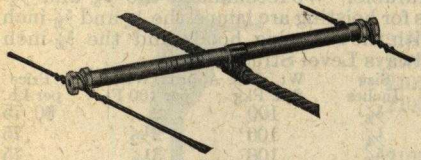
Economy Arm



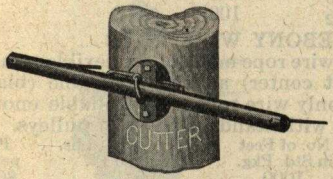
Featherweight Spreader



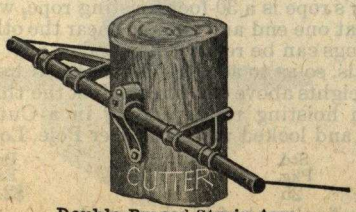
Featherweight Spreader in Use



Guide Spreader



Strain Arm



Double-Braced Strain Arm

PLAIN ARMS

Enameled wood, with metal-bound ends and porcelain knobs. Holds the line wire 12 inches apart.

Trade No.	Std. Pkg.	Wt., Lbs. Each	Price Each
20862	200	1½	$0.30

GRIP ARMS

Consists of the plain arm with a "U" bolt for clamping same to 1¼-inch (bore) iron piping as used on mast arms, outriggers and brackets.

Trade No.	Finish	Std. Pkg.	Wt., Lbs. Each	Price Each
20863	Enameled	200	1¾	$0.40
20864	*"U" bolt galvanized	200	1¾	.45

ECONOMY ARMS

A common sense cross-arm for use where the insulation is not important. Similar to the grip arm, but with sister hook.

Trade No.	Finish	Std. Pkg.	Wt., Lbs. Each	Price Each
22441	Enameled	200	2	$0.50
22442	*Iron parts galvanized	200	2	.60

FEATHERWEIGHT SPREADERS

Featherweight spreaders are readily fastened to the wires running to suspension lamps, so as to keep them at a distance of 18 inches from each other. Made of enameled wood, metal tipped, with porcelain insulators. Weighs less than 8 ounces.

Trade No.	Finish	Std. Pkg.	Wt., Lbs. Each	Price Each
20865	*Enameled	200	¾	$0.25

GUIDE SPREADERS

Same as the above, with a collar to clasp the suspension cable. Keeps the line wires 18 inches apart and in line with the suspension strand.

Trade No.	Finish	Std. Pkg.	Wt., Lbs. Each	Price Each
20866	Enameled	200	1	$0.40
20867	*Collar galvanized	200	1	.45

STRAIN ARMS

As Furnished on Junior and Cadet Mast Arms

Strain arms are made of wrought iron with a cast iron pole plate.

Trade No.	Std. Pkg.	Wt. Lbs.	Price Each
20746	100	8½	$1.20

DOUBLE-BRACED STRAIN ARMS

As Furnished on Long Junior Mast Arms

Double-braced strain arms are longer than the regular strain arms and have side braces to prevent rocking in high winds.

Trade No.	Std. Pkg.	Wt. Lbs.	Price Each
20747	50	10	$2.00

*Includes final coat of black enamel.

CUTTER POLE LINE MATERIAL

SCHEDULE F



Rope Cleat



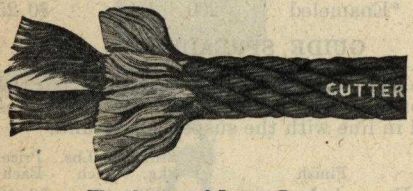
Pole Lock



Rope Clamp



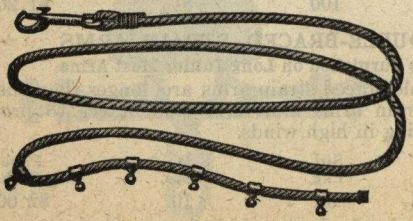
Chain Clamp



Weatherproof Lamp Rope



Ebony Wire Rope



Trimmer's Rope

POLE LOCKS

Has the keyhole at the bottom and not at the top (where the rain and sleet would drive into it). The double catch makes it non-pickable, the back fits either a wall or a pole, and the casting makes it weatherproof. Just the thing to prevent tampering with hoisting ropes. One key free with every ten locks.

Trade No.	Finish	Std. Pkg.	Wt. Lbs.	Price Each
20868	Painted	100	1½	$0.75
20869	*Galvanized	100	1½	.85
20870	Extra key	25	1 oz	.20

ROPE CLEATS

Strong and neat (though no cleat with its coil of rope makes as neat a job as the rope clamp and pole lock). Has the edges rounded so as not to cut the rope.

20871	Galvanized	200	1	.30

ROPE CLAMPS

Made of malleable iron, will readily clamp any size rope up to ⅜-inch, enabling the end of the hoisting rope to be locked at the pole. Can be used over and over again when the rope wears out.

20872	Painted	400	¼	.18
20873	*Galvanized	400	¼	.22

½-INCH ROPE CLAMPS

Same as above, for ½-inch ropes.

20874	Painted	400	¾	.20
20875	*Galvanized	400	¾	.25

CHAIN CLAMPS

A neat, secure fastening, enabling the end of the hoisting chain to be locked to the pole. Made for No. 1 or No. 3 Oneida Chain.

20876	Painted	400	½	.18
20877	*Galvanized	400	½	.22

WEATHERPROOF LAMP ROPE

A fine braided cotton rope with a weatherproof finish, which keeps out the rain and makes it extra durable. We recommend the ⅜ and ½-inch sizes for hoisting arc lamps, the ¼ and 5/16-inch for use with the swinging hoods and the 3/16-inch for the Always Level Streethood.

Trade No.	Size Inches	Wt., Lbs. Std. Pkg.	Approx. Wt., Lbs. per 100 Ft.	Price per Lb.
22340	3/16	100	2	$0.75
22341	¼	100	2½	.75
22342	5/16	100	3⅛	.75
22343	⅜	100	5	.75
22344	½	100	8	.75

EBONY WIRE ROPE

A ¼-inch wire rope made of six flexible strands (each with soft center) around a flexible (black) center. The only wire rope really pliable enough to work freely with standard types of pulleys.

Trade No.	No. of Feet in Std. Pkg.	Approx. Wt., Lbs. per 100 Ft.	Price per Ft.
20883	1000	5	$0.06

TRIMMER'S ROPE

Trimmer's rope is a 30-foot hoisting rope, with a snap hook at one end and six rings near the other end. The rings can be readily clamped at any desired intervals, so as to accommodate lamps hung at varying heights above the street. Just the thing for use with hoisting ropes, ending in a Cutter Rope Clamp and locked with a Cutter Pole Lock.

Trade No.	Std. Pkg.	Wt. Lbs.	Price Each
20884	25	4	$2.50

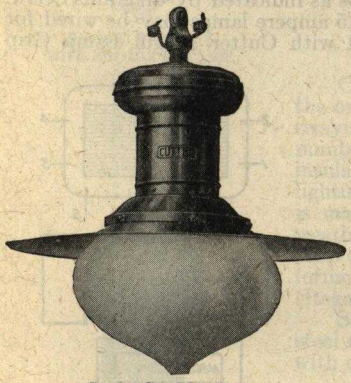
*Includes final coat of black enamel.

CUTTER MAZDAARCS

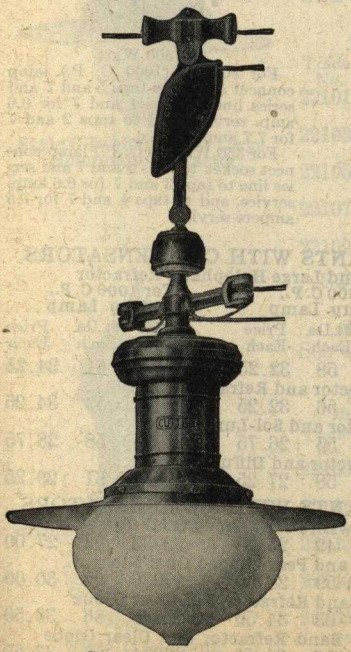
SCHEDULE G—STANDARD PACKAGE QUANTITY, 10 OF ONE TRADE NUMBER OR STYLE



Style AA Mazdaarc



Style CA Mazdaarc



Style DA Mazdaarc

These fixtures consist of ventilated copper casings with lamp grip sockets and supporting spindles adjustable vertically with respect to the reflector or globe. These features make them adapted for use with all types and sizes of lamps, including the Type C Madza lamps.

The casings are finished in black enamel or mottled copper and the steel reflectors in porcelain enamel.

Combinations may be made for any requirement in store, factory or street lighting. Each fixture gives the appearance of an arc lamp, and furnishes a soft light at the efficiency of the Mazda lamp.

For series street lighting systems, reactance sockets may be used, the coils being mounted inside the casings and connected in parallel with the sockets, no regulating apparatus being required. For prices of reactance sockets, see another page.

STYLE AA

Designed especially for store lighting. Has an insulated ring for suspending from the ceiling and an Acorn Diffuser. If 9x13-inch Clear Ball Globe with a hole in the bottom is desired, deduct 50 cents list.

Trade No.	Description	Wt. Lbs.	Price Each
	Black Enamel Finish		
21034A	Medium screw socket.....	18	$8.70
21035A	Mogul Screw Socket.....	19	9.00
21036A	*Regent Film Socket.....	20	10.00
21037A	Without socket.....	17	8.20
	Mottled Copper Finish		
21038A	Medium screw socket.....	18	9.45
21039A	Mogul Screw Socket.....	19	9.75
21040A	*Regent Film Socket.....	20	10,75
21041A	Without socket.....	17	8.95

STYLE CA

Similar to Style A, with 20-inch porcelain enamel reflector and Acorn Diffuser. 9x13-inch Diffusing Ball with a hole in the bottom will be furnished when ordered.

	Black Enamel Finish		
21050A	Medium screw socket.....	21	10.70
21051A	Mogul Screw Socket.....	22	11.00
21052A	*Regent Film Socket.....	23	12.00
21053A	Without socket.....	20	10.20
	Mottled Copper Finish		
21054A	Medium screw socket.....	21	11.45
21055A	Mogul Screw Socket.....	22	11.75
21056A	*Regent Film Socket.....	23	12.75
21057A	Without socket.....	20	10.95

STYLE DA

Style DA Mazdaarcs are for replacing arc lamps in street lighting. Consist of Style CA Mazdaarc with inner-wired iron cross-arm, high voltage insulator and lamp-supporting pulley. Shipped complete, as shown, without Mazda lamp.

If lamp-supporting pulley is not wanted, deduct $1.45 from list. For mast arm pulley for 1¼ or 1½-inch (bore) pipe, add 20 cents to prices listed below.

	Black Enamel Finish		
21058A	Medium screw socket.....	36	13.20
21059A	Mogul Screw Socket.....	37	13.50
21060A	*Regent Film Socket.....	38	14.50
21061A	Without socket.....	35	12.70

If mottled copper casing is wanted, add 75 cents to list.

*Standard film socket shown on another page furnished in place of Regent when so ordered.

CUTTER SOL-LUX PENDANTS

FOR TYPE C LAMPS

SCHEDULE G—STANDARD PACKAGE QUANTITY, 10 OF ONE STYLE OR TRADE NUMBER



Sol-Lux Junior Pendant with 18-inch Reflector and Large Refractor



Sol-Lux Junior Pendant with 18-inch Reflector and Diffusing Bowl



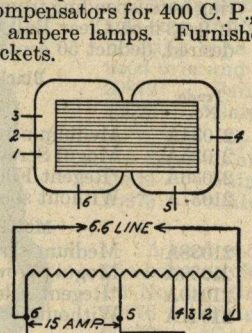
Sol-Lux Senior Pendant with Clear Pear Shaped Globe and Band Refractor

Cutter Sol-Lux Senior and Junior Pendants are the same in all respects except for the size of the lower part of the casing forming the reflector and glass holder. Compensators are used with either style. The upper part of the casing is made of iron with ornamental ribs forming ventilation for Type C lamps. The lower part of the casing is made of 20 gauge copper. All iron parts are finished with high grade weather resisting black enamel and copper parts in gun metal finish. Reflectors are made of steel and porcelain enameled.

The Junior Pendant has a hinged holder for Diffusing Bowl or Refractor or Sol-Lux Diffuser.

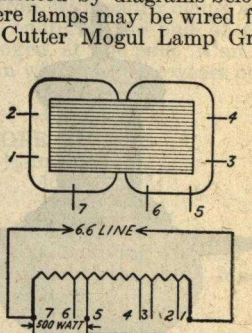
The Senior Pendant has a holder with bayonet attachment for pear shaped globes and is furnished with or without 24-inch reflectors as ordered.

Every Sol-Lux Pendant has external binding posts and is wired for 6.6 or 7.5 ampere line as specified. Compensators (auto-transformers) for 600 C. P. lamps have extra taps for 400 C. P. lamps. Likewise, compensators for 1000 C. P. lamps have extra taps for 600 C. P. lamps as indicated by diagrams below. Compensators for 400 C. P., 15 ampere lamps may be wired for 12 ampere lamps. Furnished with Cutter Mogul Lamp Grip Sockets.



216-162 Watt

Connect lamps to taps 5 and 6.
Connect one line to tap 6.
Connect other line to:
Tap 1 for 6.6 amp. line and 15 amp. lamp, 400 C. P.
Tap 2 for 7.5 amp. line and 15 amp. lamp, 400 C. P.
Tap 3 for 6.6 amp. line and 12 amp. lamp, 400 C. P.
Tap 4 for 7.5 amp. line and 12 amp. lamp, 400 C. P.



300-500 Watt

For 500 W. (1000 C. P.) lamp connect socket to taps 5 and 7 and series line to taps 1 and 7 for 6.6 amp. service, and to taps 2 and 7 for 7.7 amp. service.

For 350 W. (600 C. P.) lamp connect socket to taps 6 and 7 and series line to taps 3 and 7 for 6.6 amp. service, and to taps 4 and 7 for 7.5 ampere service.

SOL-LUX JUNIOR PENDANTS WITH COMPENSATORS

With 18-inch Reflector and Large Holophane Refractor

For 400 C. P., 15-amp. Lamp			For 600 C. P., 20-amp. Lamp			For 1000 C. P., 20-amp. Lamp		
Trade No.	Wt.,Lbs. Each	Price Each	Trade No.	Wt.,Lbs. Each	Price Each	Trade No.	Wt.,Lbs. Each	Price Each
22025	54	31.00	22026	58	32.25	22027	61	34.25
With 18-inch Reflector and Refractor Band								
22062	52	31.00	22063	56	32.25	22064	59	34.25
With 18-inch Reflector and Sol-Lux Diffuser								
22043	51	25.50	22044	55	26.75	22045	58	28.75
With 18-inch Reflector and Diffusing Bowl								
22052	54	26.00	22053	58	27.25	22054	61	29.25

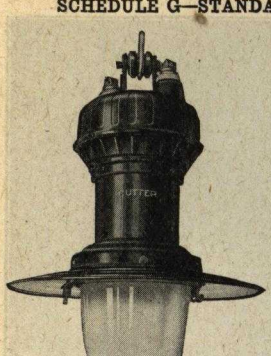
SOL-LUX SENIOR PENDANTS WITH COMPENSATORS

Without Reflector but with Pear Shaped Opal Globe								
22031	45	23.75	22032	49	25.00	22033	52	27.00
With 24-inch Reflector and Pear Shaped Opal Globe								
22034	55	26.75	22035	59	28.00	22036	62	30.00
With 24-inch Reflector, Band Refractor and Clear Globe								
22046	59	33.25	22047	63	34.50	22048	66	36.50
Without Reflector but with Band Refractor and Clear Globe								
22072	49	30.25	22073	53	31.50	22074	56	33.50

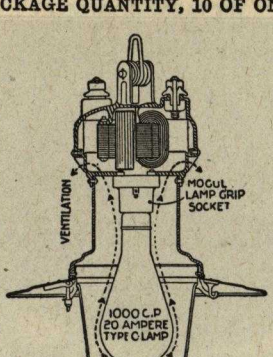
CUTTER SOL-LUX PENDANTS

FOR TYPE C LAMPS

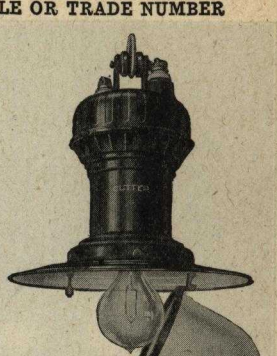
SCHEDULE G—STANDARD PACKAGE QUANTITY, 10 OF ONE STYLE OR TRADE NUMBER



Style C Pendant with Sol-lux Diffuser



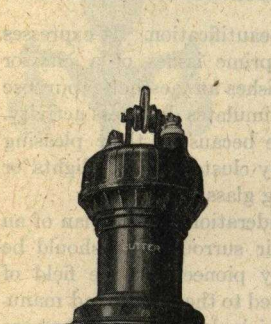
Sectional View Sol-lux Style C Pendant



Style C Pendant Showing Hinged Holder

Cutter Sol-Lux Style C Pendants are lighter in weight than the ordinary arc lamp, but of sufficient weight to prevent excessive swaying in the wind. Sturdy and simple construction, minimum number of parts, ample ventilation, external binding posts and insulated suspension ring, make these pendants ideal for street lighting purposes. They are practically indestructible. The casing is made entirely of high quality grey cast iron, and finished with weatherproof baked enamel. Equipped with Mogul Screw Lamp Grip Socket for multiple lamps or with compensators (auto transformers) for 15 and 20-ampere Type C Series Mazda Lamps. (Regent Film Sockets are furnished for straight series lamps).

Shipped complete as listed, with 18-inch porcelain enameled steel reflector, hinged holder for refractor or Sol-lux Diffuser and with or without glassware as ordered.*

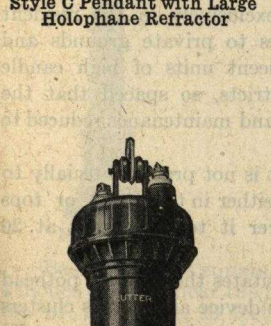


Style C Pendant with Large Holophane Refractor

SOL-LUX STYLE C PENDANTS WITHOUT COMPENSATORS

With Sol-Lux Diffuser

Mogul Screw Socket			Regent Film Socket		
Trade No.	Wt. Lbs. Each	Price Each	Trade No.	Wt. Lbs. Each	Price Each
22101	42	$12.00	22102	43	$13.00
		With Large Holophane Refractor			
22103	48	17.50	22104	49	18.50
		With Band Refractor			
22105	46	17.50	22106	47	18.50
		*With Diffusing Bowl			
22107	45	12.50	22108	46	13.50
		With Hinged Refractor Holder, Without Glassware			
22109	43	10.50	22110	44	11.50



Style C Pendant with Diffusing Bowl

SOL-LUX STYLE C PENDANTS WITH COMPENSATORS AND MOGUL SCREW SOCKETS

State on order how fixture is to be wired for line and lamp. See wiring diagrams on preceding page.

With Sol-Lux Diffuser

For 400 C. P. 15-amp. Lamp			For 600 C. P. 20-amp. Lamp			For 1000 C. P. 20-amp. Lamp		
Trade No.	Wt. Lbs. Each	Price Each	Trade No.	Wt. Lbs. Each	Price Each	Trade No.	Wt. Lbs. Each	Price Each
22139	45	$21.00	22140	47	$22.25	22141	52	$24.25
			With Large Holophane Refractor					
22142	51	26.50	22143	53	27.75	22144	58	29.75
			With Band Refractor					
22145	49	26.50	22146	51	27.75	22147	56	29.75
			*With Diffusing Bowl					
22148	48	21.50	22149	50	22.75	22150	55	24.75
			With Hinged Refractor Holder, Without Glassware					
22155	46	19.50	22156	48	20.75	22157	53	22.75

*Diffusing bowls are fastened with thumb screws; all other glassware with hinged holders.

ORNAMENTAL STREET LIGHTING SYSTEMS WITH CUTTER POSTS AND BRACKETS



Ornamental street lighting is the paramount attainment in city beautification. It expresses art and economy, progress and morality, safety and comfort as the prime issues of a city or town government. An installation of ornamental standards accomplishes an aesthetic purpose as well as a practical one. It encourages civic betterment and stimulates business activity. Streets are kept cleaner and building fronts are made more attractive because of their pleasing appearance by day. By night, adequate illumination is afforded by clusters of soft lights or single units of high candle power lamps enclosed in globes of diffusing glass.

The selection of artistic standards is the most important consideration in the plan of an ornamental lighting system. The posts should harmonize with their surroundings, should be sturdy in construction and easy to install. Cutter Posts are made by pioneers in the field of outdoor electric lighting. Over a quarter of a century has been devoted to the design and manufacture of electrical lighting fixtures. Cutter Posts are artistic and original in design. They are made of best quality grey iron, the recognized standard material for ornamental posts. They are made from metal patterns, thus insuring clean castings with ornaments true to design. There are many designs to select from, so that one can be found exactly suited to any individual requirement.

Until recently, the single light standard has been used almost exclusively in the resident portions of the city; for park and boulevard lighting and for entrances to private grounds and public buildings. The development of the high efficiency incandescent units of high candle power has made it possible to install single light posts in business districts, so spaced that the illumination is adequate for all purposes, and the cost of installation and maintenance reduced to a minimum.

These new lamps are more efficient in the 20-ampere class. As it is not practical usually to supply power to the lamps at this value, compensators are mounted either in the bases or tops of the posts to take power from a 6.6 or 7.5-ampere line and deliver it to the lamps at 20 amperes.

Operating these lamps on a series circuit of high potential necessitates the use of a pothead in the base of the post. This is described on a following page. This device also makes clusters of series lamps economical and safe, whereas in the past, multiple lamps have been used generally for cluster lighting.

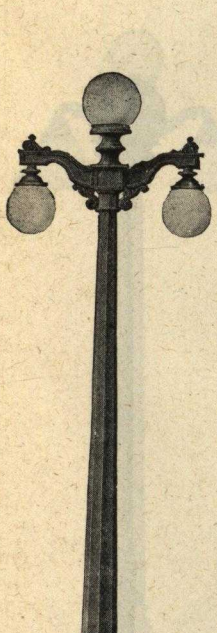
The popular designs of Cutter Posts are listed on the following pages. Post parts are listed on the last two pages of this section. Special designs and drawings, showing many pleasing combinations will be submitted upon request. Our Engineering Service Department plans complete systems and furnishes expert advice when request is made.

Unless otherwise ordered, all Cutter Posts, Newels and Brackets will be furnished in black finish.

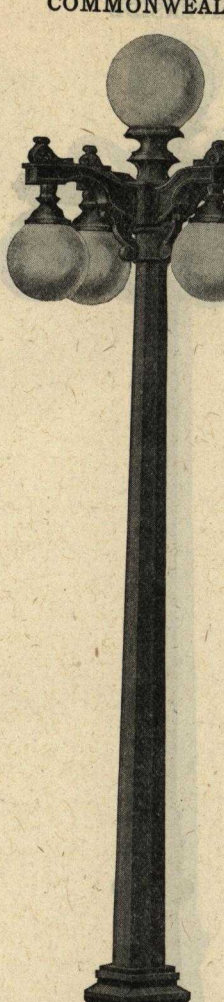
CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

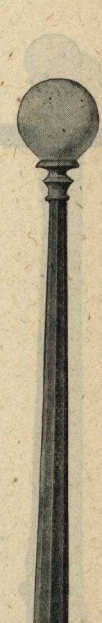
COMMONWEALTH



No. 23502



No. 23504



No. 23500

Base, 18 inches square, 2 feet high. Column, 8 inches octagon above the base, tapering to 4 inches octagon near the top. Height from ground to bottom of pendent globes, 11 feet; to top of top globe, 14 feet 3 inches; to top of globe on the 1-light post, 13 feet 6 inches. Distance from center to center of opposite globes, 36 inches. Pendent globes, 6x12 inches; top globe, 8x14 inches; globe for 1-light post, 8x16 inches.

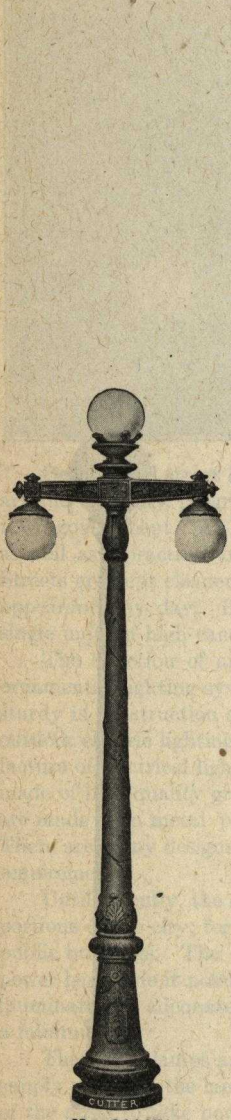
Trade No.	No. of Lights	Wt., Lbs. Each	Price Each	Trade No.	No. of Lights	Wt. Lbs. Each	Price Each
23500	1	475	$55.00	23503	4	665	$65.00
23501	2	560	60.00	23504	5	665	65.00
23502	3	560	60.00	....	....	....	....

Prices of posts include medium screw sockets, but not the globes, wiring, or foundation bolts. Use four 1-inch foundation bolts. See page of post parts.

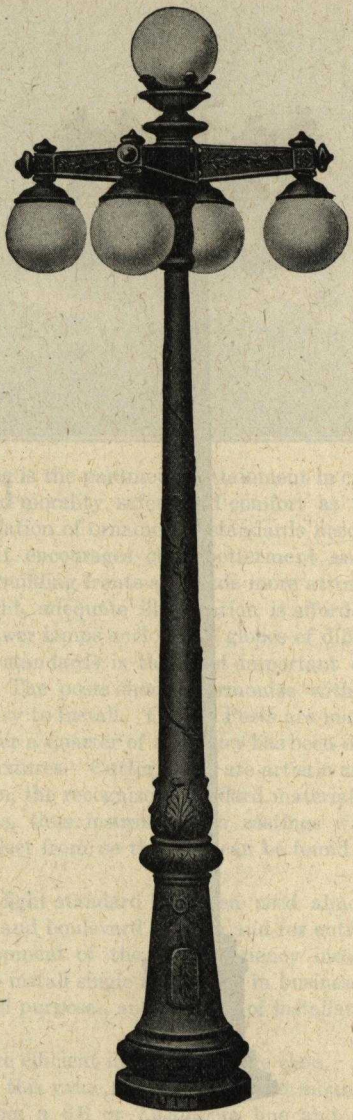
CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

RIVERSIDE



No. 21107



No. 21109



No. 21105

Base, 18 inches in diameter, 3 feet 6 inches high. Column, 8½ inches largest diameter, tapering to 3½ inches in diameter near the top. Height from ground to bottom of pendent globes, 11 feet; to top of top globe, 14 feet; to top of globe on the 1-light post 13 feet, 2 inches. Distance from center to center of opposite globes, 40 inches. All globes 8x12 inches, except for 1-light post, which is 8x16 inches.

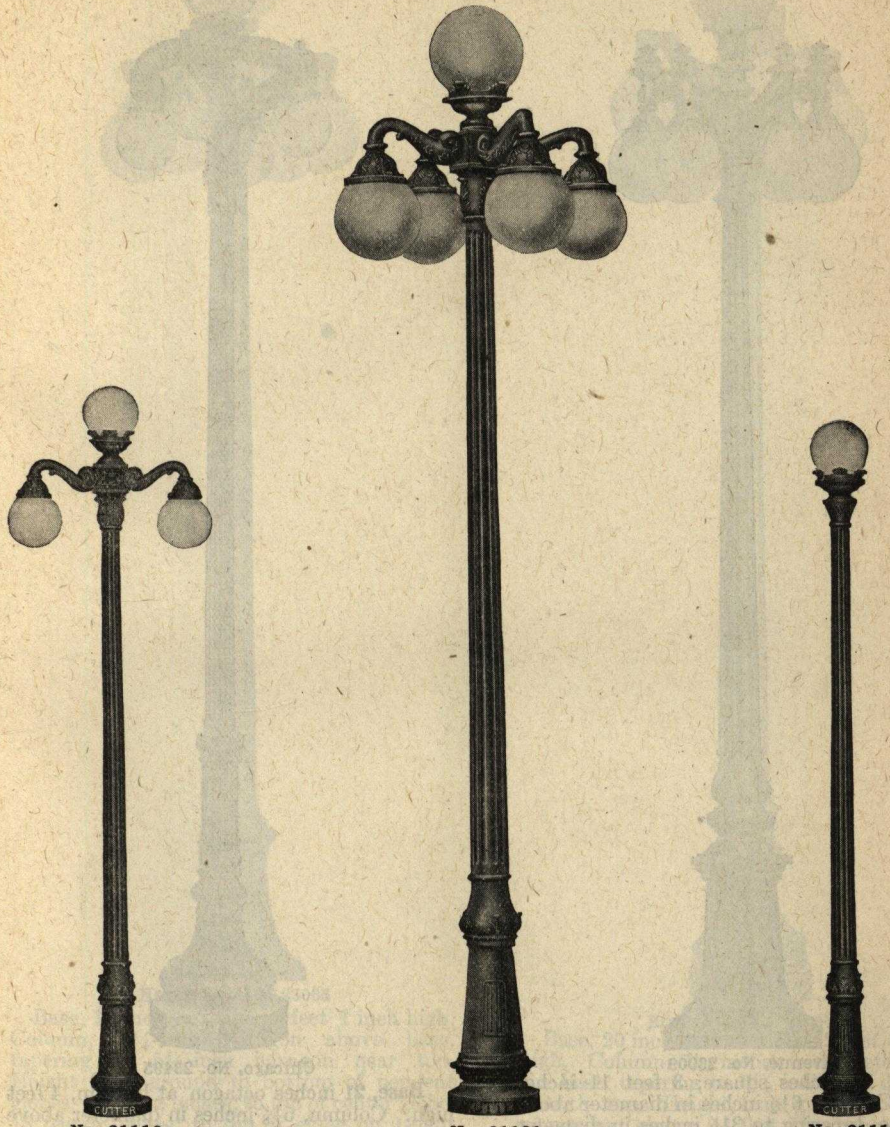
Trade No.	No. of Lights	Wt., Lbs. Each	Price Each	Trade No.	No. of Lights	Wt., Lbs. Each	Price Each
21105	1	450	$50.00	21108	4	585	$60.00
21106	2	500	55.00	21109	5	585	60.00
21107	3	500	55.00	....	....	....	....

Prices of posts include medium screw sockets, but not the globes, wiring, or foundation bolts. Use four ⅞ or 1-inch foundation bolts. See page of post parts.

CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

BOULEVARD



No. 21119 **No. 21121** **No. 21117**

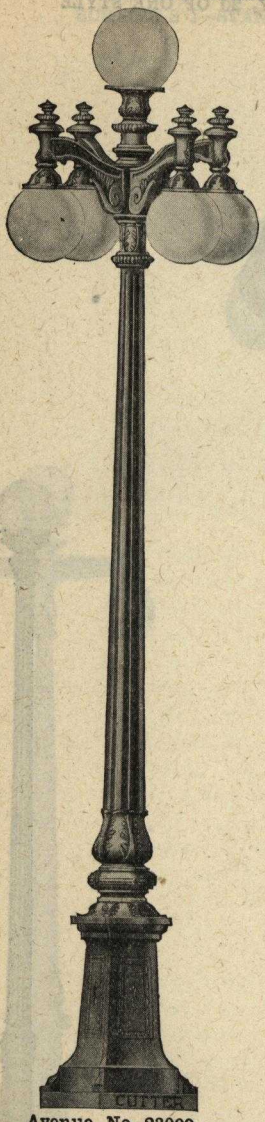
Base, 14 inches in diameter, 2 feet 10 inches high. Column, 5½ inches in diameter above the base, tapering to 3½ inches in diameter near the top. Height, from ground to bottom of pendent globes, 10 feet; to top of top globe, 13 feet 2 inches; to top of globe on the 1-light post, 12 feet 7 inches. Distance from center to center of opposite globes, 32 inches. Pendent globes, 6x10 inches; top globe, 6x12 inches; globe for 1-light post, 8x14 inches.

Trade No.	No. of Lights	Wt., Lbs. Each	Price Each	Trade No.	No. of Lights	Wt., Lbs. Each	Price Each
21117	1	300	$35.00	21120	4	375	$47.50
21118	2	335	41.50	21121	5	375	47.50
21119	3	335	41.50	....	....	....	....

Prices of posts include medium screw sockets, but not the globes, wiring, or foundation bolts. Use four ¾-inch foundation bolts. See page of post parts.

CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE



Avenue, No. 23009

Base, 18 inches square, 3 feet 11 inches high. Column, 6½ inches in diameter above the base, tapering to 3½ inches in diameter near the top. Height from ground to bottom of pendent globes, 11 feet; to top of top globe, 14 feet 4 inches; to top of globe on the 1-light post, 13 feet. Distance from center to center of opposite globes, 32 inches. Pendent globes 6x12 inches; top globe, 8x14 inches; globe for 1-light post, 8x16 inches. Use four ⅞ or 1-inch foundation bolts.

Trade No.	No. of Lights	Wt., Lbs., Each	Price, Each
23005	1	500	$55.00
23006	2	575	61.00
23007	3	575	61.00
23008	4	675	67.50
23009	5	675	67.50



Chicago, No. 23495

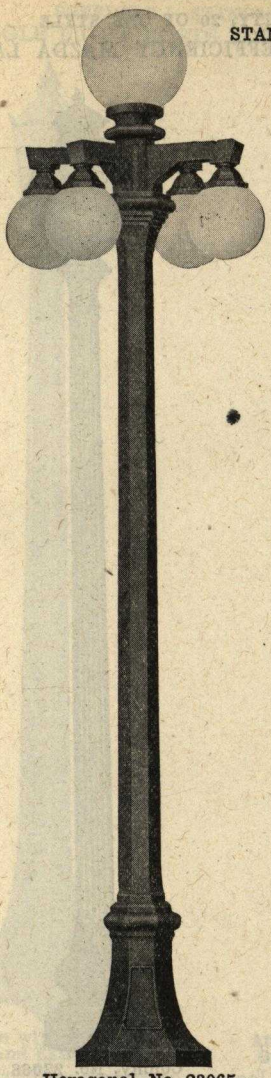
Base, 21 inches octagon at bottom, 4 feet high. Column, 5⅛ inches in diameter above the base, tapering to 4 inches in diameter near the top. Height, from ground to center of pendent globes, 12 feet; to top of top globe, 14 feet 7 inches. Distance from center to center of opposite globes, 26 inches. Pendent globes, 6x9 inches; top globe, 6x12 inches. Use four ¾-inch foundation bolts.

Trade No.	No. of Lights	Wt., Lbs. Each	Price Each
23000	1	500	$55.00
23495	5	665	65.00

Prices of posts include medium screw sockets, but not the globes, wiring or foundation bolts.

CUTTER ORNAMENTAL POSTS

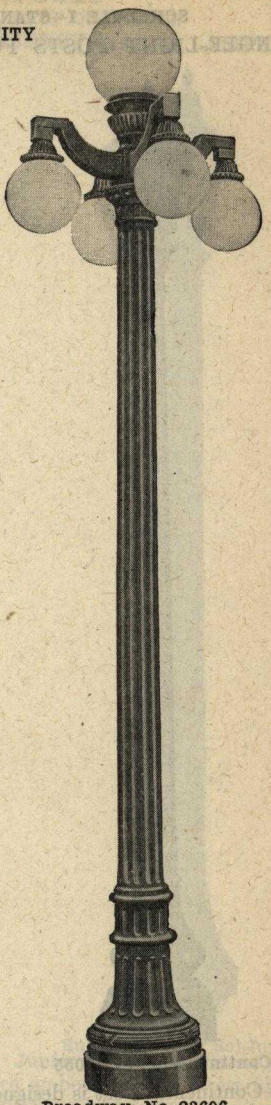
SCHEDULE I
STANDARD PACKAGE QUANTITY
20 OF ONE STYLE



Hexagonal, No. 23065

Base, 18-inch hexagon, 2 feet 1 inch high. Column, 6¾-inch hexagon above base, tapering to 5¼-inch hexagon near top. Height from ground to bottom of pendent globes, 10 feet 2 inches; to top of center globe, 13 feet 5 inches; to top of globe on 1-light post, 12 feet 11 inches. Distance from center to center of opposite globes, 32 inches. Pendent globes, 6x12 inches; top globe, 8x16 inches; globe for 1-light post, 8x16 inches. Use four ¾-inch foundation bolts.

Trade No.	No. of Lights	Wt., Lbs., Each	Price, Each
23061	1	400	$41.50
23062	2	450	48.00
23063	3	450	48.00
23064	4	485	53.00
23065	5	485	53.00



Broadway, No. 23696

Base, 20 inches in diameter, 2 feet 8 inches high. Column, 7½ inches in diameter above the base, tapering to 6⅛ inches in diameter near the top. Height, from ground to bottom of pendent globes, 11 feet 7½ inches; to top of center globe, 15 feet; to top of globe on 1-light post, 14 feet. Distance from center to center of opposite globes, 32 inches. Pendent globes, 6x12 inches; top globe, 8x16 inches. Globe for 1-light post, 8x16 inches. Use four 1-inch foundation bolts.

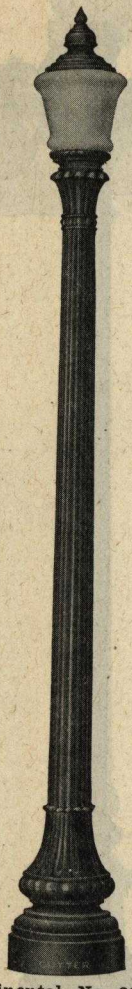
Trade No.	No. of Lights	Wt., Lbs., Each	Price, Each
23692	1	560	$56.50
23693	2	650	62.50
23694	3	650	62.50
23695	4	700	67.50
23696	5	700	67.50

Prices of posts include medium screw sockets, but not the globes, wiring, or foundation bolts.

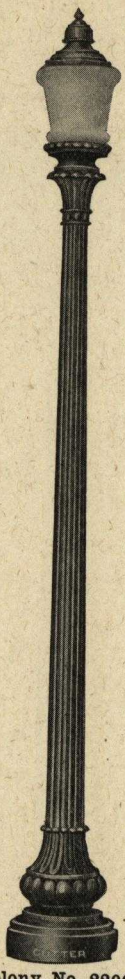
CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

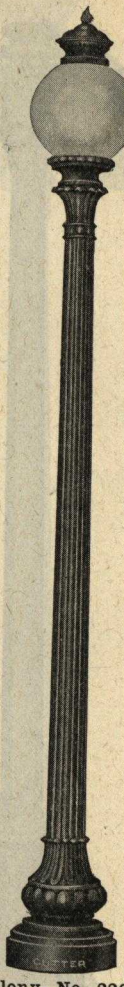
SINGLE-LIGHT POSTS FOR TYPE C HIGH EFFICIENCY MAZDA LAMPS



Continental, No. 22055



Colony, No. 22065



Colony, No. 22068

The Continental Post is designed for "White Way" lighting, with Sol-lux Senior Top which accommodates compensators for 15 and 20-ampere series Mazda lamps. Base, 20 inches in diameter, 31 inches high. Column, 7½ inches in diameter above the base, tapering to 5¾ inches in diameter near the top. Height to bottom of globe, 12 feet 6 inches; to top of ventilator on Sol-lux Senior Globe, 14 feet 8 inches; to top of ventilator on 16-inch ball globe, 14 feet 4 inches. Globe holder has 8-inch fitter. Use four ⅞ or 1-inch foundation bolts.

The Colony Post is a smaller size of the Continental. Base, 16 inches in diameter, 21 inches high. Column, 5¾ inches in diameter above the base, tapering to 3¾ inches in diameter near the top. Height to bottom of globe, 10 feet; to top of ventilator on Sol-lux Junior Globe, 11 feet 11 inches; to top of ventilator on 16-inch globe, 11 feet 10 inches. Globe holder has 8-inch fitter and will accommodate compensator. Use three ¾-inch foundation bolts.

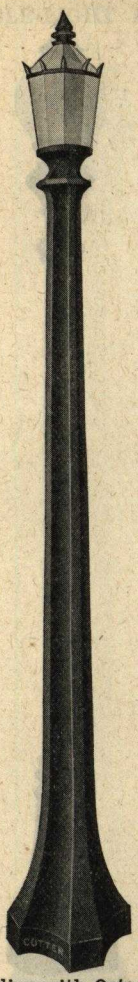
Description	Continental Trade No.	Continental Wt., Lbs. Each	Continental Price Each	Colony Trade No.	Colony Wt., Lbs. Each	Colony Price Each
*With globe holder and Mogul Screw Socket	22051	500	$52.80	22061	300	$35.30
With Sol-lux Ornamental Top, Mogul Screw Socket	22055	520	70.80	22065	320	50.30
Same, with Regent Film Socket	22056	521	71.80	22066	321	51.30
With 16-in. diffusing ball, ventilator and Mogul Socket	22058	520	63.30	22068	320	45.80
Same, with Regent Film Socket	22059	521	64.30	22069	321	46.80

*See another page for prices of compensators, glassware, potheads, sockets and foundation bolts.

CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

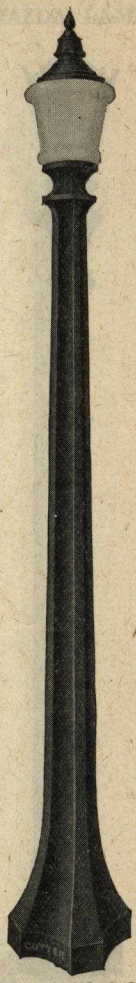
SINGLE LIGHT POSTS FOR TYPE C HIGH EFFICIENCY MAZDA LAMPS



Arcadian with Octagonal Senior Top and Extension Capitol



Arcadian No. 23160 with Octagonal Senior Globe



Suburban with Sol-lux Junior Top and Extension Capitol

The Arcadian Post is an original design of simple elegance embodying the latest ideas of art. It is adapted to either business or residence districts of all cities and towns.

Made in two sizes designated Arcadian and Suburban, furnished with or without extension capitol. Senior tops are used with the Arcadian; Junior tops with Suburban. The bases are made in 20-inch and 16-inch octagons respectively. Height from ground to bottom of globe on the Arcadian Post, 12 feet; on Suburban, 10 feet. The extension capitol is made to receive compensators for 15 and 20 ampere lamps and adds 5½ inches to the height. Use 4¾-inch foundation bolts.

Description	Arcadian Trade No.	Arcadian Wt., Lbs. Each	Arcadian Price Each	Suburban Trade No.	Suburban Wt., Lbs. Each	Suburban Price Each
*With 8-in. globe holder and medium screw socket	23157	500	$52.50	23164	350	$40.00
Same, with Mogul Screw Socket	23158	501	52.80	23165	351	40.30
Same, with Regent Film Socket	23159	502	53.80	23166	352	41.30
With octagonal top, Mogul Socket	23160	526	70.80	23167	373	57.30
Same, with Regent Film Socket	23161	527	71.80	23168	374	58.30
With Sol-lux Top, Mogul Screw Socket	23162	521	70.80	23169	368	55.30
Same, with Regent Film Socket	23163	522	71.80	23170	369	56.30

Extension capitol for compensator coil furnished when so ordered for $1.50 list additional.

*Prices do not include glassware, compensators, wiring, lamps or foundation bolts.

CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

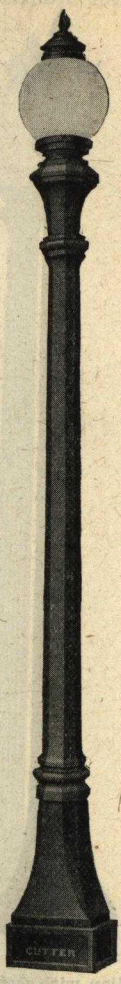
SINGLE LIGHT STANDARDS FOR TYPE C HIGH EFFICIENCY MAZDA LAMPS



Metropolitan, No. 22536
With Octagonal Senior Top



Metropolitan, No. 22538
With Sol-lux Senior Top



Metropolitan, No. 22540
With 16-in. Diffusing Ball and Ventilator

The Metropolitan Post is designed for the lighting of business districts. It is octagonal in shape except the lower portion of the base which is square. Furnished with octagonal casing for compensator coils.*

Base, 18 inches square, 3 feet high. Column, 6¾ inches, octagon above the base, tapering to 5 inches octagonal near the top. Height from ground to bottom of globe, 12 feet; to top of ventilator on octagonal globe, 14 feet 3 inches; to top of ventilator on Sol-lux Senior Globe, 14 feet 2 inches; to top of ventilator on 16-inch diffusing ball, 13 feet 7 inches. Use four ¾-inch foundation bolts.

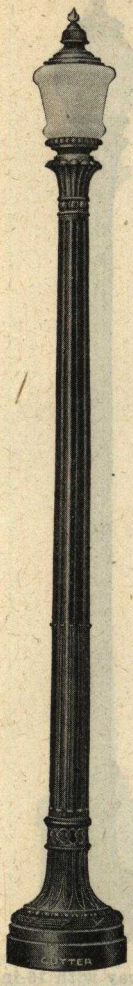
Trade No.	Description	Wt., Lbs. Each	Price Each
22534	With 8-inch globe holder and Mogul Screw Socket	450	$50.00
22535	Same, with Regent Film Socket	451	51.00
22536	With Octagonal Senior Top, Mogul Screw Socket	475	70.00
22537	Same, with Regent Film Socket	476	71.00
22538	With Sol-lux Senior Top, Mogul Screw Socket	470	68.00
22539	Same, with Regent Film Socket	471	69.00
22540	With 16-inch diffusing ball, ventilator, Mogul Socket	470	60.50
22541	Same, with Regent Film Socket	471	61.50

*For prices of compensators, foundation bolts, etc., see other pages.

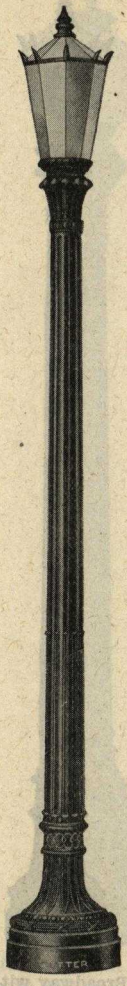
CUTTER ORNAMENTAL POSTS

SCHEDULE I — STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

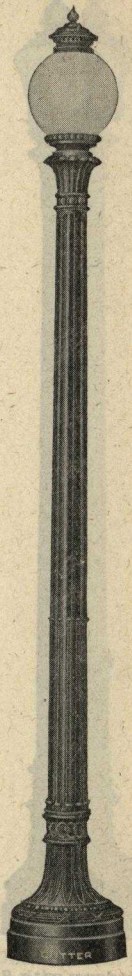
SINGLE-LIGHT POSTS FOR TYPE C HIGH EFFICIENCY MAZDA LAMPS



Capitol, No. 22075



Capitol, No. 22077



Capitol, No. 22078

The Capitol Post is a massive standard of highly artistic design built especially for the lighting of business districts with high candle power incandescent lamps. Base, 20 inches in diameter, 2 feet 5 inches high. Column, 7½ inches in diameter above the base, tapering to 6⅛ inches in diameter near the top.

It is made in two heights, 13 feet 5 inches and 11 feet 4 inches to bottom of Sol-Lux globe. The heights to top of ventilator on Sol-Lux Senior Globe are 15 feet 7 inches and 13 feet 6 inches, respectively.

Description	13-foot 5-inch Posts Trade No.	Wt., Lbs. Each	Price Each	11-foot 4-inch Posts Trade No.	Wt., Lbs. Each	Price Each
With Sol-Lux Ornamental Top, Mogul Socket	22075	600	$78.30	22097	500	$70.80
Same, with Regent Film Socket	22076	601	79.30	22098	501	71.80
With Octagonal Senior Top, Mogul Socket	22077	600	80.30	22084	500	72.80
Same with Regent Film Socket	22083	601	81.30	22087	501	73.80
With 16-inch diffusing ball, ventilator and Mogul Socket	22078	600	70.80	22099	500	63.30
Same, with Regent Film Socket	22079	601	71.80	22100	501	64.30

Use four 1-inch foundation bolts. For prices of bolts, compensators, etc., see another page.

CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

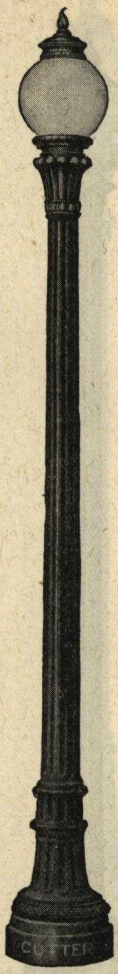
SINGLE LIGHT POSTS FOR TYPE C HIGH EFFICIENCY MAZDA LAMPS



Broadway with Sol-lux Senior Ornamental Top



Broadway with Octagonal Senior Globe



Broadway with 16-inch Diffusing Ball Ventilator

The Broadway Post is a massive standard of simple and artistic design. It is especially adapted to white way lighting in large cities. Base, 20 inches diameter, 2 feet 8 inches high. Column 7½ inches diameter above the base, tapering to 6⅛ inches diameter near the top. Height from ground to bottom of globe, 13 feet 6 inches; to top of ventilator on globe, 15 feet 9 inches. Sol-lux Senior casing will accommodate compensator and has an 8-inch globe fitter.

The Plaza Post is of the same design and dimensions as the Broadway, but shorter. Designed for white way lighting in small cities and towns and for residence districts of large cities. Height from ground to bottom of globe, 11 feet, 6 inches; to top of ventilator, 13 feet, 9 inches.

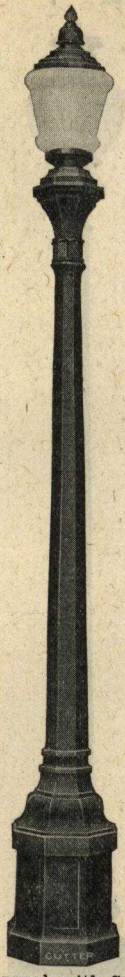
Description	Broadway Trade No.	Broadway Wt. Lbs. Each	Broadway Price Each	Plaza Trade No.	Plaza Wt. Lbs. Each	Plaza Price Each
With Sol-lux Senior Top, Mogul Socket	23763	600	$75.80	23769	525	$70.80
Same, with Regent Film Socket	23764	601	76.80	23770	526	71.80
With Octagonal Senior Top, Mogul Socket	23765	600	77.80	23771	525	72.80
Same, with Regent Film Socket	23766	601	78.80	23772	526	73.80
With 16-inch Diffusing Ball, Ventilator, Mogul Socket	23767	600	68.30	23773	525	63.30
Same, with Regent Film Socket	23768	601	69.30	23774	526	64.30

Use four 1-inch foundation bolts. For bolts, compensators, etc., see other pages.

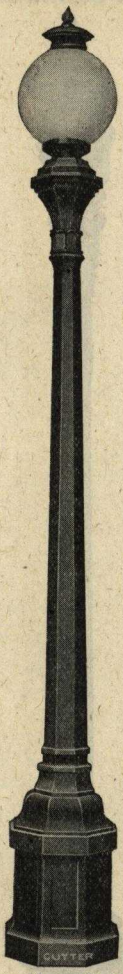
CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

SINGLE-LIGHT POSTS FOR TYPE C HIGH EFFICIENCY MAZDA LAMPS



Octagonal, with Sol-lux Senior Ornamental Top



Octagonal, with 16-inch Diffusing Ball and Ventilator



Chicago, with Sol-lux Junior Ornamental Top

The Octagonal Post conforms to the latest ideas of artistic design. Straight lines and graceful proportions make it a standard of simple elegance, one which harmonizes with surroundings in almost every locality. The top accommodates compensators for 15 and 20-ampere lamps and has an 8-inch globe fitter. The post is made in two heights. Base, 21 inches octagon, 3 feet high. Column, 8 inches octagon above the base, tapering to 4½ inches octagon near the top. Heights to bottom of globe, 11 feet 9 inches and 15 feet 4 inches, respectively. Use four 1-inch foundation bolts.

The Chicago Post has a 21-inch octagonal base. Column, 5½ inches in diameter above the base, tapering to 4 inches in diameter near the top. Height to bottom of globe, 12 feet. Use four ¾-inch foundation bolts.

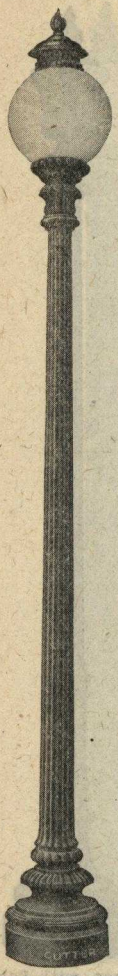
Trade No.	Description	Wt., Lbs. Each	Price Each
22111	11-ft. 9-in. Octagonal, Casing with 8-in. fitter, Mogul Socket	490	$55.30
22112	Same, with Regent Film Socket	491	56.30
22121	15-ft. 5-in. Octagonal, Casing with 8-in. fitter, Mogul Socket	585	67.80
22122	Same, with Regent Film Socket	586	68.80
22131	Chicago, with Sol-lux Junior Casing with 8-in. fitter, Mogul Socket	500	55.30
22132	Same, with Regent Film Socket	501	56.30

Prices do not include glassware, ventilators, compensators or foundation bolts. See page of post parts.

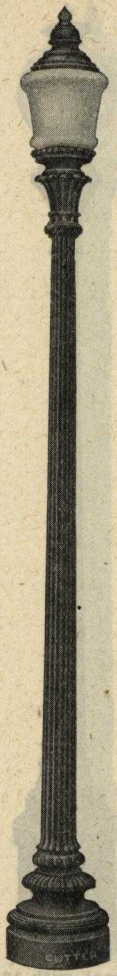
CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

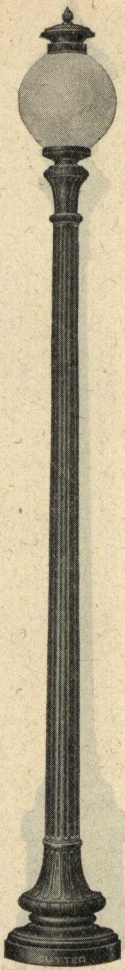
SINGLE-LIGHT STANDARDS FOR TYPE C HIGH EFFICIENCY MAZDA LAMPS



Park View, with 16-inch Diffusing Ball and Ventilator



Park View, with Sol-lux Junior Top



Villa, with 16-inch Diffusing Ball and Ventilator

The Park View Post is designed especially for lighting parks, boulevards and entrances to public buildings. Base, 16 inches in diameter, 17 inches high. Column, 5½ inches in diameter above the base, tapering to 3½ inches in diameter near the top. Height to top of standard globe holder, 10 feet; to bottom of Sol-lux Junior Globe, 10 feet 3½ inches; to top of ventilator on same, 12 feet 2½ inches; to top of ventilator on 16-inch ball globe, 12 feet.

The Villa design has a base 17 inches in diameter, 18¼ inches high. Column, 5 inches in diameter above the base, tapering to 2⅞ inches in diameter near the top. Height to top of standard globe holder, 10 feet; to top of ventilator on 16-inch ball globe, 12 feet. Standard globe holder has 8-inch fitter.

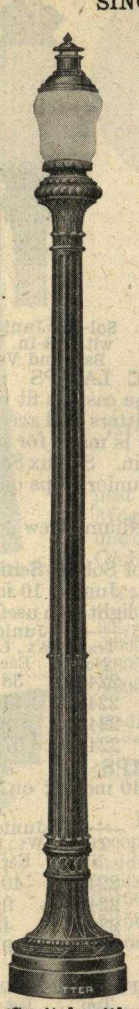
Description	Park View Trade No.	Park View Wt., Lbs. Each	Park View Price Each	Villa Trade No.	Villa Wt., Lbs. Each	Villa Price Each
*With 8-in. standard globe holder and medium screw socket	22435	300	$35.00	22426	300	$35.00
*Same, with Mogul Screw Socket	22436	301	35.30	22427	301	35.30
*Same, with Regent Film Socket	22437	302	36.30	22428	302	36.30
With Sol-lux Junior Top, Mogul Socket	22431	312	51.00	....	....	....
Same, with Regent Film Socket	22432	313	52.00	....	....	....
With 16-inch diffusing ball, ventilator and Mogul Socket	22433	312	45.80	22429	312	45.80
Same, with Regent Film Socket	22434	313	46.80	22430	313	46.80

*Glassware and ventilators extra. Use three ¾-inch foundation bolts. See page of post parts.

CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

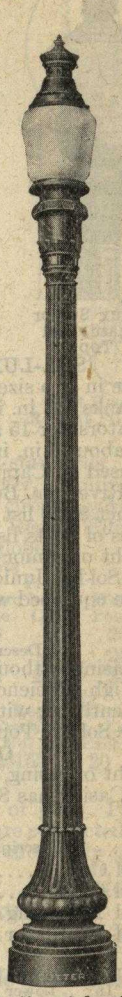
SINGLE-LIGHT STANDARDS FOR NOVALUX TOPS



Capitol, with Novalux Top



White Way, with Novalux Top



Continental, with Novalux Top

These posts are designed for use with inverted arc lamps, but prices do not include arc lamps. The columns have threaded holes in the top to receive screws for holding the insulator of the arc lamp. The dimensions are practically the same for all posts, except that the White Way and Capitol styles are made in shorter lengths as designated.

The bases are 20 inches in diameter and 2 feet 7 inches high. The columns are 7½ inches in diameter above the base, tapering to about 6 inches in diameter near the top. Height to bottom of inverted arc lamp, 12 feet 3 inches, except for Continental, which is 11 feet 5½ inches. Height to center of lamp of White Way type, 14 feet 6 inches; Residential, 12 feet.

Description	Ship. Wt., Lbs. Each	For Westinghouse Flame Lamp Trade No.	For Westinghouse Flame Lamp Price Each	For General Electric Novalux Top Trade No.	For General Electric Novalux Top Price Each
Capitol, 14½ ft. to lamp center	550	22090	$52.50	22095	$52.50
Capitol, 12 ft. to lamp center	465	22070	45.00	22080	45.00
White Way	540	22091	50.00	22439	50.00
Residential	465	22092	45.00	22438	45.00
Continental	510	22094	47.50	22096	47.50

Use four 1-inch foundation bolts.

PARTS FOR CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER



Sol-lux Senior Ornamental Top



Sol-lux Junior Ornamental Top



Octagonal Senior Ornamental Top



Sol-lux Junior Casing with 16-in. Diffusing Ball and Ventilator

SOL-LUX ORNAMENTAL POST TOPS FOR TYPE C LAMPS

Made in two sizes, designated Senior and Junior, respectively. The casings fit over cylindrical shanks 3½ in. in diameter and 5 in. high. Both have 8-in. globe fitters and accommodate compensators for 15 and 20-ampere Type C lamps. The Senior Casing is made for poles with columns about 6 in. in diameter near the top; Junior Casing, about 3½ in. Sol-lux Senior Tops may be used on Capitol, Continental, Broadway and Plaza Columns; Junior Tops on Chicago, Avenue, Riverside, Boulevard, Midway and Park View Columns.

Deduct $3.20 list from prices of 1-light posts for globe holder and medium screw socket and add prices of parts listed below.

Height of Senior Casing, 14¼ in.; Junior Casing, 14¼ in. Height of Sol-lux Senior Globe, 14¾ in.; Sol-lux Junior Globe, 13 in. Height of Senior Ventilator, 12 in.; Junior, 10 in. Ventilators are equipped with reflectors which direct the maximum amount of light into useful planes.

	Senior			Junior		
Description	Trade No.	Wt., Lbs. Each	Price Each	Trade No.	Wt., Lbs. Each	Price Each
Sol-lux Casing without socket*	22477	40	$7.00	22481	38	$5.00
Sol-lux High Efficiency Globe	22478	13	7.50	22482	11	6.00
Sol-lux Ventilator with reflector	22479	9	10.50	22483	8	9.00
Complete Sol-lux Top, less socket*	22480	62	25.00	22484	57	20.00

OCTAGONAL POST TOPS FOR TYPE C LAMPS

Height of casing, 15 inches. Height to top of ventilator on Senior, 40 inches; on Junior, 36 inches. Casing has 8-inch globe fitter.

	Senior			Junior		
Description	Trade No.	Wt., Lbs. Each	Price, Each	Trade No.	Wt., Lbs., Each	Price Each
Octagonal Casing	22463	50	$10.00	22467	40	$7.00
Octagonal Globe	22464	11	9.50	22468	9	7.50
Octagonal Trimming	22465	5	6.00	22469	4	5.00
Octagonal Ventilator	22466	9	4.50	22470	9	4.50

DIFFUSING BALL GLOBES

Trade No.	Diam. In.	Size of Fitter, In. Lower	Top	Wt., Lbs. Each	Price Each	Trade No.	Diam. In.	Size of Fitter, In. Lower	Top	Wt., Lbs. Each	Price Each
21841	8	6	..	5	$1.50	22488	14	7	..	14	$3.50
21830	9	6	..	6	1.75	22489	14	8	..	14	3.50
21842	10	6	..	7	2.00	22490	16	8	..	18	6.50
21831	12	6	..	8	2.50	21791	16	8	6	18	6.50
22453	12	6	6	8	2.50	22492	18	8	6	26	9.00
22487	12	8	..	8	2.50	22493	20	8¼	..	36	25.00
22454	14	6	6	14	3.50	....	..	....	..	..	....

For globes with top fitters, order ventilators.

VENTILATORS FOR DIFFUSING BALL GLOBES

Trade No.	Description	Wt., Lbs., Ea.	Price, Each
21792	For globe with 6-inch top fitter	9	$4.00

COMPENSATORS WITH MOGUL SOCKETS

Furnished with attachments for mounting in Sol-lux and Octagonal Post Tops.

Trade Number			Wt., Lbs.	Price
For 6.6-amp.	For 7.5-amp.	Description	Each	Each
22494	22497	For 400 candle power, 15-ampere lamp	7	$10.80
22495	22498	For 600 candle power, 20-ampere lamp	9	11.80
22496	22499	For 1000 candle power, 20-ampere lamp	14	13.80

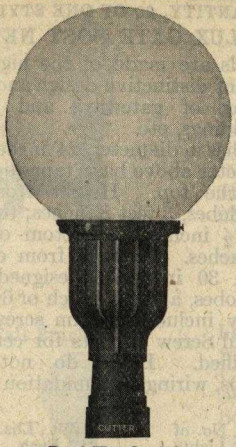
*Add following list prices for sockets: Medium screw, 50 cents; Mogul Screw, 80 cents; Regent Film, $1.80. Compensators with Mogul Screw Sockets are listed separately. Diffusing ball globes and ventilators for same are listed above.

PARTS FOR CUTTER ORNAMENTAL POSTS

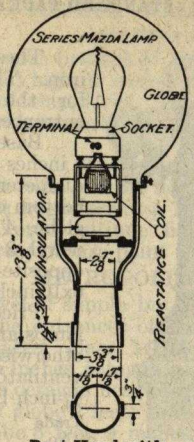
SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER



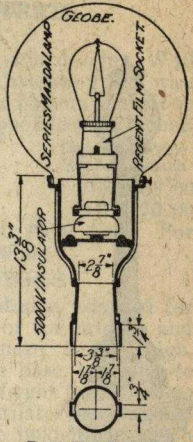
Gas Post with Head



Post Head with 7x14-in. Diffusing Ball



Post Head with Reactance Coil



Post Head with Regent Film Socket

POST HEADS

Designed for converting gas posts into electric light standards. Fits gas post columns or steel poles of 2½-inch internal diameter. Equipped with Mogul Socket and Reactance Coil (for use on series circuits without regulator) or with Cutter Lamp Grip Multiple Sockets or Regent Film Socket. Globe holder has 7-inch fitter. Prices do not include globes.

With Reactance Coils and Mogul Sockets

Trade Number 4-ampere 60-cycle	Trade Number 6.6-ampere 60-cycle	Size of Lamp C. P.	Weight Pounds Each	Price	Trade Number 4-ampere 60-cycle	Trade Number 6.6-ampere 60-cycle	Size of Lamp C. P.	Weight Pounds Each	Price
23051	23147	32	21	$11.60	23054	23150	80	23	$12.60
23052	23148	40	21½	11.75	23055	23151	100	25	12.80
23053	23149	60	22	12.00	23056	23152	200	28	16.20

With Sockets only

Medium Screw Socket Trade No.	Wt., Lbs. Each	Price Each	Mogul Screw Socket Trade No.	Wt., Lbs. Each	Price Each	Regent Film Socket Trade No.	Wt., Lbs. Each	Price Each
23153	18	$5.50	23154	19	$5.80	23155	20	$6.80



Pothead

POTHEADS

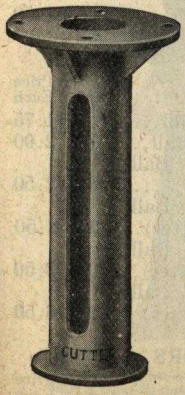
Has an iron bracket support for mounting in base of post. Provides a receptacle of high insulation where underground cables are connected to wires inside the post and hermetically sealed in. Cables are effectively grounded.

Trade No.	Description	Wt., Ea.	Price, Ea.
23156	In ordering, give external diameter of cables	10	$3.00
23156A	Sealing compound, (one pound per pothead) extra		.12
23156B	Iron support for imbedding in concrete	5	.75

GROUND SECTIONS

Prices of posts on preceding pages do not include foundation bolts or ground sections. When cast iron ground sections are used, bolts are supplied for fastening bases of posts to ground sections. Foundation bolts listed below.

21138	Commonwealth and Midway	225	16.00
21144	Broadway, Plaza, Capitol, Continental, White Way, Residential, Park Way and Flaming Arc	225	16.00
21139	Avenue	225	16.00
21115	Chicago	225	16.00
21140	Riverside	160	13.00
21142	Park View and Colony	150	12.50
21116	Villa	160	13.00
21141	Boulevard	110	12.00



Cast Iron Ground Section

FOUNDATION BOLTS

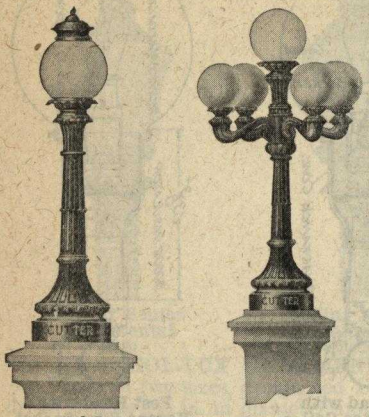
Prices cover round head machine bolts with hexagon nuts. Wrought washers are 10 per cent list extra.

Length, Bolt Inches	Price, Each — Diameter of Bolts ¾-in.	⅞-in.	1-in.	1¼-in.	Length, Bolt Inches	Diameter of Bolts ¾-in.	⅞-in.	1-in.	1¼-in.
8	$0.14	$0.18	$0.30	$0.55	18	$0.24	$0.31	$0.46	$0.85
10	.16	.21	.32	.58	20	....	.35	.50	.90
12	.18	.24	.36	.65	24	....	....	.58	1.00
15	.22	.28	.40	.75	..	....	....	....	....

CUTTER ORNAMENTAL NEWELS

FOR TYPE C LAMPS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE



Sol-Lux Gate Post Newels

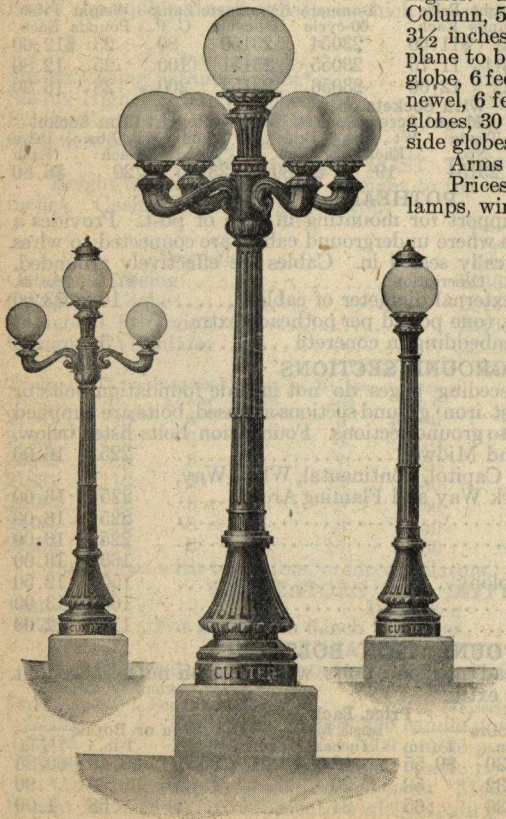
SOL-LUX GATE POST NEWELS

These newels are made of the highest quality grey iron. They are of distinctive design and very appropriate for the lighting of gateways and private grounds, entrances of buildings, etc.

Base, 14 inches in diameter, 24 inches high. Column, 5 inches in diameter above base, tapering to 3½ inches in diameter near the top. Height from base plane to bottom of side globes, 3 feet 8 inches; to bottom of center globe, 4 feet 6½ inches; to bottom of globe of 1-light newel, 3 feet 8 inches. Distance from center to center of opposite globes, 30 inches. Designed for 6x9-inch or 6x10-inch side globes, and 6x12-inch or 6x14-inch top globe.

Prices below include medium screw sockets for side lamps and Mogul Screw Sockets for center lamps, unless otherwise specified. Prices do not include globes, ventilators, lamps, wiring or foundation bolts. Use three ¾-inch bolts.

Trade No.	No. of Lights	Wt., Lbs. Each	Price Each
21817	1	125	$25.00
21818	2	175	35.00
21819	3	175	35.00
21820	4	215	40.00
21821	5	215	40.00



Sol-Lux Bridge Newels

SOL-LUX BRIDGE NEWELS

Similar in design to Sol-Lux Gate Post Newel but higher. Base, 14 inches in diameter, 24 inches high. Column, 5 inches in diameter above the base, tapering to 3½ inches in diameter near the top. Height from base plane to bottom of side globes, 6 feet; to bottom of center globe, 6 feet 10½ inches; to bottom of globe on the 1-light newel, 6 feet. Distance from center to center of opposite globes, 30 inches. Designed for 6x9-inch or 6x10-inch side globes and 6x12-inch or 6x14-inch center globes.

Arms may be reversed for pendent clusters.

Prices below do not include globes, ventilators, lamps, wiring or foundation bolts. Use three ¾-inch bolts. listed on another page. Prices include medium screw sockets for side lamps and Mogul Screw Sockets for top lamps.

Trade No.	No. of Lights	Wt., Lbs. Each	Price Each
21825	1	175	$32.50
21826	2	225	42.50
21827	3	225	42.50
21828	4	265	47.50
21829	5	265	47.50

GLOBES

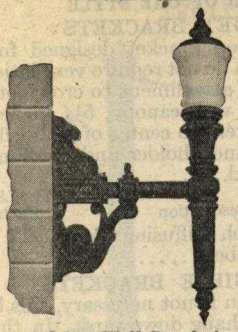
Trade No.	Description	Wt., Lbs. Each	Price Each
21830	6x9-inch Diffusing Ball...	6	$1.75
21842	6x10-inch Diffusing Ball..	7	2.00
21831	6x12-inch Diffusing Ball (without top fitter)....	8	2.50
22472	6x12-inch Diffusing Ball (with 6-inch top fitter).	8	2.50
22473	6x14-inch Diffusing Ball (with 6-inch top fitter).	9	3.50
21791	8x16-inch Diffusing Ball (with 6-inch top fitter).	10	6.50

VENTILATORS

Trade No.	Description	Wt., Lbs. Each	Price Each
21792	With 6-inch fitter.....	9	$4.00

CUTTER BRACKETS, NEWELS AND TRAFFIC POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE



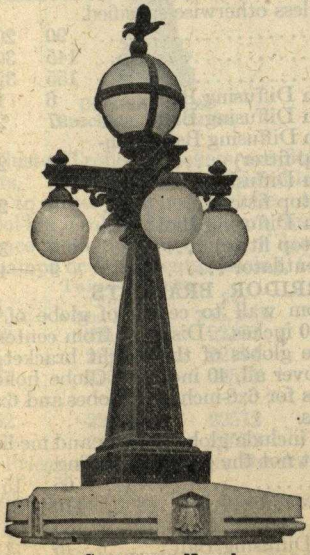
Sol-lux Wall Bracket



Metropolitan Newel



"Safety First" Traffic Post



Commerce Newel

SOL-LUX WALL BRACKETS

For Type C Lamps

A massive bracket of highly artistic design. Wall plate, 2 feet high, 6 inches wide. Distance from wall to center of lamp, 3 feet. Height from bottom of shaft to top of ventilator on Sol-lux Senior Globe 6 feet 6½ inches.

Trade No.	Description	Ship. Wt., Lbs., Each	Price Each
22542	With Sol-lux senior top, Mogul Socket.....	375	$68.00
22543	With octagonal senior top, Mogul Socket	380	70.00

For Verde antique finish, add $5.00 list. For weatherproof bronze paint add $10.00 list.

METROPOLITAN NEWELS

A newel of simple but artistic design, adapted for lighting the entrances of buildings or for bridges and public places. Base 14 inches square, 2 feet high. Column 5 inches octagon above the base, tapering to 3½ inches octagon near the top. Height from base to bottom of globe 7 feet; to top of ventilator on octagonal junior globe 8 feet, 9 inches. Globe holder has 8-inch fitter. Use four ¾-inch foundation bolts.

22548	With octagonal junior top, med. screw socket.	225	52.00
22549	Same, with Mogul Screw Socket.	226	52.30
22550	Same, with Regent Film Socket.	227	53.30
22566	With Sol-lux junior top, medium screw socket.	220	50.00
22554	Same, with Mogul Screw Socket.	221	50.30
22555	Same, with Regent Film Socket.	222	51.30

For Verde antique finish, add $5.00 list; for weatherproof bronze paint, add $10.00 list.

"SAFETY FIRST" TRAFFIC POSTS

By marking the centers of intersecting streets the rule of "keep to the right" is always enforced. These traffic posts are silent watchmen, always on the job.

Base, 14 inches in diameter, 24 inches high. Column, 5 inches in diameter above the base, tapering to 3½ inches in diameter near the top. Height from base plane to bottom of globe on the 1-light newel, 6 feet.

Prices of newels do not include globes, lamps, wiring or foundation bolts. These are listed separately below.

27000	6-in. holder, medium multiple socket	175	32.20
27001	8-in. holder, medium multiple socket	176	32.20
21825	6-in. holder, Mogul Multiple Socket	176	32.50
27003	8-in. holder, Mogul Multiple Socket	177	32.50
27004	6-in. holder, Regent Film Socket.	177	33.50
27005	8-in. holder, Regent Film Socket.	178	33.50
27006	6x12-in. ruby globe, extra	8	8.00
27007	8x14-in. ruby globe, extra	9	12.00
21831	6x12-in. diffusing ball, extra	8	2.50
22489	8x14-in. diffusing ball, extra	9	3.50
	Set of three ¾x12-inch foundation bolts...	...	.54
20938	Fixed pin clamp arm	6	.80
20942	Pinless clamp arm.....	6½	.80

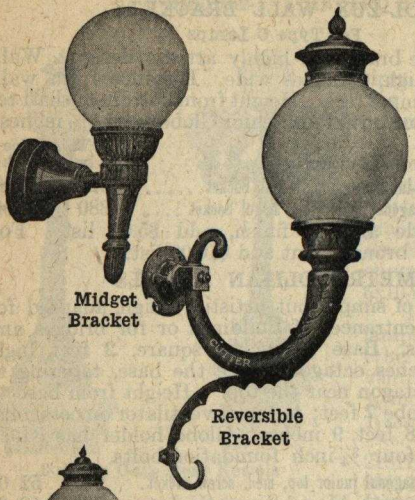
COMMERCE NEWELS

A massive newel designed especially for bridges and entrances to large buildings, etc. Base, 21x35¼ inches. Height from ground to bottom of pendent globes 4 feet 6 inches; to top of eagle ornamentation on top globe 9 feet 6 inches; to top of eagle ornamentation on one-light newel, 8 feet. Pendent globes, 8x14 inches; top globe, 8x20 inches; globe for 1-light newel 8x20 inches. Prices below include medium screw base sockets, glassware as above specified and eagle ornamentation, but not foundation bolts. Use four ⅞-inch foundation bolts.

22556	One-light.....	475	125.00
22558	Three-light.....	550	135.00
22560	Five-light.....	625	150.00

CUTTER ORNAMENTAL BRACKETS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE



Midget Bracket

Reversible Bracket

MIDGET BRACKETS

A light cast iron bracket designed for small sizes of lamps which do not require ventilation. Has a threaded stem for attachment to crowfoot or conduit. Diameter of wall canopy, 5¼ inches. Distance from end of stem to center of globe, 6 inches. Equipped with 4¼-inch holder and medium screw socket, but not wired.

Trade No.	Description	Wt., Lbs. Each	Price Each
21835	With 4x8-inch Diffusing Globe	12	$4.75
21836	Without globe	7	3.25

REVERSIBLE BRACKETS

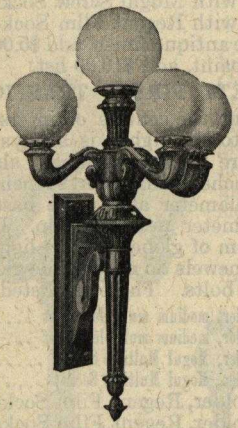
When ventilation is not necessary, this bracket may have the globe hang downward. In this position, the bracket has the same artistic lines and correct proportions as in the position illustrated. Distance from wall to center of globe, 2 feet. Distance between centers of wall plates, approximately 20 inches. Fitted with 8-inch globe holder.

Prices do not include globe, ventilator or wiring.

21248	Medium screw socket	65	15.00
21837	Mogul Screw Socket	65	15.30
21791	8x16-inch Diffusing Ball (with 6-inch top fitter)	19	6.50
21792	Ventilator, with 6-inch fitter	9	4.00



1-light Commerce Bracket



4-light Commerce Bracket

COMMERCE BRACKETS

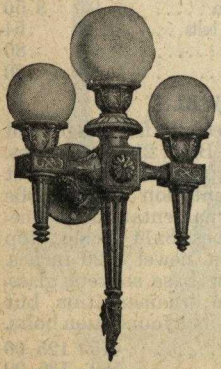
A massive fixture of distinctly artistic and classical design. Particularly adapted for lighting fronts of fine structures, such as banks and office buildings, clubs, libraries, etc.

Wall plate, 9 inches wide, 20 inches high. Distance from wall to center of top globe, 14 inches. Height to bottom of globe of 1-light bracket, 33 inches; to bottom of center globe of 3 and 4-light brackets, 41 inches. Distance from center to center of opposite globe, 30 inches.

For side lamps use 6x9-inch or 6x10-inch globes. For center lamps use 6x12-inch or 6x14-inch globe.

Prices below do not include lamps, globes, ventilators or wiring. Medium screw sockets are furnished for side lamps, Mogul Screw Sockets for center lamps, unless otherwise specified.

21838	1-light	90	20.00
21839	3-light	145	30.00
21840	4-light	155	32.50
21830	6x 9-inch Diffusing Ball	6	1.75
21842	6x10-inch Diffusing Ball	7	2.00
21831	6x12-inch Diffusing Ball (without top fitter)	8	2.50
22476	6x12-inch Diffusing Ball (with 6-inch top fitter)	8	2.50
22480	6x14-inch Diffusing Ball (with 6-inch top fitter)	9	3.50
21792	6-inch ventilator	9	4.00



3-light Corridor Bracket



1-light Corridor Bracket

CORRIDOR BRACKETS

Distance from wall to center of globe of the 1-light bracket, 10 inches. Distance from center to center of opposite globes of the 3-light bracket, 16 inches. Height over all, 40 inches. Globe holders have 6-inch fitters for 6x8-inch side globes and 6x10-inch center globes.

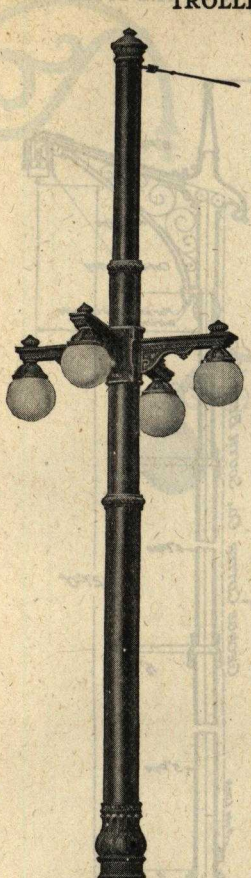
Prices below include globe holders and medium screw sockets, but not the globes or wiring.

21245	1-light	65	15.00
21246	3-light	110	21.00
21247	4-light	135	24.00
21841	6x8-inch Diffusing Ball	5	1.50
21842	6x10-inch Diffusing Ball	7	2.00

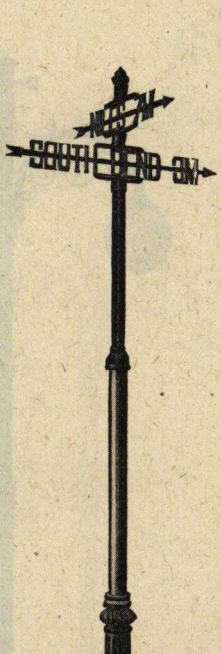
CUTTER ORNAMENTAL POSTS AND BRACKETS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

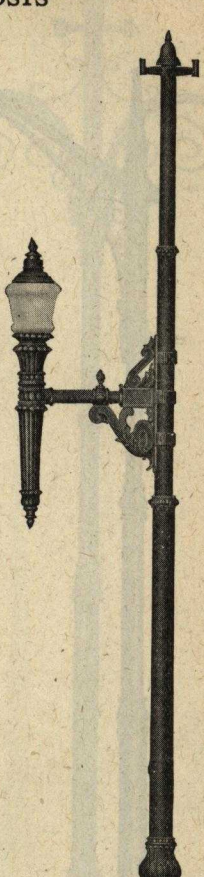
TROLLEY BRACKETS AND SIGN POSTS



Cluster Trolley Brackets, No. 22154



Arcade Sign Post No. 22443



Sol-lux Trolley Brackets, No. 22551

Trolley Brackets

Cluster Trolley Brackets are fitted with 8-inch pendent globe holders and medium screw sockets. The clamps are adjustable to compensate for rake on trolley poles. Distance from center to center of opposite globes, 48 inches. Prices cover brackets only without globes.

Sol-lux Trolley Brackets are designed for Sol-lux Ornamental Tops or Inverted Arc Lamps. Distance from pole to center of lamp, 3 feet. Prices cover brackets only and do not include Arc Lamps or Ornamental Casing, Globe or Ventilator.

Trade Number For 5-in. Pipe	For 6-in. Pipe	For 7-in. Pipe	Description	Wt., Lbs. Each	Price Each
22152	22162	22172	2-light cluster bracket	185	$25.00
22154	22164	22174	4-light cluster bracket	275	37.50
22551	22561	22571	*1-light Sol-lux Bracket for Sol-lux Ornamental Top	275	37.50
22552	22562	22572	*Same, for Westinghouse Flame Lamp	265	37.50
22553	22563	22573	*Same, for G-E Novalux Fixture	265	37.50

*Prices of 2-light Sol-lux Brackets are double those for single-light brackets.

Sign Posts

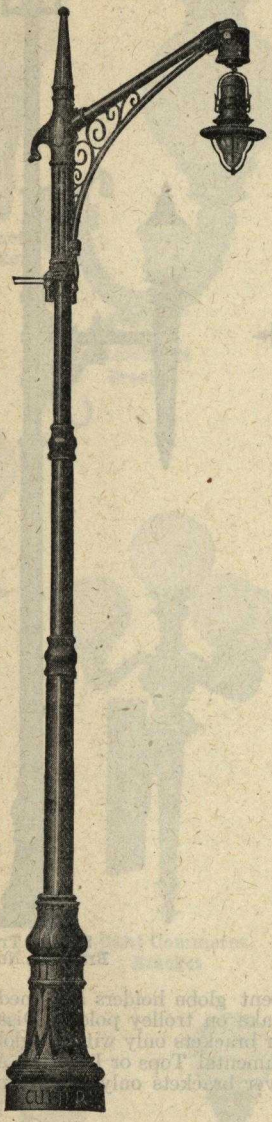
The Arcade Sign Post has a cast iron base, 12 inches in diameter, 2½ feet high and a column made of 2½ and 1¼-inch bore pipe. Height to center of signs, 9 feet 9 inches.

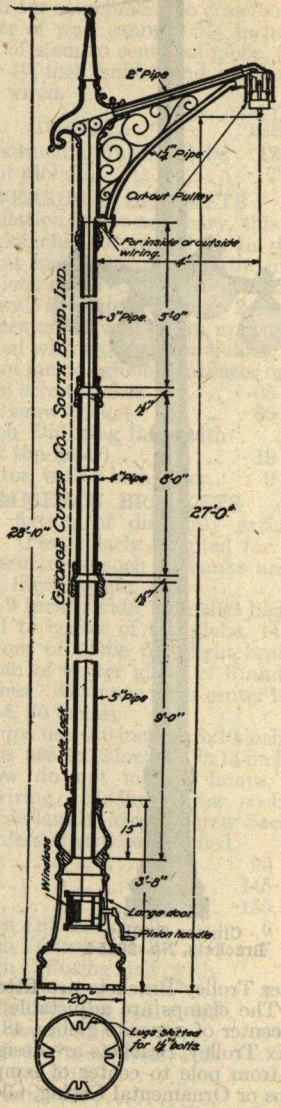
Trade No.	Description	Wt., Lbs., Each	Price, Each
22443	Without signs. Use four ¾-inch foundation bolts	125	$12.00

CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

FLAMING ARC





A substantial and artistic pole for supporting modern arc lamps. The hoisting rope may be run inside or outside the column and the wires may be strung overhead or laid underground.

Trade Number With Multiple Cut-out Pulley	Trade Number With Series Cut-out Pulley	Description	Wt., Lbs. Each	Price Each
21147	21148	With pole lock outside	765	$92.00
21111	21112	With hook in base	765	90.50
		With High Voltage Insulator in Place of Cut-out Pulley and without Pole Lock or Hook		
21288		With clamp arm for overhead wiring	745	82.00
21289		Without clamp arm	742	81.20

Prices do not include rope, wiring or foundation bolts. Use four 1¼-inch bolts.

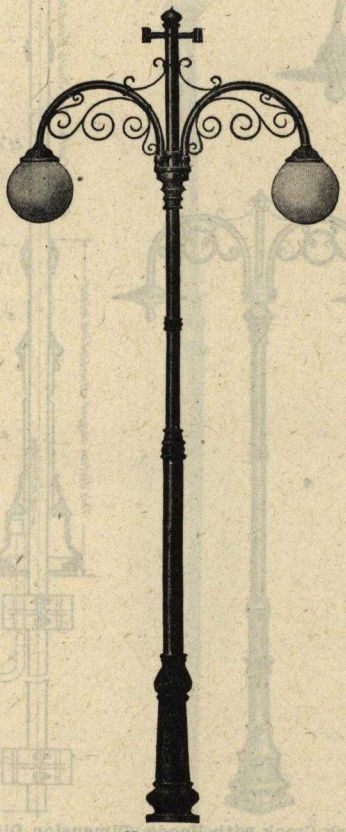
CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE
QUANTITY, 20 OF ONE STYLE

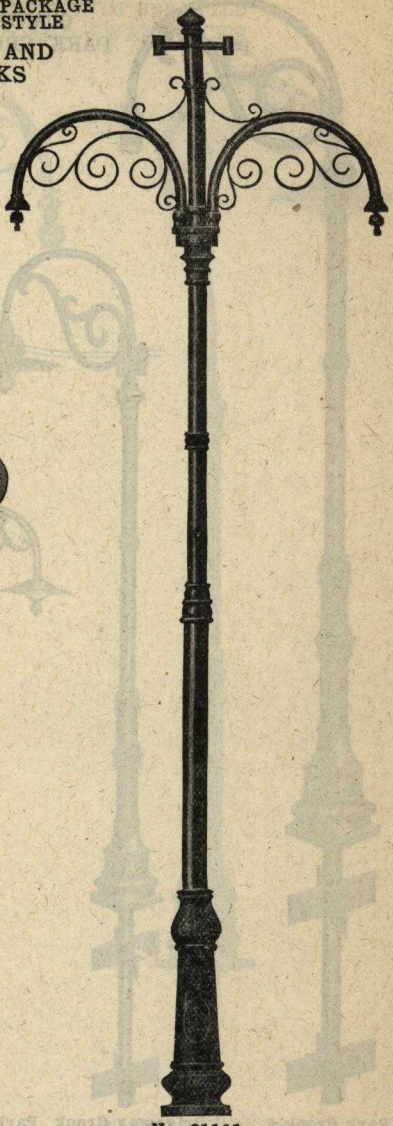
STREET CROOKS AND VILLAGE CROOKS



No. 21180



No. 21195



No. 21191

STREET CROOKS

These are well built street lighting poles for supporting arc or incandescent lamps. Height from ground to insulator, 18 feet. Other heights built to order. Diameter of base, 14 inches. Prices below include 5-foot ground section and insulators for arc lamps or 8-inch globe holders with medium screw sockets for 8x12-inch globes. If ground section is not wanted, deduct $11.50.

Trade Number With Insulator	With 8-inch Holder	No. of Lights	Wt., Lbs. Each	Price Each	Trade Number With Insulator	With 8-inch Holder	No. of Lights	Wt., Lbs. Each	Price Each
21180	21184	1	460	$48.50	21182	21186	3	510	$58.50
21181	21185	2	485	53.50	21183	21187	4	535	63.00

VILLAGE CROOKS

Similar to Cutter Street Crooks, but built for overhead wiring. Furnished complete, with clamp arm, ground section and with insulators for arc lamps or 8-inch globe holders and medium screw sockets for 8x12-inch globes. For ladder rest, add $0.80 to the list prices.

21190	21194	1	485	55.00	21192	21196	3	535	65.00
21191	21195	2	510	60.00	21193	21197	4	560	70.00

Prices do not include glassware, lamps or wiring. Use four ⅞-inch foundation bolts.

CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE
QUANTITY, 20 OF ONE STYLE

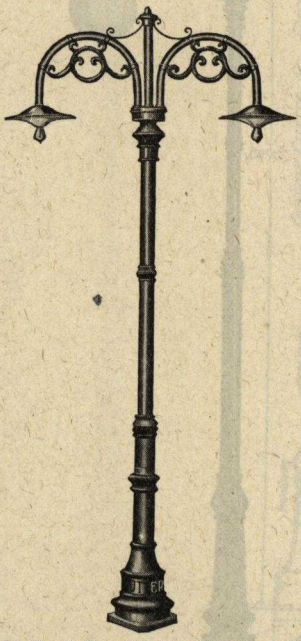
PARK CROOKS AND DRIVEWAY CROOKS



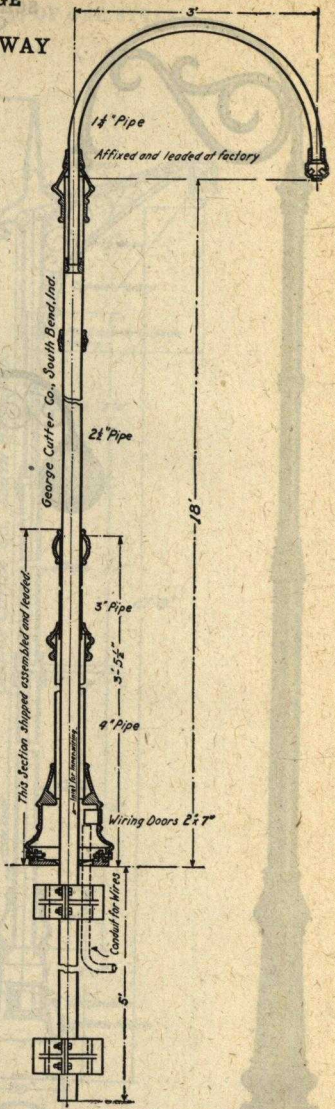
Park Crook



Driveway Crook



Park Crook with Hoods



Dimension Diagram Park Crook

Park Crooks are light but substantial poles for supporting arc or incandescent lamps. Standard height from ground to insulator, 18 feet. Other heights built to order. On 14-foot and shorter heights, 4-foot ground sections will be supplied, on greater heights, 5-foot. If ground section is not wanted, deduct $7.50 from list, and use four ¾-inch foundation bolts.

Trade Number With Insulators	With 18-inch Hoods	No. of Lights	Wt., Lbs. Each	Price Each	Trade Number With Insulators	With 18-inch Hoods	No. of Lights	Wt., Lbs. Each	Price Each
21198	21202	1	340	$37.50	21200	21204	3	385	$48.50
21199	21203	2	365	43.50	21201	21205	4	410	53.50

Driveway Crook, a variation of the Park Crook, built 14 feet from ground to lamp, fitted with 4-foot ground section, clamp arm for overhead wires and 20-inch Flat Radial Streethood Body with Insulating Joint.

Trade No.	Style Socket	Wt., Lbs. Each	Price Each	Trade No.	Style Socket	Wt., Lbs. Each	Price Each
21206	Medium screw	350	$40.00	21208	Film	350	$41.30
21207	Mogul Screw	350	40.30	21209	Without socket	350	39.50

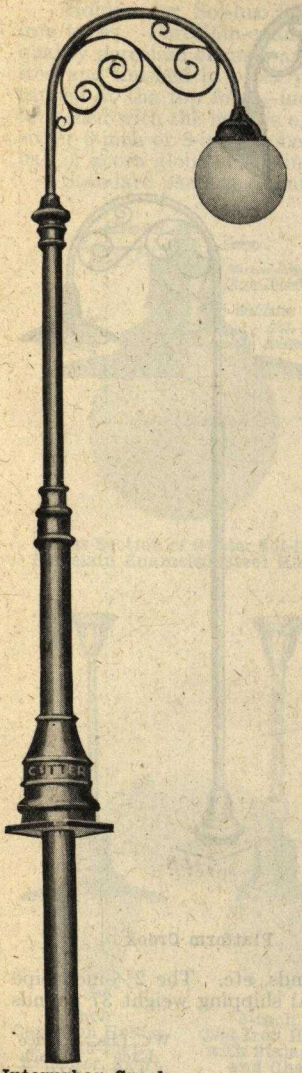
This fixture built for underground wiring at a reduction of 80 cents from list.

Prices do not include lamps or wiring. Use four ¾-inch foundation bolts.

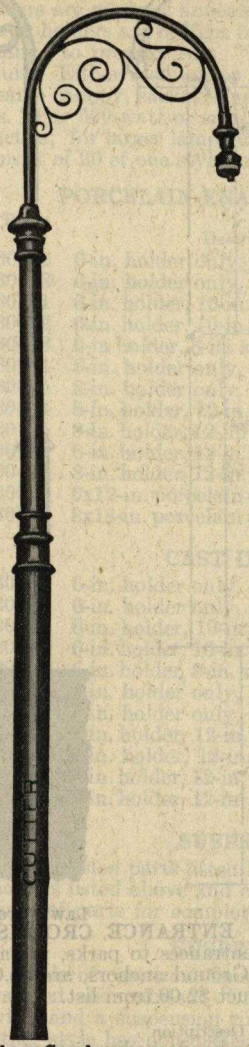
CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

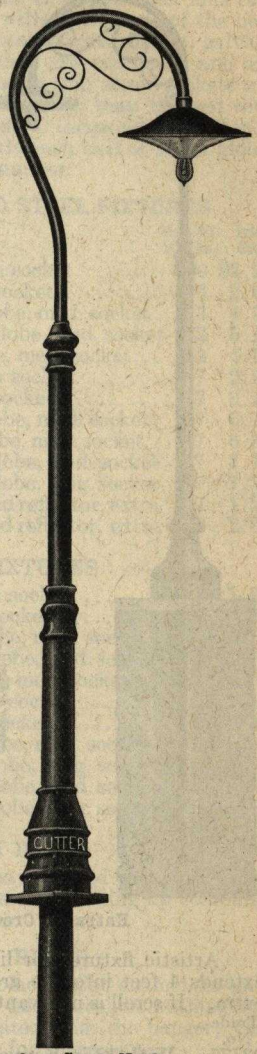
INTERURBAN AND URBAN CROOKS AND SWAN NECKS



Interurban Crook



Urban Crook



Interurban Swan Neck

The column is made of 4-inch and 2½-inch pipe, with the 4-inch pipe extending 4 feet into the ground. The cast iron base has a door to make wiring easy. The crook is made of 1¼-inch pipe and holds the lamp 2 feet 3 inches from the column. The height to insulator is 14 feet. Prices below include high voltage insulator, or 8-inch globe holder and medium screw socket or 18-inch hood, reflector and medium screw socket. If scroll is not wanted, deduct $2.00 from list. For ground anchors, add $5.50 to list.

INTERURBAN CROOKS AND SWAN NECKS

Trade Number					
With Insulator	With Globe Holder	With 18-inch Hood	Description	Wt., Lbs. Each	Price Each
21218	21220	21222	Crook Bend	225	$29.60
21219	21221	21223	Swan Neck	225	29.60

URBAN CROOKS AND SWAN NECKS

Same as Interurban, but without the base casting.

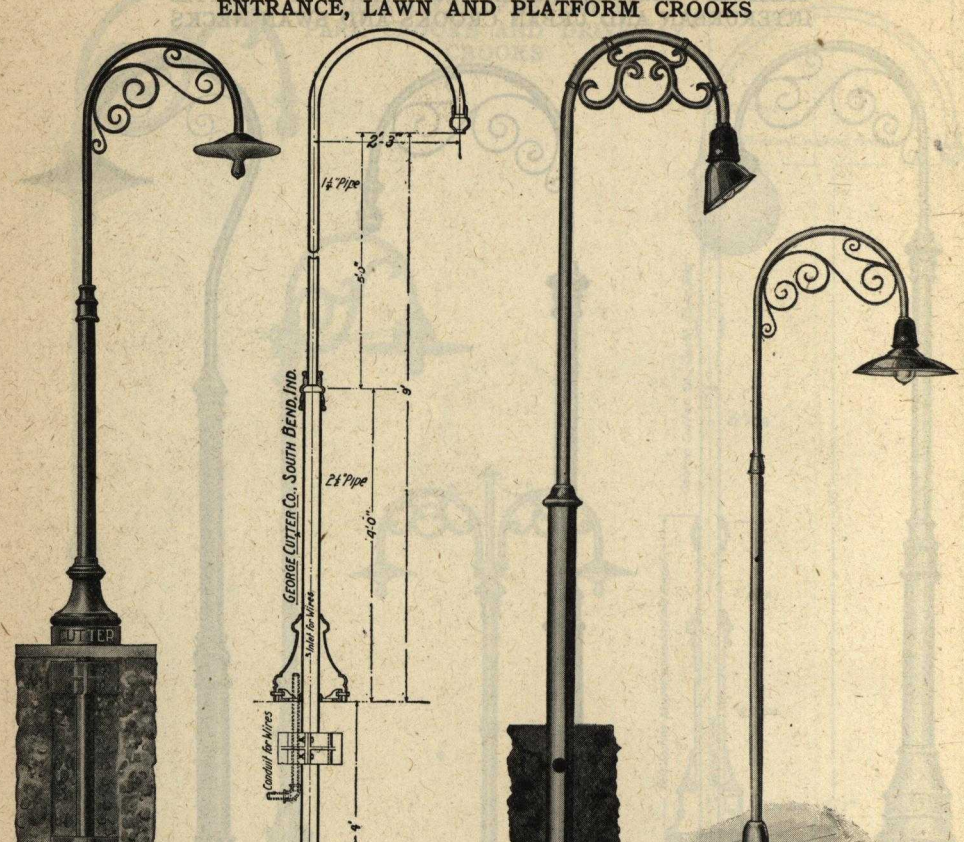
21224	21226	21228	Crook Bend	190	22.60
21225	21227	21229	Swan Neck	190	22.60

Prices do not include lamps or wiring.

CUTTER ORNAMENTAL POSTS

SCHEDULE I—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE

ENTRANCE, LAWN AND PLATFORM CROOKS



Entrance Crook **Lawn Crook** **Platform Crook**

ENTRANCE CROOKS

Artistic fixtures for lighting entrances to parks, private grounds, etc. The 2½-inch pipe extends 4 feet into the ground. Ground anchors, are $5.00 extra; shipping weight 37 pounds extra. If scroll is not wanted, deduct $2.00 from list.

Trade No.	Description	Wt., Lbs. Each	Price Each
23775	With 18-inch inverted cone hood, medium screw socket	160	$18.75
23776	With 18-inch radial bowl streethood body, medium screw socket	168	22.55
23777	Same, with 20-inch flat radial streethood body	167	21.80

LAWN CROOKS

Similar to entrance crooks, but without cast iron base. If scroll is not wanted, deduct $1.50 from list. Holds the lamp 2 feet from the column. Outer end is fitted with 1¼x½-inch reducer and ½-inch nipple with 2¼ or 3¼-inch weatherproof holder to take reflectors having 2¼ or 3¼-inch standard heels. Furnished with other sizes of holders and fittings, when so ordered, at regular catalogue list additions. Prices do not include reflectors. See Schedule H.

23778	With 2¼-inch holder, medium screw socket	105	14.85
23779	With 3¼-inch holder, Mogul Screw Socket	107	15.35

PLATFORM CROOKS

A 1¼-inch pipe with cast iron base and crook bend of ½-inch pipe holds the lamp 8 feet from the floor. If scroll is not wanted, deduct $1.50 from list. Prices do not include reflectors. See Schedule H.

23780	With 2¼-inch holder, medium screw socket	80	8.85
23781	With 3¼-inch holder, Mogul Screw Socket	82	9.35

Prices do not include lamps or wiring.

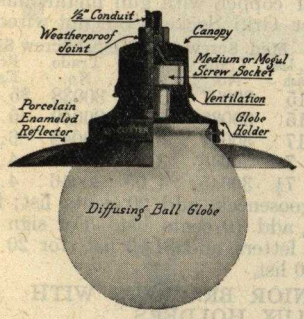
CUTTER SOL-LUX FIXTURES

SCHEDULE H

PENDANT STYLES FOR MAZDA C LAMPS

Holders for Sol-lux Fixtures are manufactured in both porcelain-enameled steel and cast iron types. Porcelain-enameled holders are made of annealed steel with three coats of the best quality porcelain enamel, and cast iron holders are of light but substantial construction, galvanized and finished in black paint enamel to prevent rust. The holders are ventilated and are tapped at the top for ½-inch conduit. Either medium or mogul lamp grip screw sockets are furnished with the holders and the same canopy, socket support and locknut may be used with either 6-inch or 8-inch globe holders. For 500-watt or smaller Mazda C lamps use a 6x10-inch ball or acorn globe or 6x8-inch stalactite; for larger lamps use an 8x12-inch ball or acorn globe.

Standard package quantities consist of 20 of one style or trade number.



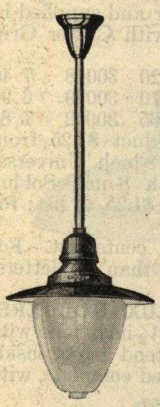
Cross Section of Cutter Sol-lux Porcelain Enameled Steel Holder

PORCELAIN-ENAMELED STEEL FIXTURES

Trade No.	Description	Ship. Wt. Lbs., Ea.	Price Each
30542	6-in. holder only, medium socket	6	$2.70
30543	6-in. holder only, mogul socket	6	2.90
30451	6-in. holder, 10-in. ball globe, med. socket	13	4.70
30452	6-in. holder, 10-in. acorn globe, med. socket	13	5.45
30453	6-in holder, 8-in. stalactite, med. socket	12	4.70
30544	8-in. holder only, medium socket	7	2.90
30545	8-in. holder only, mogul socket	7	3.10
30454	8-in. holder, 12-in. ball globe, med. socket	17	6.15
30455	8-in. holder, 12-in. ball globe, mog. socket	17	6.35
30456	8-in. holder, 12-in. acorn globe, med. socket	17	7.15
30457	8-in. holder, 12-in. acorn globe, mog. socket	17	7.35
30518	6x12-in. porcelain enameled reflector, extra	7	1.25
30519	8x18-in. porcelain enameled reflector, extra	8	2.00

CAST IRON FIXTURES

30520	6-in. holder only, medium socket	8	1.90
30521	6-in. holder only, mogul socket	8	2.10
30460	6-in. holder, 10-in ball globe, med. socket	15	3.90
30461	6-in. holder, 10-in. acorn globe, med. socket	15	4.65
30462	6-in. holder, 8-in. stalactite, med. socket	14	3.90
30522	8-in. holder only, medium socket	9	2.10
30523	8-in. holder only, mogul socket	9	2.30
30463	8-in. holder, 12-in. ball globe, med. socket	19	5.35
30464	8-in. holder, 12-in. ball globe, mog. socket	19	5.55
30465	8-in. holder, 12-in. acorn globe, med. socket	19	6.35
30466	8-in. holder, 12-in. acorn globe, mog. socket	19	6.55



6-inch Cast Iron Holder with 15-inch Reflector, Acorn Globe and Stem Suspension



8-inch Cast Iron Holder with Stalactite and Chain Suspension

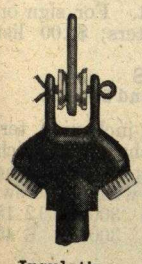
SUSPENSION PARTS

Suspension parts listed below may be used with any of the holders listed above and can be used in making up combinations of parts for complete fixtures.

SUSPENSION RINGS

Made of cast iron, finished in black paint enamel, or galvanized and painted. One style has porcelain bushing for wires and a suspension ring insulated from the hanger; the other style has non-insulating eye for suspension.

30731	Suspension eye, paint enameled	2	.60
30732	Suspension eye, galvanized	2	.70
30029	Insulating suspension ring, paint enameled	2	.70
30030	Insulating suspension ring, galvanized	2	.80



Insulating Suspension Ring



Suspension Eye

STEMS AND CHAINS

Made of brass, with gun metal finish; 18-inch drop, canopy and wiring included.

30031	Stem, with crowfoot	6	2.20
30032	Stem, with ⅜-inch hickey	6	2.10
30033	Stem, with ⅜-inch insulating joint	6	2.50
30034	Chain, with crowfoot	4	2.70
30035	Chain, with ⅜-inch hickey	4	2.60
30036	Chain, with ⅜-inch insulating joint	4	3.10

½-inch hickeys and insulating joints furnished in place of ⅜-inch, when so ordered, at same price. For longer lengths of stem or chain suspension, add 50 cents per foot additional.

CUTTER SOL-LUX FIXTURES



Standard Bracket with Sol-lux Holder and Opal Globe

FOR TYPE C LAMPS—BRACKET STYLES

SCHEDULE H—STANDARD PACKAGE QUANTITY, 20 OF ONE STYLE OR TRADE NUMBER

For 500-watt or smaller Type C lamps, use 6x10-inch opal globe or 6x8-inch Stalactite; for larger lamps, use 8x12-inch opal globe or Acorn Diffuser.

STANDARD BRACKETS WITH SOL-LUX HOLDERS

A simple form of bracket suspension, consisting of a 3-foot gooseneck of ½-inch pipe, with grooved wall plate, for inner wiring. The Sol-lux Holder attached to outer end is made of copper with gun metal finish. Furnished with Cutter Grip Sockets, but not wired.

Description	Wt., Lbs. Each	Med. Screw Skt. Trade No.	Med. Screw Skt. Price Each	Mogul Screw Skt. Trade No.	Mogul Screw Skt. Price Each
With 6x10-in. opal globe..	15	30037	$5.60	30038	$5.80
With 6x8-in. Stalactite...	15	30039	5.10	30040	5.30
With 8x12-in. opal globe..	17	30041	6.05	30042	6.25
With 6-in. holder only...	7	30043	3.85	30044	4.05
With 8-in. holder only...	7½	30045	4.05	30046	4.25

For galvanized gooseneck, add 20 cents list; for galvanized pole plate, add 10 cents list. For sign on globe of less than 20 letters, add $1.50 list; for 20 or more letters, add $3.00 list.



Spartan Junior Bracket with Sol-lux Holder, 15-inch Reflector and Stalactite

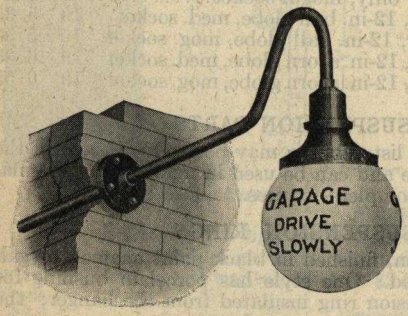
SPARTAN JUNIOR BRACKETS WITH SOL-LUX HOLDERS

An artistic and substantial bracket which holds the lamp 3 feet from the wall. Made of ½-inch (bore) pipe, with wrought iron scrolls and grooved wall plate. The Sol-lux Holder is made of copper and supplied in gun metal finish. Shipped complete with Cutter Grip Sockets, but not wired.

With 6x10-in. opal globe..	23	30047	7.20	30048	7.40
With 6x8-in. Stalactite...	23	30049	6.70	30050	6.90
With 8x12-in. opal globe..	25	30051	7.65	30052	7.85

For 6-inch Universal Holder, deduct $1.25 from list with 6-inch Sol-lux Holder; for 8-inch Universal Holder, deduct $1.25 from list with 8-inch Sol-lux holder. For 6x15-inch reflector, add $1.25 to list; for 8x18-inch reflector, add $2.00.

For galvanized bracket, add 70 cents list. For sign on globe, add $1.50 list for less than 20 letters; $3.00 list for 20 or more.



Wall Bracket with Sol-lux Holder and Opal Globe

WALL BRACKETS WITH SOL-LUX HOLDERS

Consists of a 4-foot gooseneck of ½-inch pipe with wall flange, allowing the pipe to extend 1 foot inside the wall and 3 feet outside. Furnished complete, with Cutter Grip Socket, but not wired.

With 6x10-in. opal globe..	16	30057	6.00	30058	6.20
With 6x8-in. Stalactite...	16	30059	5.50	30060	5.70
With 8x12-in. opal globe..	18	30061	6.45	30062	6.65
With 6-in. holder only...	8	30063	4.25	30064	4.45
With 8-in. holder only...	7½	30065	4.45	30066	4.65

For galvanized gooseneck, add 25 cents list; for galvanized wall flange, add 15 cents list. For sign on globe, add $1.50 for less than 20 letters; $3.00 list for 20 or more.



Entrance Bracket with Concentric Reflector and Opal Globe

ENTRANCE BRACKETS

With Sol-lux Holder (4-inch Fitter) and 20-inch Concentric Dome Reflector

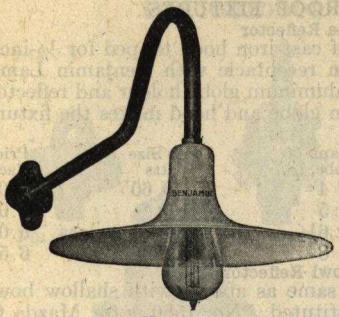
Consists of a 4-foot gooseneck of ¾-inch pipe, terminating in a vertical piece of ½-inch pipe, which allows hood to be raised for making connections. The wall flange slips over the pipe and fastens with set screw.

With 8x12-in. opal globe..	37	30067	11.95	30068	12.15
With 4-in. holder only...	24	30071	6.25	30072	6.45
With reflector, without globe.....	27	30073	8.85	30074	9.05

For galvanized bracket, add $1.00 list.

BENJAMIN REFLECTOR SOCKET FIXTURES

SOCKETS ARE NATIONAL ELECTRICAL CODE STANDARD



No. 5412

Reflector socket fixtures consist of reflector sockets completed by the addition of suspensions. Benjamin Lamp Grip, a device to keep the lamps in place, will be furnished without extra charge, if specified. Standard reflector finish is green outside. Iron parts are galvanized; brass portions are finished brushed.

BRACKET FIXTURES

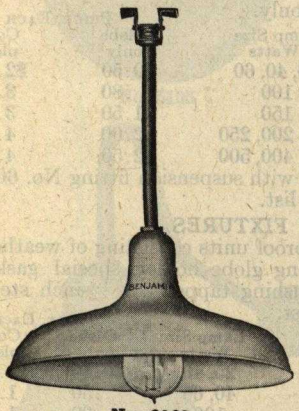
Nos. 5412–5521 have reflector socket, gooseneck bracket of ½-inch pipe overhanging 30 inches, and wall fitting. For 48-inch gooseneck of ¾-inch iron pipe, overhanging 40 inches, and pole fitting, add 40 cents list.

Flat Cone Reflectors

Trade No.	Mfrs. No.	Reflector Diam., In.	Lamp Size Watts	Price Each
047274	5443	14	25, 40, 50, 60	$3.40
047277	5412	16	75, 100, 150	3.70
047278	5413	18	200	4.30
120622	5415	20	200	4.90

Shallow Bowl Reflectors

106234	5449	12	25, 40, 50, 60	3.40
120611	5420	14	75, 100	3.70
120612	5422	16	150, 200	4.30
047283	5424	18	200	4.90
120613	5521 Mogul	18	300, 400, 500	5.10



No. 6063

PENDENT FIXTURES

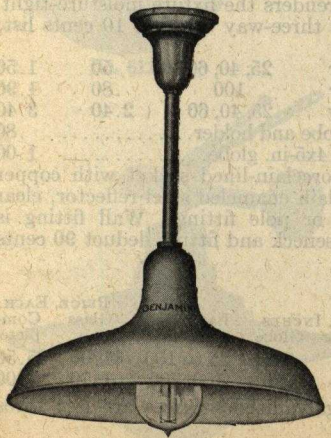
Nos. 6005–6149 have reflector socket, 12-inch stem of ⅜-inch iron pipe and shock absorber. Additional length stems list at 20 cents per foot. For absorber with either top strap or suspension loop add 5 cents list. No. 6031 fitting will be substituted at an advance of 35 cents list.

Flat Cone Reflectors

Trade No.	Mfrs. No.	Reflector Diam., In.	Lamp Size Watts	Price Each
047302	6005	14	25, 40, 50, 60	$3.00
047305	6053	16	75, 100, 150	3.30
047306	6055	18	200	3.90
106240	6057	20	200	4.50

Shallow Bowl Reflectors

047303	6007	12	25, 40, 50, 60	3.00
120614	6061	14	75, 100	3.30
120615	6063	16	150, 200	3.90
047311	6065	18	200	4.50
120616	6149 Mogul	18	300, 400, 500	4.70



No. 6047

Nos. 6025–6139 have reflector socket, 12-inch stem of ⅝-inch brass tubing, 5x4-inch canopy, and crowfoot. Additional length stems list at 30 cents per foot.

Flat Cone Reflectors

047288	6025	14	25, 40, 50, 60	3.30
047291	6037	16	75, 100, 150	3.60
047292	6038	18	200	4.20
120623	6039	20	200	4.80

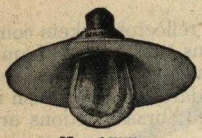
Shallow Bowl Reflectors

047289	6027	12	25, 40, 50, 60	3.30
120617	6046	14	75, 100	3.60
120618	6047	16	150, 200	4.20
047297	6048	18	200	4.80
106238	6139 Mogul	18	300, 400, 500	5.00

Pull chain medium base sockets with lamp grip may be ordered at an advance of 60 cents list.

BENJAMIN FIXTURES

SOCKETS ARE NATIONAL ELECTRICAL CODE STANDARD



No. 1555

GAS AND VAPOR-PROOF FIXTURES

With Flat Cone Reflector

Fixtures Nos. 1553–1558 consist of cast iron hood tapped for ½-inch stem, two-piece, easy-to-wire porcelain receptacle with Benjamin Lamp Grip, screw-threaded enclosing globe, aluminum globe holder and reflector as indicated. A special gasket between globe and hood makes the fixture tight.

Trade No.	Mfrs. No.	Reflector Size, In.	Diam. of Globe, In.	Lamp Size Watts	Price Each
27659	1553	15	4	25, 40, 60	$4.0
27660	1555	16	5	100	5.0
27661	1557	18	6½	150	6.0
27665	1558	18	8	200, 250	6.5



No. 1566

With Shallow Bowl Reflector

Fixtures Nos. 1578–1580 are the same as above, with shallow bowl porcelain enameled steel reflector substituted. No. 1580 is for Mazda C lamps only.

120516	1578	15	5	100	5.5
120517	1579	16	8	150, 200, 250	6.5
120518	1580 Mogul	18	10	300, 400, 500	7.5

Without Reflector

Fixtures Nos. 1563–1570 are without reflectors, otherwise the same as above. No. 1570 is for Mazda C lamps only.



No. 628

Trade No.	Mfrs. No.	Diam. of Globe, In.	Lamp Size Watts	Price, Each: Globe only	Price, Each: Complete
27666	1563	4	25, 40, 60	$0.50	$2.2
27667	1565	5	100	.80	3.2
120519	1566	6½	150	1.50	3.5
120520	1568	8	150, 200, 250	2.00	4.0
120521	1570 Mogul	10	300, 400, 500	2.50	4.5

For standard stem for above fixtures with suspension fitting No. 602 and with wires sealed in, add 85 cents to list.

MOISTURE-PROOF FIXTURES

Fixtures Nos. 617–631 are moisture-proof units consisting of weather-proof porcelain-lined socket, non-corroding globe holder, special gasket and screw-threaded enclosing globe. Bushing tapped for ½-inch stem. For Banjamin Lamp Grip add 10 cents list.

Trade No.	Mfrs. No.	Size Globe, In. Diam.	Size Globe, In. Depth	Color of Globe	Lamp Size Watts	Price, Each: Globe only	Price, Each: Complete
120522	617	3¼	4¼	Clear	25, 40	$0.40	$1.3
120523	628	4	5	Clear	40, 60	.50	1.5
120524	630	5	6	Clear	100	.80	1.9
120525	631	4	5	Ruby	40, 60	2.40	3.4
120526	1415	Screw wire guard for 4x5-in. globe					1.0



No. 634

Moisture-proof outlet box units Nos. 634–648 have galvanized cast iron outlet box with pipe openings tapped either ½ or ¾-inch, as specified, non-corroding globe holder, screw-threaded deep enclosing globe and porcelain receptacle. A special gasket renders the fixture moisture-tight. Prices apply to two-way outlet box; for three-way box add 10 cents list, for four-way add 20 cents list.

120527	634	4	5	Clear	25, 40, 60	.50	1.5
120528	646	5	6	Clear	100	.80	1.9
120529	647	4	5	Ruby	25, 40, 60	2.40	3.4
120530	648	Two-way box, less globe and holder					.8
120526	1415	Screw wire guard for 4x5-in. globe					1.0

Fixtures Nos. T-100–T-250 have porcelain-lined socket with copper hood re-enforcing the socket shell, porcelain enameled steel reflector, clear globe, ½x30-inch gooseneck and wall or pole fitting. Wall fitting is regularly supplied. For fixture less gooseneck and fitting deduct 90 cents list.



No. T-250

Trade No.	Mfrs. No.	Size, Inches: Reflector	Size, Inches: Globe	Lamp Size Watts	Price, Each: Glass only	Price, Each: Complete
120531	T-100	15	8x5	25 to 100	$1.00	$5.5
120532	T-250	18	10x6	100, 200	1.70	7.0

Iron parts are galvanized. Prices are less wire and lamps.

BENJAMIN WEATHERPROOF FIXTURES

SOCKETS ARE NATIONAL ELECTRICAL CODE STANDARD

FOR OUTDOOR STORE FRONTS OR EXPOSED PLACES



No. 6031M No. 6049M



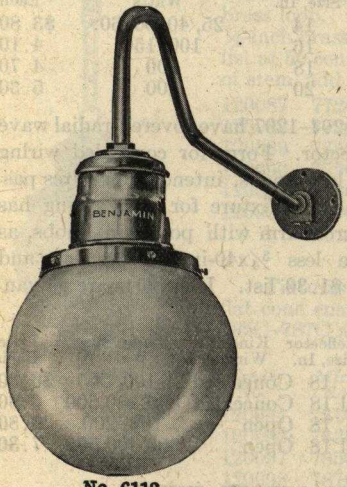
No. 5105

Nos. 5103–5106

Fixtures Nos. 5103–5106 include ventilated hood and ball globe together with two-piece, easy-to-wire porcelain socket with Benjamin Lamp Grip. The method of hooding protects the lamp from rain and snow. Globe offers especially good diffusion. Fixture support is independent of socket. Copper units have thumbscrews equipped with locknuts.

Hoods are tapped ½ inch, but ¾ inch may be ordered at an advance of 10 cents list; 1 or 1¼ inches at an advance of 15 cents list. For No. 6031M fitting add 65 cents list; for No. 6049M, 80 cents list. For reflectors, see fixtures below.

Trade No.	Mfrs. No.	Description	Size of Globe, In.	Lamp Size Watts	Price Each
92001	5103	Copper hood	10x6	300, 400, 500	$6.65
92002	5104	Steel hood	10x6	300, 400, 500	4.35
92003	5105	Copper hood	12x8	750, 1000	7.15
92004	5106	Steel hood	12x8	750, 1000	4.85

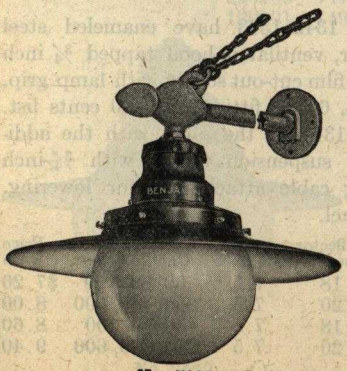


No. 6113

Nos. 5113–6114

Fixtures Nos. 5113–6114 are substantially as above, without loop suspension, but have 40x¾-inch gooseneck added, together with No. 5031 pole fitting with porcelain wire openings. For natural copper finish on hood, deduct 15 cents list.

Trade No.	Mfrs. No.	Description	Size of Globe, In.	Lamp Size Watts	Price Each
92005	5113	Copper hood	10x6	300, 400, 500	$8.15
92006	5114	Steel hood	10x6	300, 400, 500	5.85
91995	6113	Copper hood	12x8	750, 1000	8.65
91996	6114	Steel hood	12x8	750, 1000	6.35



No. 5116

Nos. 5116–6119

Fixtures 5116–6119 are substantially Nos. 5103-5106 with the addition of enameled steel reflector as indicated, and a 3-foot mast arm of ¾-inch pipe with head, chains and No. 5031 pole fitting having porcelain wire openings. For fixtures less mast arm and fitting, deduct $2.40 list.

Reflectors only list as follows: 15-inch, $2.00; 18-inch, for 10x6-inch globe, $2.60; 20-inch, $3.00.

Trade No.	Mfrs. No.	Description	Size, Inches Reflector	Size, Inches Globe	Lamp Size Watts	Price Each
92007	5116	Copper hood	15	10x6	300, 400, 500	$12.05
92008	5117	Steel hood	15	10x6	300, 400, 500	9.75
91999	6118	Copper hood	20	12x8	750, 1000	12.55
92000	6119	Steel hood	20	12x8	750, 1000	10.25

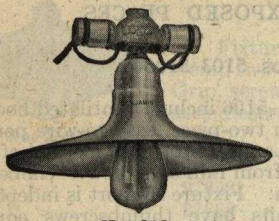
Globes are regularly furnished with hole in bottom, but may be ordered without hole, or stalactite globes may be substituted without change in price. They list as follows: 10x6-inch, $2.50; 12x8-inch, $3.00.

Standard finish on all above fixtures is black enamel. Iron parts are galvanized.

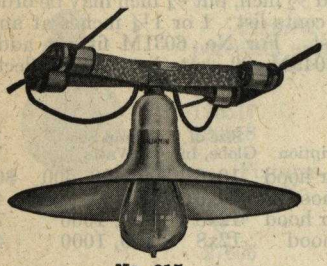
Prices are less wires and lamps.

BENJAMIN OUTDOOR FIXTURES

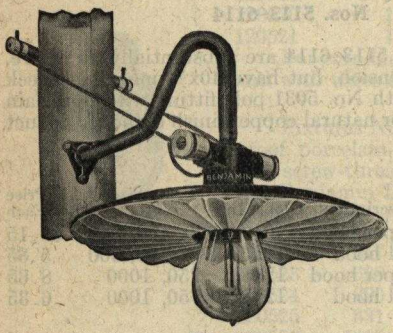
SOCKETS ARE NATIONAL ELECTRICAL CODE STANDARD



No. 802



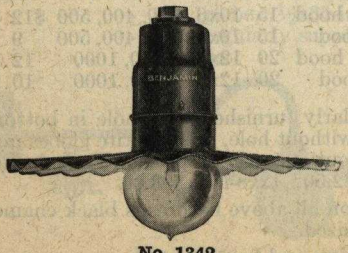
No. 815



No. 1206



No. 6049V



No. 1342

MULTIPLE STREET UNITS

Fixtures Nos. 802–807 are standard reflector sockets with flat cone reflector, metal cross-arm, porcelain knobs, separable connection with weatherproof outlet for line wires, and Benjamin Lamp Grip. Top of fitting is tapped for ½-inch iron pipe. They are intended for outdoor lighting on low voltage multiple circuits. For fixture with shock absorber add 10 cents to list. Iron parts are galvanized.

Trade No.	Mfrs. No.	Reflector Size, In.	Lamp Size Watts	Price Each
27673	802	14	25, 40, 50, 60	$3.30
27674	803	16	100, 150	3.60
27675	804	18	200	4.20
27670	807	20	200	4.80

Fixtures Nos. 814–819 are substantially those described above, except that they have special fitting for center suspension. The latter is provided with porcelain outlets for line wires. Other specifications there given apply.

Trade No.	Mfrs. No.	Reflector Size, In.	Lamp Size Watts	Price Each
27678	814	14	25, 40, 50, 60	$3.80
27679	815	16	100, 150	4.10
27680	816	18	200	4.70
27671	819	20	200	5.30

Fixtures Nos. 1204–1207 have covered radial wave enameled steel reflector. Form for concealed wiring has cast iron top, less knobs, intended for wires passing through gooseneck. Fixture for open wiring has cast iron top and cross-arm with porcelain knobs, as shown. For fixture less ¾x40-inch gooseneck and pole fitting, deduct $1.30 list. Iron parts are galvanized.

Trade No.	Mfrs. No.	Reflector Size, In.	Kind of Wiring	Lamp Size Watts	Price Each
27672	1204	18	Concealed	100, 200	$6.30
120537	1205 Mogul	18	Concealed	300,400,500	6.80
120538	1206	18	Open	100, 200	6.80
120539	1207 Mogul	18	Open	300,400,500	7.30

SERIES STREET UNITS

Fixtures Nos. 1342–1343 have enameled steel radial wave reflector, ventilated hood tapped ¾ inch and porcelain series film cut-out socket with lamp grip. For fixture with No. 6049V fitting add 80 cents list. Fixtures Nos. 1346–1347 are the same, with the addition of three-point suspension fitting with ¾-inch bushing, permitting cable attachment for lowering. Finish is black enamel.

Trade No.	Mfrs. No.	Reflector Size, In.	Amperes	Lamp Size Candle Power	Price Each
120546	1342	18	7.5	60, 80, 100	$7.20
120547	1343	20	7.5	250, 400, 600	8.00
120548	1346	18	7.5	60, 80, 100	8.60
120549	1347	20	7.5	250, 400, 600	9.40

Prices are less wires and lamps.

BENJAMIN FIXTURES

SOCKETS ARE NATIONAL ELECTRICAL CODE STANDARD FOR STORE AND OFFICE LIGHTING



No. 703C

Nos. 703C–736C

Fixtures Nos. 703C–736C include ventilated hoods and holders of material as listed, stalactite globe of correct density, and two-piece, easy-to-wire porcelain socket with Benjamin Lamp Grip. Flange is securely attached to hood so that support of fixture does not depend on socket. 100–200-watt fixtures have one-piece hood, while 300–1000-watt fixtures have two-piece hood to provide for greater ventilation. Fittings are regularly supplied for ½-inch pipe. ⅜-inch may be ordered without change in price, or ¾-inch at an advance of 10 cents list.

Trade No.	Mfrs. No.	Description	Fixture Length Inches	Size of Globe Inches	Lamp Size Watts	Price Each
106131	703C	Copper, black enamel	12	7x5	75, 100, 200	$2.40
106132	705C	Brass, brush brass finish	12	7x5	75, 100, 200	2.50
106133	707C	Steel, black enamel finish	12	7x5	75, 100, 200	1.80
106135	710C	Copper, black enamel	13½	8x6	300, 400, 500	3.30
106136	712C	Brass, brush brass finish	13½	8x6	300, 400, 500	3.40
106137	714C	Steel, black enamel finish	13½	8x6	300, 400, 500	2.30
106139	732C	Copper, black enamel	19	12x8	750, 1000	5.30
106140	734C	Brass, brush brass finish	19	12x8	750, 1000	5.20
106141	736C	Steel, black enamel finish	19	12x8	750, 1000	3.60



No. 772C

Nos. 738C–779C

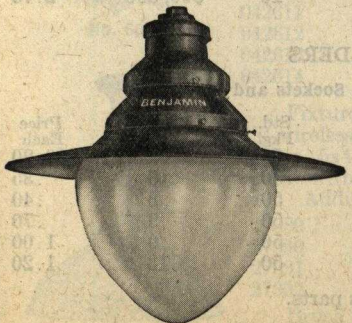
Fixtures Nos. 738C–779C are like the above, with suspension. Nos. 772C–779C have chain suspension, 5x4-inch canopy, crowfoot and ½-inch brass loop. Nos. 738C–739C have 12-inch stem of ⅜-inch iron pipe and ⅞-inch brass casing, 5½x4-inch canopy and crowfoot. Additional lengths list at 50 cents per foot. For chain suspension on Nos. 738C–739C instead of stem, add .10 list. Stem and fittings take No. 14 asbestos covered wire.

120087	772C	Brass, brush brass finish	26	7x5	75, 100, 200	3.60
120088	773C	Steel, black enamel finish	26	7x5	75, 100, 200	2.90
120089	778C	Brass, brush brass finish	27½	8x6	300, 400, 500	4.50
120090	779C	Steel, black enamel finish	27½	8x6	300, 400, 500	3.40
120091	738C	Brass, brush brass finish	31	12x8	750, 1000	6.20
120092	739C	Steel, black enamel finish	31	12x8	750, 1000	4.60

Nos. 747C–787C

Fixtures Nos. 747C–787C are substantially Nos. 703C–736C with flat cone enameled steel reflector added. For 18-inch reflector with Nos. 785C–787C add 50 cents list. Reflectors are finished black.

Trade No.	Mfrs. No.	Description	Size of Reflector Inches	Size of Globe Inches	Lamp Size Watts	Price Each
120094	781C	Copper, black enamel	12	7x5	75, 100, 200	$3.40
120095	783C	Steel, black enamel finish	12	7x5	75, 100, 200	2.80
120097	785C	Copper, black enamel	15	8x6	300, 400, 500	4.80
120098	787C	Steel, black enamel finish	15	8x6	300, 400, 500	3.80
120100	747C	Copper, black enamel	20	12x8	750, 1000	7.50
120101	749C	Steel, black enamel finish	20	12x8	750, 1000	5.80



No. 747C

Ventilation.—Globes are regularly furnished with hole in bottom, in line with general practice, although globe ventilation is rarely necessary on account of the adequate provision made in Benjamin Fixture Hoods. Globes without hole will be furnished when specified, without change in price.

Globes list as follows: 7x5-inch, 80 cents; 8x6-inch, 90 cents; 12x8-inch, $2.20. Spherical globes of same dimensions may be ordered without change in price. Trutint 8x6-inch stalactite globes giving noonday sunlight effect, will be furnished with 300–500-watt fixtures at an advance of $1.50 list; Trutint 12x8-inch spherical globes for 750–1000-watt fixtures at an advance of $3.10 list.

For white enamel finish, add 20 per cent list to price of fixture, less glassware.

BENJAMIN SINGLE UNITS

SOCKETS ARE NATIONAL ELECTRICAL CODE STANDARD

FOR STORE AND OFFICE LIGHTING



No. 752C

Nos. 751C-754C

Fixtures 751C–754C have Benco porcelain-lined socket, tapped ½ inch, ventilated deep holder, and stalactite diffusing globe. Socket tapped ⅜ inch furnished without change in price. Globes are furnished with bottom opening.

Benjamin Lamp Grip, to prevent loosening of lamps, furnished at an advance of 10 cents list.

Corresponding sizes of ball globes furnished without change in price.

Trade No.	Mfrs. No.	Length of Fixture, In.	Size of Globe, In.	Lamp Size Watts	Price, Each Globe only	Price, Each Complete
120058	751C	10	6x4	25, 40, 60	$0.70	$1.70
120059	752C	11	7x5	100, 200	.80	2.00
120060	753C	12	8x6	200	.90	2.30
120061	754C Mogul	13	8x6	300, 400, 500	.90	2.90



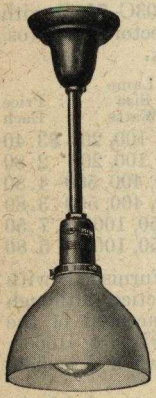
No. 762C

Nos. 761C-764C

Fixtures 761C–764C have Benco socket, ventilated holder, chain suspension extending 14 inches from socket to top of canopy, 5x4-inch canopy, and crowfoot. Extra length chain list at 50 cents per foot.

Stalactite globes of sizes indicated, with bottom opening, furnished regularly, but ball globes in corresponding sizes can be supplied without change in price. Chain loops are drilled to take No. 14 asbestos covered wire.

Trade No.	Mfrs. No.	Length of Fixture, In.	Size of Globe, In.	Lamp Size Watts	Price, Each Globe only	Price, Each Complete
120062	761C	23	6x4	25, 40, 60	$0.70	$2.80
120063	762C	24	7x5	100, 200	.80	3.10
120064	763C	26	8x6	200	.90	3.40
120065	764C Mogul	27	8x6	300, 400, 500	.90	4.00



No. 757C

Nos. 756C-758C

Fixtures Nos. 756C–758C have Benco porcelain-lined socket with ventilated holder as indicated, standard 8-inch stem of ⅝-inch brass tubing, 5x4-inch canopy and crowfoot. Additional length stems list at 30 cents per foot. No. 759C has 12-inch stem of ⅜-inch iron pipe and ¾-inch brass casing. Additional length stems list at 50 cents per foot. For Benjamin Lamp Grip add 10 cents list. For Benco pull chain socket with lamp grip add 40 cents to list. Prices do not include glassware.

Trade No.	Mfrs. No.	Size of Holder Inches	Length, Less Glass, In.	Lamp Size Watts	Price Each
120066	756C	2¼, Form O	11	25, 60	$1.55
120067	757C	2¼, Form H	12	100	1.70
120068	758C	3¼	12	200	1.75
120069	759C Mogul	3¼	16	300, 500	2.75



No. 4377

TYPE S HOLDERS

For Benjamin Screw Threaded Sockets and Fixtures

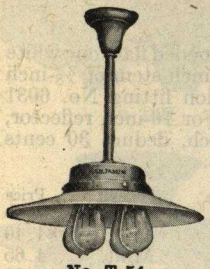
Trade No.	Mfrs. No.	Size of Holder Inches	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
120076	4377	2¼, Form O	50	2	$0.20
120077	4378	2¼, Form H	50	3	.35
120078	4379	3¼	50	8	.40
120079	4380	4	50	9	.70
120080	4381	5	50	9	1.00
120081	4382	6	50	13	1.20

Brush brass is standard finish for brass parts.

Prices are less wires and lamps.

BENJAMIN CLUSTER FIXTURES

SOCKETS AND CLUSTERS ARE NATIONAL ELECTRICAL CODE STANDARD



No. T-54

OPAL REFLECTOR STYLE

Fixtures Nos. T-52–T-55 have cluster body, opal reflector, 15-inch stem of ⅜-inch iron pipe and ¾-inch brass casing, 5x4-inch canopy, and crow foot. Cluster body consists of enameled steel plate and receptacles which permit of wiring in any manner. Additional length stems list at 50 cents per foot For pendent switch and 1 yard of flexible cord add 70 cents list. Reflector lists at $1.70. For 18-inch enameled steel instead of opal reflector add $1.00 list.

Trade No.	Mfrs. No.	No. of Lights	Reflector Diam., In.	Length, In. Less Lamps	Lamp Size Watts	Price Each
038886	T-52	2	18	23	25–200	$7.10
038887	T-53	3	18	23	25–200	7.40
038888	T-54	4	18	23	25–200	7.70
038889	T-55	5	18	23	25–200	8.00



No. 0335

Fixtures Nos. 0332–0335 have cluster body, 12-inch stem of ⅜-inch iron pipe and ¾-inch brass casing, special 6-inch deep holder, flat cone open reflector, 5x4-inch canopy and crow foot. Clusters have knock-out bushing for pendent switch. Socket outlets are at an angle of 18° with the vertical. Additional length stems list at 50 cents per foot. Nos. 0732–0733 have stem of ⅝-inch brass tubing, and special 5-inch deep holder. Additional lengths list at 30 cents per foot.

020816	0332	2	18	16	25–100	5.50
020817	0333	3	18	16	25–100	5.75
020818	0334	4	18	16	25–100	6.00
020819	0335	5	18	16	25–100	6.25
020820	0732	2	16	17	25–100	4.50
020821	0733	3	16	17	25–100	4.75



No. 0534

HOODED ENAMELED STEEL REFLECTOR STYLE

Fixtures Nos. 0532–0535 have 3T cluster body, standard 12-inch stem of ⅜-inch iron pipe and ¾-inch brass casing, deeply hooded white enameled steel reflector, 5x4-inch canopy, and crowfoot. Socket outlets are at an angle of 18° with the vertical. Fixtures with 18-inch reflectors for 100-watt lamps will be furnished at an advance of 30 cents list. Additional length stems list at 50 cents per foot.

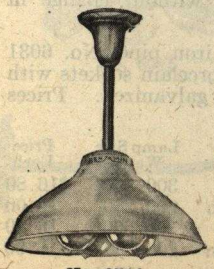
020822	0532	2	16	17	25–100	4.55
020823	0533	3	16	17	25–100	4.80
020824	0534	4	16	17	25–100	5.05
020825	0535	5	16	17	25– 60	5.30



No. 6034

Fixtures Nos. 6032–6035 have 3T cluster body with shell of aluminum, standard 8-inch stem of ½-inch iron pipe and separable suspension fitting, and deeply hooded white enameled steel reflector. Reflector and cluster are made weatherproof by gasket and flange. Additional length stems list at 25 cents per foot. For fixture with gooseneck and wall fitting, add 35 cents list. For suspension with shock absorber, add 10 cents list. Iron parts are galvanized.

042611	6032	2	16	14	25–100	4.20
042612	6033	3	16	14	25–100	4.45
042613	6034	4	16	14	25–100	4.70
042614	6035	5	16	14	25– 60	4.95



No. 0544

Fixtures Nos. 0542–0545 have bowl-shaped enameled steel reflector, 3T wireless cluster, 12-inch stem of ⅜-inch iron pipe and ¾-inch brass casing, 5x4-inch canopy, and crowfoot. Socket outlets are at an angle of 18° with the vertical. Ventilation is provided between reflector and cap. Additional length stems list at 50 cents per foot.

27389	0542	2	18	20	40–200	5.65
27390	0543	3	18	20	40–200	5.90
27391	0544	4	18	20	40–200	6.15
27392	0545	5	18	20	40–100	6.40

Brush brass is standard finish for brass parts.
Prices are less wires and lamps.

BENJAMIN FIXTURES

SOCKETS AND CLUSTERS ARE NATIONAL ELECTRICAL CODE STANDARD

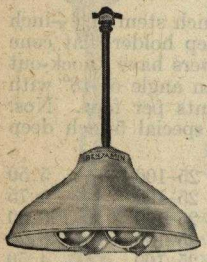


No. 0634L

INDUSTRIAL CLUSTERS

Fixtures Nos. 0632L–0635½ have 18-inch deeply hooded flat cone white enameled steel reflector, 3T wireless cluster body, 12-inch stem of ⅜-inch galvanized iron pipe, and shock absorber. Suspension fitting No. 6031 may be substituted at an advance of 30 cents list. For 16-inch reflector, suitable for lamps below 100-watt, instead of 18-inch, deduct 30 cents list. Additional length stems list at 20 cents per foot.

Trade No.	Mfrs. No.	No. of Lights	Reflector Diam., In.	Length, In. Less Lamps	Lamp Size Watts	Type of Wiring	Price Each
27593	0632L	2	18	18½	60–200	Mult.	$4.40
27594	0633L	3	18	18½	60–200	Mult.	4.65
27595	0634L	4	18	18½	60–200	Mult.	4.90
27596	0635L	5	18	18½	60–100	Mult.	5.15
27598	0632½	2	18	18½	60–200	Series	4.40
27599	0634½	4	18	18½	60–200	Series	4.90
27600	0635½	5	18	18½	60, 100	Series	5.15



No. 0644

Fixtures Nos. 0642–0646 are similar to above, but have bowl-shaped 18-inch white enameled reflector with ventilation between reflector and cap. Fixture No. 0646 has 20-inch black-backed enameled steel reflector.

120632	0642	2	18	21	40, 200	Mult.	5.20
27601	0643	3	18	21	40, 200	Mult.	5.45
27602	0644	4	18	21	40, 200	Mult.	5.70
27603	0645	5	18	21	100	Mult.	5.95
27606	0642½	2	18	21	40, 200	Series	5.20
27607	0644½	4	18	21	40, 200	Series	5.70
27608	0645½	5	18	21	40, 100	Series	5.95



No. 884

Fixtures Nos. 883–894 are dustproof devices for use in foundries, mills, etc. They have 20-inch porcelain enameled steel reflector, standard 8-inch stem of ½-inch iron pipe, separable suspension fitting, and globe as indicated. A special gasket between globe and reflector renders them dustproof. Globe may be removed, or suspended and held in position by means of rod passing through hollow support. For Benjamin Lamp Grip add 5 cents per outlet. Iron parts are galvanized.

Trade No.	Mfrs. No.	No. of Lights	Size of Globe Inches	Lamp Size Watts	Price, Each Complete	Price, Each Globe only
27609	883	3	11¼x10½	60, 100	$10.25	$2.00
27610	884	4	11¼x10½	60, 100	10.55	2.00
27611	885	5	11¼x10½	60, 100	10.85	2.00
27612	886	6	11¼x10½	60	11.15	2.00
27613	894	4	11 x12¾	200	11.05	2.50



No. 0664

Fixtures Nos. 0664–0694 are large ventilated units with white enameled steel reflectors for use in mills and factories. Nos. 0664 and 0674 have concentrating dome reflector and can be hung sufficiently high to clear traveling cranes. Nos. 0684 and 0694 have distributing flat cone reflector, and are recommended for heights from 25 to 30 feet above the floor. They are regularly wired multiple for 110-volt circuits but may be ordered wired series-multiple for 220-volt circuits, without change in price.

Fixtures have 8-inch stem of ½-inch iron pipe, No. 6031 fitting with porcelain wire openings, and porcelain sockets with Benjamin Lamp Grip. Iron parts are galvanized. Prices include stem wires.

Trade No.	Mfrs. No.	No. of Lights	Reflector Diam., In	Length, In. Less Lamps	Socket Base	Lamp Size Watts	Price Each
052626	0664	4	24	21	Mogul	300, 500	$16.80
27614	0674	4	24	21	Medium	200, 250	16.00
052627	0684	4	24	18	Mogul	300, 500	16.80
27615	0694	4	24	18	Medium	200, 250	16.00

Prices are less wires and lamps, except as specified.

BENJAMIN CLUSTER FIXTURES

CLUSTERS ARE NATIONAL ELECTRICAL CODE STANDARD



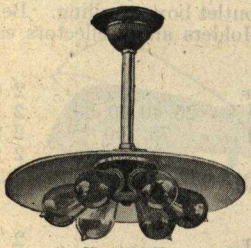
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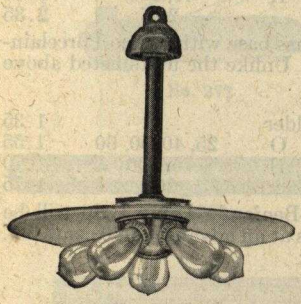
No. 322P



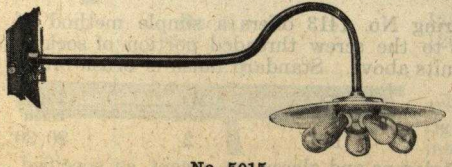
No. 022P



No. 016H



No. 6015



No. 5015

BENJAMIN CEILING FIXTURES

Fixtures Nos. 12H–24H have cluster body less flange, and porcelain enameled steel reflector, which is placed directly between cluster back and ceiling, with rubber ring preventing contact with metal parts.

Type 1 Body

Trade No.	Mfrs. No.	No. of Lights	Reflector Size, In.	Lamp Size Watts	Price Each
021307	12H	2	15	25–100	$2.80
021308	13H	3	15	25–100	3.05
021309	14H	4	15	25–100	3.30
021310	15H	5	15	25–100	3.55
021311	16H	6	15	25–100	3.80
		Type 2 Body			
106161	22H	2	15	25–100	2.55
106162	23H	3	15	25–100	2.80
106163	24H	4	15	25–100	3.05

Fixtures Nos. 322P–323P have cluster body, ornamental sub-base, and opal reflector.

Type 2 Body

Trade No.	Mfrs. No.	No. of Lights	Reflector Size, In.	Base Size, In.	Lamp Size Watts	Price Each
021314	322P	2	14	6x3¼	25–100	$3.10
021315	323P	3	14	6x3¼	25–100	3.35

BENJAMIN PENDENT FIXTURES

Fixtures Nos. 022P–024P have cluster body, 8x⅝-inch brass stem, 3¼-inch reflector holder, opal reflector, 4½x3-inch canopy, and crowfoot.

Type 2 Body

Trade No.	Mfrs. No.	No. of Lights	Reflector Size, In.	Lamp Size Watts	Price Each
044124	022P	2	14	25–100	$2.85
044125	023P	3	14	25–100	3.10
106160	024P	4	14	25–100	3.25

Fixtures Nos. 012H–016H are similar to above, but do not require holder and have porcelain enameled steel reflector.

Type 1 Body

044144	012H	2	15	25–100	3.45
044145	013H	3	15	25–100	3.70
044146	014H	4	15	25–100	3.95
044147	015H	5	15	25–100	4.20
044148	016H	6	15	25–100	4.45

BENJAMIN WEATHERPROOF FIXTURES

Fixtures Nos. 6012–6016 consist of Type 1 aluminum cased wireless cluster, enameled steel reflector, and 8-inch stem with flange and separable suspension fitting. Flange is tapped ½ inch and is bolted to the cluster back. Socket shells are of copper. Iron parts are galvanized.

Type 1 Body, Pendent

Trade No.	Mfrs. No.	No. of Lights	Reflector Size, In.	Lamp Size Watts	Price Each
044106	6012	2	15	25–100	$3.45
044107	6013	3	15	25–100	3.70
044108	6014	4	15	25–100	3.95
044109	6015	5	15	25–100	4.20
044110	6016	6	15	25–100	4.45

Fixtures Nos. 5012–5016 are similar to above, but have ½x30-inch gooseneck and wall fitting.

Type 1 Body, Gooseneck

Trade No.	Mfrs. No.	No. of Lights	Reflector Size, In.	Lamp Size Watts	Price Each
044115	5012	2	15	25–100	$3.80
044116	5013	3	15	25–100	4.05
044117	5014	4	15	25–100	4.30
044118	5015	5	15	25–100	4.55
044119	5016	6	15	25–100	4.80

Brush brass is standard finish for brass parts.
Prices are less wires and lamps.

BENJAMIN SINGLE UNIT FIXTURES

SOCKETS ARE NATIONAL ELECTRICAL CODE STANDARD



No. 4306

CEILING FIXTURES

Benjamin Ceiling Fixtures with 3¼-inch holder will accommodate 200-watt Mazda C lamps, but it is necessary that 12 inches of No. 14 asbestos covered wire be inserted between house wires and fixture terminals to prevent high temperatures in the former. When specified, proper length of wire will be furnished, unattached, without extra charge. Where No. 14 approved wire is used, no insulating joint or ring is required on account of the high insulation of the sockets. For Benjamin Lamp Grip add 10 cents list.

Enameled Steel Base

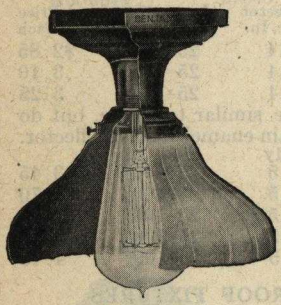


No. 4340

Fixtures Nos. 4302–4306 have easy-to-wire porcelain socket and white enameled steel base held by screw threaded ring on outside of socket shell, making it unnecessary for screws to pass through the enamel. Shade holders are covered by white enameled cap.

Trade No.	Mfrs. No.	Size, Inches Base	Holder	Form Holder	Lamp Size Watts	Price Each
27627	4302	10	2¼	O	25, 40, 50, 60	$4.25
27628	4304	10	2¼	H	75, 100	4.35
27629	4306	10	3¼	..	200	4.40

Brush Brass Base



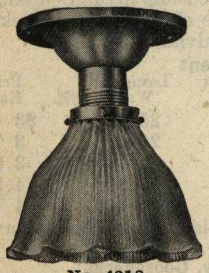
No. 4345

Fixtures Nos. 4312–4342 have easy-to-wire socket, brass base and heavy steel strap for attaching to outlet box or ceiling. Benjamin Type S Interchangeable Shade Holders and Reflectors can be used with these units.

27632	4312	10	Less holder		....	2.60
120560	4340	10	2¼	O	25, 40, 50, 60	2.75
120561	4341	10	2¼	H	75, 100	2.90
120562	4342	10	3¼	..	200	2.95

Fixtures Nos. 4314–4345 are essentially those above, with 8-inch instead of 10-inch bases.

27642	4314	8	Less holder		....	2.00
120563	4343	8	2¼	O	25, 40, 50, 60	2.15
120564	4344	8	2¼	H	75, 100	2.30
120565	4345	8	3¼	..	200	2.35



No. 4318

Fixtures Nos. 4316–4319 have brass base with Benco Porcelain-lined Socket permanently attached. Unlike the units listed above the socket is uncovered.

120566	4316	6	Less holder		....	1.35
120567	4317	6	2¼	O	25, 40, 50, 60	1.55
120568	4318	6	2¼	H	75, 100	1.70
120569	4319	6	3¼	..	200	1.75

Benco Pull Chain Sockets with Benjamin Lamp Grip will be supplied with any of the above fixtures at an advance of 40 cents list.

CHAIN SUPPORTING RINGS



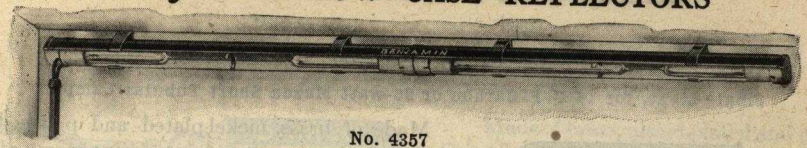
No. 1413

Chain supporting ring No. 1413 offers a simple method of attaching chain fixtures to the screw threaded portion of sockets and Benjamin ceiling units above. Standard finish is brush brass.

Trade No.	Mfrs. No.	Std. Pkg.	Wt. Lbs.	Price Each
120363	1413	100	2	$0.30

Prices are less wires, lamps and glassware except as specified.

BENJAMIN SHOW CASE REFLECTORS



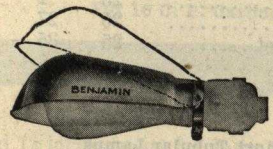
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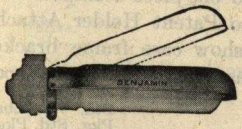
Sockets and Connections



No. 4282



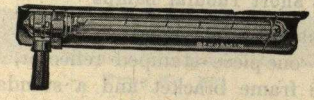
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No. 275

SECTIONAL SHOW CASE REFLECTORS

Standard sections are 22 inches, and consist of reflector (1⅞ inches wide), for tubular lamps, two separable sockets wired in place, and supporting strap. Sections over 22-inch, up to 36-inch, list at advance of $1.80. Two screws join the sections mechanically and electrically. Stem finish is nickel. Reflector is finished black enamel outside, aluminized inside.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Weight Pounds	Price Each
120113	4357	Standard section, wired	10	16	$3.50
120114	4358	Opal linings, per section	10	9	1.50
120115	4359	Mirror linings, per section	10	9	1.60
120116	4360	Stem, flange and bushing	10	10	1.40

COLUMN LIGHTS

Column light No. 4282 has twin socket, adjustable reflector, 26-inch brass stem and flange. Additional length stems list at 40 cents per foot. Standard finish is polished nickel.

120117	4282	2-light, not wired	10	6	2.80

HINGED TYPE REFLECTORS

Pear shaped half shades Nos. 362–366 take 10 to 40-watt lamps. Hinged feature permits easy access to lamp. Shades are used singly, or in pairs. Finish is aluminized inside; outer finishes are indicated below.

120118	362	Brush brass	50	10	.45
120119	364	Brass, nickel-plated	50	10	.60
120120	365	Steel, green enamel	50	8	.30
120139	366	Steel, brush brass	50	8	.40

Tubular half shades Nos. 277–278 are used with standard brass shell, Benjamin unit shell, twin or angle sockets, and accommodate one 6-inch tubular lamp. Steel shade is aluminized inside.

120121	277	All nickel-plated	50	11	.60
120122	278	Steel, green enamel	50	9	.35

RIGID TYPE REFLECTORS

Tubular twin shades Nos. 272–282, with clamps, are 14 inches in length and take two 6-inch tubular lamps. Standard finish is polished nickel.

120123	272	Not slotted	50	25	1.00
120124	282	Slotted	50	25	1.00

Tubular single shades No. 31 are 13 inches in length and accommodate one 12-inch tubular lamp. Standard finish is polished nickel.

120125	31	Not slotted	50	18	1.10

Tubular twin shades Nos. 275–285 are 26 inches in length and accomodate two 12-inch tubular lamps. Standard finish is polished nickel.

120126	275	Not slotted	50	45	2.40
120127	285	Slotted	50	42	2.40

Rigid types of display reflectors Nos. 31 and 275 are furnished regularly not slotted for use with upright support. Suspended and bracket methods of installation require slotted reflectors. Prices are for reflectors only.

OAMCO SHOW CASE REFLECTORS

TYPE No. 577

Single Light, for 16 C. P. Carbon or 25-watt Mazda Short Tubular Lamps



No. 577C

Made of brass, nickel-plated and polished. The complete device consists of a one-piece stamped reflector with an Oamco Patent Holder Attachment, an adjustable show case frame bracket and a standard brass shell keyless socket.

Trade No.	Mfrs. No.	Size, Inches Length	Width	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
050901	577	6¾	2⅛	Reflector only	20	8	$0.75
050902	577A	1¾	1½	Bracket only	20	2	.50
050903	577B	...	2⅛	Reflector and bracket	20	10	1.25
050904	577C	10	2⅛	Reflector, bracket and socket	20	20	1.75

TYPE No. 773

Two Light, for 16 C. P. Carbon or 25-watt Mazda Short Tubular Lamps



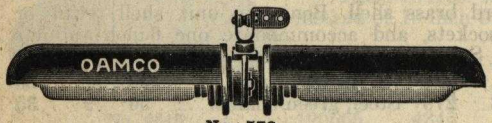
No. 773C

Made of brass, nickel-plated and polished. The complete fixture is made up of a one-piece stamped reflector with spring clip socket holder, an adjustable show case frame bracket and a standard brass shell twin keyless socket.

Trade No.	Mfrs. No.	Size, Inches Length	Width	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
80520	773	14	2½	Reflector only	25	25	$1.15
80521	773A	1½	½	Bracket only	25	2	.50
80522	773B	14	2½	Reflector and bracket	25	27	1.65
80523	773C	14	2½	Reflector, bracket and socket	25	35	2.50

TYPE No. 578

Two Light, for 16 C. P. Carbon or 25-watt Mazda Short Tubular Lamps



No. 578

Made of brass, nickel-plated and polished. Consists of two one-piece stamped reflectors with an Oamco Patent Holder Attachment, an adjustable show case frame bracket and a standard brass shell twin keyless socket.

Trade No.	Mfrs. No.	Size, Inches Length	Width	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
050905	578	15½	2⅛	Complete, two reflectors, bracket and twin socket	10	10	$2.85
80524	578A	1½	½	Bracket only	25	2	.50
050901	577	6¾	2⅛	Reflector only	20	8	.75

TYPE No. 776

Single Light, for 16 C. P. Carbon or 25-watt Mazda Short Tubular Lamps



No. 776B

Made of steel, matte aluminum finish.

Made up of a one-piece stamped reflector, an adjustable show case frame bracket and a standard brass shell keyless socket.

Trade No.	Mfrs. No.	Size, Inches Length	Width	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
80526	776	11	2½	Reflector and bracket only	20	8	$0.85
80527	776A	11	2½	Reflector, bracket and nickel-plated keyless socket	20	30	1.35
80528	776B	11	2½	Reflector, bracket and brass socket	20	30	1.25

OAMCO SHOW CASE REFLECTORS

TYPE No. 694

Single Light, for 10 C. P. Carbon or 25-watt Mazda Short Tubular Lamps



No. 694B

Made of brass, nickel-plated and polished. Complete, includes reflector No. 577, a horizontal swing bracket and a standard brass shell keyless socket.

Trade No.	Mfrs. No.	Size, Inches Length	Width	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
050901	577	6¾	2⅛	Reflector only	20	8	$0.75
050906	694	8	...	Bracket only	20	10	1.50
050907	694A	....	...	Reflector and bracket	20	18	2.25
050908	694B	16	2⅛	Reflector, bracket and socket	20	35	2.75

TYPE No. 775

Single Light, for 25 or 40-watt Mazda 12-inch Tubular Show Case Lamps



No. 775

Made of steel, matte aluminum finish. Metal straps are furnished to fasten the reflector to the frame of the show case. Equipped with brass shell nickel-plated keyless socket. Length, 15 in.; face, 2½ in.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
80541	775	Reflector, bracket and socket	20	30	$2.50

TYPE No. 774

For 16 C. P. Carbon or 25-watt Mazda Short or Long Tubular Lamps



Type No. 774

Made of steel, exterior finished Bauer-Barff, dead black. Metal straps are furnished to attach the reflector to the frame of the show case. Reflectors are wired and equipped with nickel-plated keyless sockets spaced 12 inches apart for short lamps and 20 inches for long lamps. Face of reflector, 2½ inches. Made in lengths up to and including 10 feet.

Trade No.	Mfrs. No.	Description	Std. Qty. Feet	Price per Ft
		For 4-inch Short Lamp		
80542	774	Matte aluminum reflecting surface	25	$2.30
80543	774A	Corrugated mirror reflecting surface	25	2.50
		For 12-inch Long Lamp		
80544	774B	Matte aluminum reflecting surface	25	2.10
80545	774C	Corrugated mirror reflecting surface	25	2.30

TYPE No. 521

Wall Case Reflector for 25 or 40-watt Mazda Regular Lamps



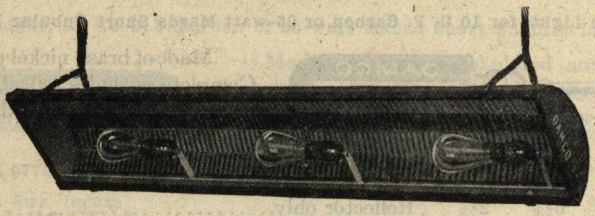
Type No. 521

Made of steel, dead black finish exterior. Metal straps are furnished to suspend the reflector. Equipped with wiring and nickel-plated keyless sockets spaced 12 inches apart. Made in lengths up to and including 10 feet. Face, 3½ and 4½ inches.

Trade No.	Mfrs. No.	Description	Face Inches	Std. Qty. Feet	Price per Ft.
80546	521A	Corrugated mirror, glass lining	3½	25	$2.40
80547	521B	Corrugated mirror, glass lining	4½	25	2.50
80548	521C	Matte aluminum lining	3½	25	2.15
80549	521D	Matte aluminum lining	4½	25	2.25

OAMCO SHOW WINDOW REFLECTORS

TYPE 518

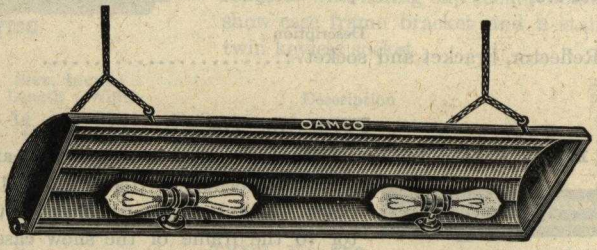


Made up in lengths up to and including ten feet. Semi-elliptical in form with section lining of mirror or white enamel. The wires are run in a channel along the edge of the reflector and are concealed. The reflector is suspended by chains from the ceiling and as near the window as conditions will permit. The incandescent lamps are spaced about 12 inches apart. Prices include wiring and sockets spaced 12 inches apart. Face of reflector, 7 inches.

Trade No.	Mfrs. No.	Description	Std. Qty. Feet	Price per Ft.
133141	518A	Corrugated mirror	25	$2.30
133142	518C	White enamel	25	1.75

TYPE 655

N. E. C. STANDARD



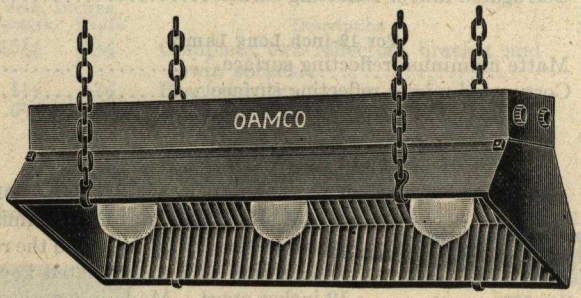
This reflector is made of heavy sheet metal, semi-elliptical in form, with sectional lining of corrugated mirror glass. The outside is finished flat green. The wires are run through a metal conduit to the lamp sockets.

The reflector can be made in lengths up to 10 feet. Face of reflector, 7 inches

054580	655A	With wiring and sockets, one light per foot	25	2.80

TYPE 678

N. E. C. STANDARD



This reflector is made of heavy sheet metal. The reflecting surface is of corrugated mirror or white enamel. Outside finish is flat green. The wires are run in a channel on top of the reflector and are concealed. The reflector is made to be suspended from the ceiling by chains.

Face of reflector, 8 inches. Furnished complete with sockets, and wired. Lights are spaced 12 inches apart.

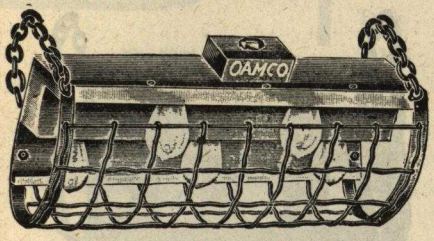
054581	678A	White enamel	25	2.20
054583	678C	Corrugated mirror	25	2.70

OAMCO STAGE REFLECTORS

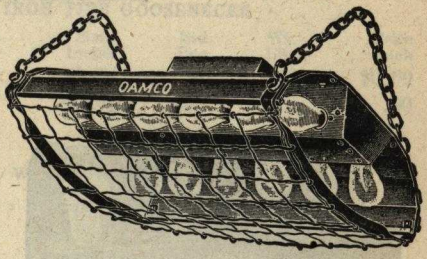
NATIONAL ELECTRICAL CODE STANDARD

BORDER REFLECTORS

Green Outside, Reflecting Surface White

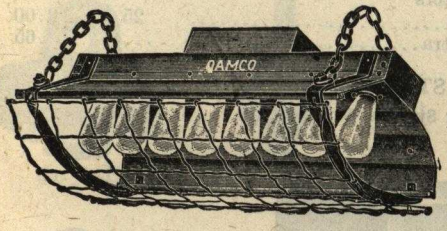


No. 685A

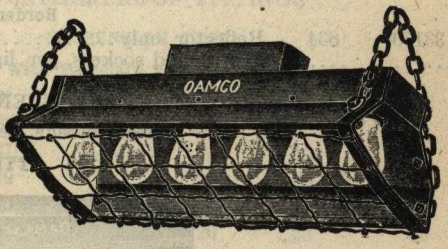


No. 591A

Trade No.	Mfrs. No.	Description	Std Qty. Feet	Price per Ft.
		No. 685		
050736	685	12-inch face, without wire guard	25	$2.50
050737	685A	12-inch face, with wire guard	25	3.00
050738	....	Wiring and sockets, per light, extra	..	.65
		No. 591		
050739	591	16-inch face, without wire guard	25	2.75
050740	591A	16-inch face, with wire guard	25	3.15
050741	....	Wiring and sockets, per light, extra	..	.65



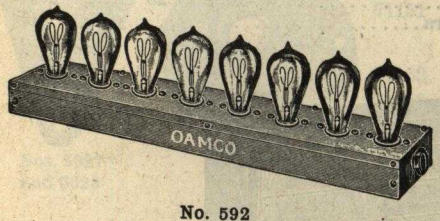
No. 587A



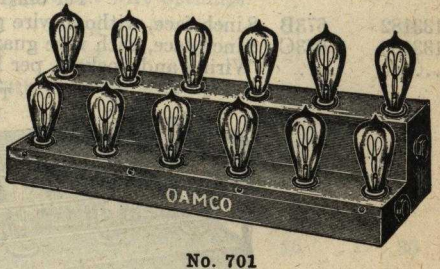
No. 608A

		No. 587		
050742	587	13-inch face, without wire guard	25	2.00
050743	587A	13-inch face, with wire guard	25	2.60
050744	....	Wiring and sockets, per light, extra	..	.65
		No. 608		
050745	608	9-inch face, without wire guard	25	2.00
050746	608A	9-inch face, with wire guard	25	2.50
050747	....	Wiring and sockets, per light, extra	..	.65

STRIP OR FOOTLIGHTS



No. 592



No. 701

		No. 592		
050748	592	4x2 inches, straight	25	1.00
050749	592B	4x2 inches, curved	25	1.75
050750	....	Wiring and sockets, per light, extra	..	.65
		No. 701		
050751	701	Double row footlight	25	2.00
050752	....	Wiring and sockets, per light, extra	25	.65

OAMCO STAGE REFLECTORS AND PROSCENIUM STRIPS

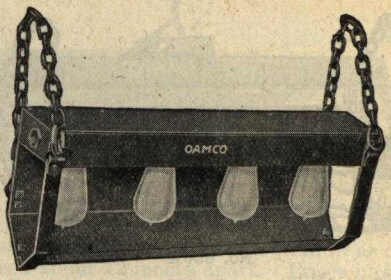
NATIONAL ELECTRICAL CODE STANDARD

STAGE REFLECTORS

Green Outside, Reflecting Surface White



No. 833



No. 834

Designed for use in schools, small theatres and motion picture houses where a small, neat portable footlight and border reflector, with one row of lights, is required.

Footlight Reflectors

Trade No.	Mfrs. No.	Description	Std. Qty. Feet	Price per Ft.
133178	833	Reflector only	25	2.00
.....	....	Wiring and sockets, per light, extra	...	.65

Border Reflectors

133179	834	Reflector only	25	2.00
.....	....	Wiring and sockets, per light, extra	...	.65

PROSCENIUM STRIPS

Green Outside, Reflecting Surface White

TYPE 673



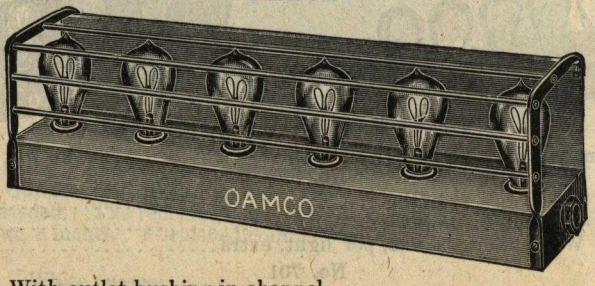
For Double Rows of Lamps

133180	673	10-inch face, without wire guard	25	2.00
133181	673A	10-inch face, with wire guard	25	2.30
.....	....	Wiring and sockets, per light, extra	...	.65

For Single Row of Lamps

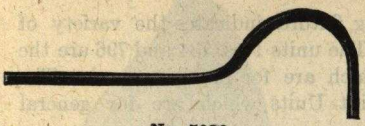
133182	673B	8-inch face, without wire guard	25	1.80
133183	673C	8-inch face, with wire guard	25	2.10
.....	....	Wiring and sockets, per light, extra	...	.65

TYPE 702



133184	702	With outlet bushing in channel	25	2.00
.....	....	Wiring and sockets, per light, extra	...	.65

BENJAMIN PARTS FOR WEATHERPROOF FIXTURES



No. 5036

WEATHERPROOF SUSPENSIONS

IRON PIPE GOOSENECKS

Trade No.	Mfrs. No.	Size Inches	Std. Pkg.	Wt. Lbs.	Price Each
71175	5036	30x½	20	46	$0.60
27938	5037	40x¾	20	110	.90

CROSS-ARMS



No. 6202

Without Shock Absorber

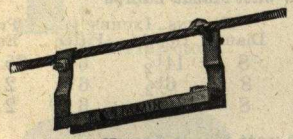
71168	6200	½	20	26	.80

With Shock Absorber

71169	6202	½	20	28	.90

With Insulated Wire Openings like No. 6049V

71170	6203	¾	20	32	1.00



No. 6206

SPAN WIRE SUSPENSION

71174	6206	Slips ⅝-in. bolt	20	21	.50

WEATHERPROOF FITTINGS

SUSPENSION TYPES



No. 6031



No. 6049M

With Porcelain Wire Openings

71145	*6031	½	20	10	.60
71163	*6031F	½ Top & Bottom	20	10	.65
71160	*6031M	½ Male	20	10	.65
71161	*6049	½	20	23	.75
71162	*6049M	½ Male	20	23	.80
71164	*6049V	¾ Male	20	23	.80

Without Shock Absorber

71143	6029	½	20	16	.30

With Shock Absorber

71144	6030	½	20	18	.40

Malleable Iron Fitting

71165	6028	½	20	6	.25



No. 6029



No. 6028

POLE TYPES

Without Wire Openings

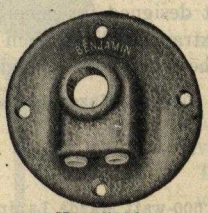
71150	5027	¾	20	27	.40
71151	5028	½	20	27	.40

With Porcelain Wire Openings

71152	5031	¾	20	31	.60
71153	5032	½	20	31	.60



Nos. 5027 and 5028



Nos. 5031 and 5032

POLE AND WALL TYPES

Malleable Iron Pole Fitting

71147	5025	½	20	16	.30

Malleable Iron Wall Fitting

71148	5026	½	20	8	.30



No. 5025



No. 5026

Iron parts are galvanized. Black enamel may be ordered without change in price.

*National Electrical Code Standard.

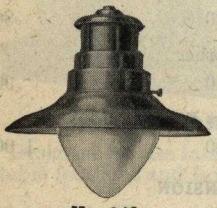
TRUTINT UNITS



No. 748

This group of light filtering fixtures indicates the variety of styles which may be obtained. The units Nos. 734 and 796 are the Nela Color Matching Units which are for precision work. The other units illustrate the Trutint Units which are for general illumination.

NOON SUNLIGHT



No. 842

These styles are intended for general illumination in paint shops, lithograph plants, cigar factories, book shops, dry goods stores, wall paper and paint stores, etc. These units are made of Trutint glass, sand blasted within. They give a light corresponding to noon sunlight.

No. 748—For 400 and 500-watt Mazda Lamps

Trade No.	Mfrs. No.	Description	Dimens., Inches Diam.	Depth	Fitter	Price Each
112642	748	Complete	8	14½	6	$5.30
112643	729	Fixture only	8	6½	6	2.40
112646	1293–8	Glass only, R. I.	8	8	6	2.90



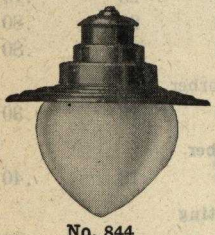
No. 723

No. 842—For 400 and 500-watt Mazda Lamps

096419	842	Complete	15	13¾	6	8.70
•096420	807	Fixture only	15	9¼	6	5.80
112646	1293–8	Glass only, R. I.	8	8	6	2.90

No. 723—For 750 and 1000-watt Mazda Lamps

112637	723	Complete	12	16½	8	10.00
112638	753	Fixture only	8½	7¼	8	2.80
112647	423–12	Glass only, R. I.	12	12	8	7.20
112648	*423–10	Glass only, R. I.	10	10	8	5.50

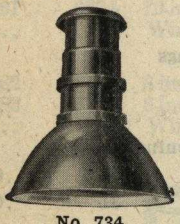


No. 844

No. 844—For 750 and 1000-watt Mazda Lamps

112649	844	Complete	18	18	8	14.40
112650	833	Fixture only	18	8⅛	8	7.20
096421	1296	Glass only	12	12	8	7.20

NORTH SKYLIGHT—COLOR MATCHING



No. 734

Units Nos. 734 and 796 are for most accurate color matching and color comparison work, such as inspecting rooms in textile mills, for detecting color reaction in chemical laboratories, for testing colors in dye houses, for making artificial teeth in dental works, for showing fabrics in their true daylight color in retail stores, etc. They consist of pendant reflectors into which is set a round plate glass filter. These units are not designed for general illumination but for use where there is little extraneous light, such as in booths, closets, or inspection rooms. These units are of high precision.

No. 734—For 400 and 500-watt Mazda Lamps

112639	734	Complete	12	15	..	13.50
112640	736	Fixture only	12	15	..	7.00
112641	3069	Trutint plate	11	..	..	6.50



No. 796

No. 796—For 400 and 500-watt Mazda Lamps

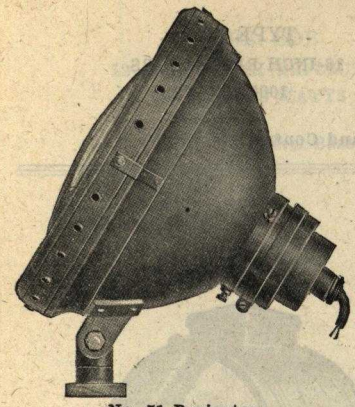
112644	796	Complete	12¼	16½	..	15.50
112645	797	Fixture only	12¼	16½	..	9.00
112641	3069	Trutint plate	11	....	..	6.50

Standard package, 12.

• Finish of metal parts: Nos. 723 and 748, dark japan; Nos. 734 and 796, outside, brown lacquer; inside, Cleanezy aluminum; Nos. 842 and 844, porcelain enamel.

*Can be used with No. 753.

X-RAY FLOOD LIGHTING PROJECTORS



No. 51 Projector

No. 51 PROJECTORS

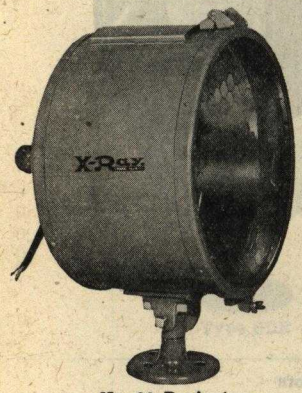
For Use with 200-watt, G-30, Mazda C Flood Lighting Lamp

The complete projector unit consists of a weatherproof, ventilated, cold galvanized and enameled steel housing, with heat-resisting glass cover; X-Ray Projector Reflector; special arrangement for adjusting lamp position from the exterior; porcelain lined weatherproof socket. Standard finish of housing is a neutral gray baked enamel.

No. 51 unit is equipped with swivel and tilting attachment for bolting to supporting surfaces.

The reflector is designed to concentrate the maximum light from the lamp into a powerful beam. The angle of divergence of the beam may be varied from 12 to 20 degrees. With a 12-degree beam, the 200-watt lamp gives a maximum candle power of 54000.

Trade No.	Mfrs. No.	Diam. Inches	Depth Inches	Price Each
109148	51	11½	9¾	$22.50



No. 60 Projector

No. 60 PROJECTORS

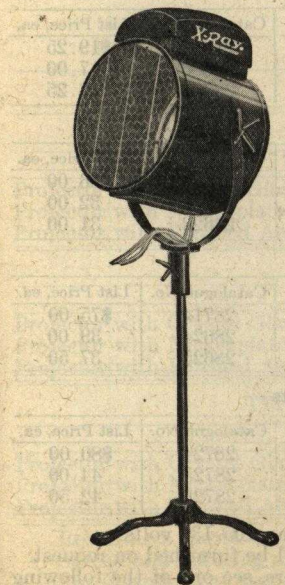
For Use with 400-watt, G-40, Mazda C, Flood Lighting Lamp

The complete unit consists of a weatherproof, well ventilated, cold galvanized and enameled steel housing, with wire glass cover; special design of X-Ray reflector; lamp adjustment device operated from exterior, and mogul porcelain lined socket. Standard finish is a neutral gray enamel.

Unit equipped with swivel and tilting device for bolting to supporting surfaces.

The angle of divergence of the light beam may be varied from 12 to 30 degrees. With narrow beam, the 400-watt lamp gives a very powerful beam.

Trade No.	Mfrs. No.	Size Over All, In. Diam.	Depth	Weight, Pounds Net	Ship.	Price Each
67438	60	14	14	20	35	$35.00



No. 90 Mogul Projector

No. 90 MOGUL PROJECTORS

For Use with Any Size Standard Lamp Having Mogul Base 300-400-500-750-1000 Watt Mazda C Lamps, PS Bulb

The lamp burns in the natural pendant position, insuring long life. A powerful, concentrated beam of light is obtained with any of these lamps.

The X-Ray Mogul Projector is substantially made of heavy steel and castings, finished in black, weatherproof, well ventilated, light in weight, and it is wired with a short cord. The socket is included. An adjustable stand support comes with the unit.

An X-Ray reflector of special parabolic design makes this the most efficient unit of its kind.

Trade No.	Mfrs. No.	Size Over All, In. Diam.	Depth	Weight, Pounds Net	Ship.	Price Each
67437	90	17	16½	30	55	$56.00

Diameter of barrel, 14 inches; spread of base, 19½ inches; height, not including yoke and stand, 18⅝ inches.

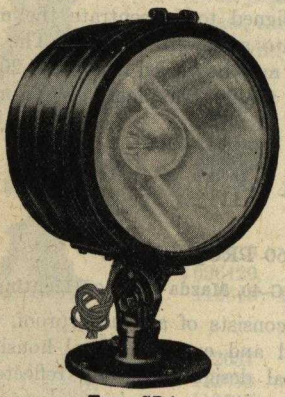
Price does not include lamp.

IMPERIAL INCANDESCENT FLOOD LIGHT PROJECTORS

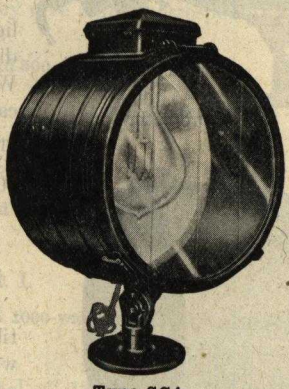
TYPE SDA
9⅝, 12 AND 16-INCH REFLECTORS
150, 250 AND 500 WATTS

TYPE SCA
16-INCH REFLECTORS
1000 WATTS

Swivel Base and Quadrant Mounting—Hand Control



Type SDA



Type SCA

TYPE SDA—9⅝, 12 and 16-Inch Reflectors

With 9⅝-inch Reflectors—150 Watts

Style of Reflector	Catalogue No.	List Price, ea.
Projector with Crystal Glass Mirror Reflector	28685	$19.25
Projector with Nickel-plated Copper Reflector	28686	17.00
Projector with Polished Aluminum Reflector	28687	16.25

With 12-inch Reflectors—250 Watts

Style of Reflector	Catalogue No.	List Price, ea.
Projector with Crystal Glass Mirror Reflector	28621	$36.00
Projector with Nickel-plated Copper Reflector	28622	32.00
Projector with Polished Aluminum Reflector	28623	31.00

With 16-inch Reflectors—500 Watts

Style of Reflector	Catalogue No.	List Price, ea.
Projector with Crystal Glass Mirror Reflector	28714	$75.00
Projector with Nickel-plated Copper Reflector	28624	39.00
Projector with Polished Aluminum Reflector	28625	37.50

TYPE SCA—With 16-inch Reflectors—1000 Watts

Style of Reflector	Catalogue No.	List Price, ea.
Projector with Crystal Glass Mirror Reflector	28724	$80.00
Projector with Nickel-plated Copper Reflector	28725	44.00
Projector with Polished Aluminum Reflector	28726	42.50

Resistances can be furnished for operation on voltages other than 105–130 volts.

Spread and diffusing glasses for producing wide-angle beams will be furnished on request.

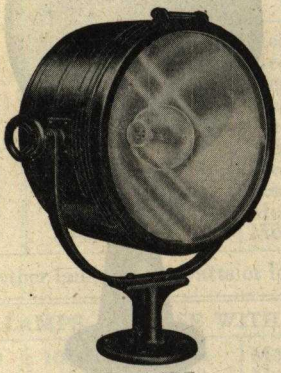
For incandescent lamps that can be used in above projectors, see one of the following pages.

IMPERIAL INCANDESCENT FLOODLIGHT PROJECTORS

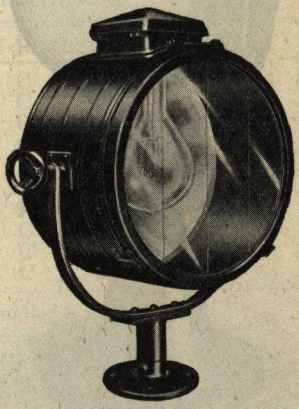
TYPE SDE
12 and 16-INCH REFLECTORS
250 AND 500 WATTS

TYPE SCE
16-INCH REFLECTORS
1000 WATTS

Swivel Base and Trunnion Mounting—Hand Control



Type SDE



Type SCE

TYPE SDE—12 and 16-inch Reflectors

With 12-inch Reflectors—250 Watts

Style of Reflector	Catalogue No.	List Price, ea.
Projector with Crystal Glass Mirror Reflector	28688	$39.00
Projector with Nickel-plated Copper Reflector	28689	35.00
Projector with Polished Aluminum Reflector	28690	34.00

With 16-inch Reflectors—500 Watts

Style of Reflector	Catalogue No.	List Price, ea.
Projector with Crystal Glass Mirror Reflector	28715	$81.00
Projector with Nickel-plated Copper Reflector	28711	45.00
Projector with Polished Aluminum Reflector	28712	43.50

TYPE SCE—With 16-inch Reflectors—1000 Watts

Style of Reflector	Catalogue No.	List Price, ea.
Projector with Crystal Glass Mirror Reflector	28721	$86.00
Projector with Nickel-plated Copper Reflector	28722	50.00
Projector with Polished Aluminum Reflector	28723	48.50

Resistances can be furnished for operation on voltages other than 105–130 volts.

Spread and diffusing glasses for producing wide-angle beams will be furnished on request.

For incandescent lamps that can be used in above projectors, see one of the following pages.

IMPERIAL INCANDESCENT FLOODLIGHT PROJECTORS

TYPE SDX
16-INCH REFLECTORS
500 WATTS
Pilot House Control, Lever and Wheel Designs

TYPE SDY
16-INCH REFLECTORS
500 WATTS
Deck Control



Typy SDX-Lever Control



Type SDY

TYPE SDX—16-inch Reflectors

With 16-inch Reflectors—Lever Control—500 Watts

Style of Reflector	Catalogue No.	List Price, ea.
Projector with Crystal Glass Mirror Reflector	28717	$140.00
Projector with Nickel-plated Copper Reflector	28706	105.00
Projector with Polished Aluminum Reflector	28707	103.00

With 16-inch Reflectors—Wheel Control—500 Watts

Style of Reflector	Catalogue No.	List Price, ea.
Projector with Crystal Glass Mirror Reflector	28718	$140.00
Projector with Nickel-plated Copper Reflector	28630	105.00
Projector with Polished Aluminum Reflector	28705	103.00

TYPE SDY—With 16-inch Reflectors—500 Watts

Style of Reflector	Catalogue No.	List Price, ea.
Projector with Crystal Glass Mirror Reflector	28716	$120.00
Projector with Nickel-plated Copper Reflector	28703	85.00
Projector with Polished Aluminum Reflector	28704	83.00

Resistances can be furnished for operation on voltages other than 105–130 volts.
Spread and diffusing glasses for producing wide angle beams will be furnished on request.
For lamps that can be used in above projectors, see following pages.

INCANDESCENT LAMPS FOR IMPERIAL FLOOD LIGHT PROJECTORS

FOR PROJECTORS WITH 9⅝, 12 AND 16-INCH REFLECTORS

LAMPS FOR USE WITH 9⅝-INCH REFLECTORS

Watts	Volts	Bulb	Base	Light Center Length, In.	Type	Total Lumens	Standard Package	Prices
*†100	105-130	G25	Med. Sc.	2¾	C	1,260	50	On Application
94	105-130	G25	Med. Sc.	2 1/16	B	960	50	
72	105-130	G25	Med. Sc.	2 1/16	B	730	50	
56	105-130	G25	Med. Sc.	2 1/16	B	570	50	
150	30-34	G25	Med. Sc.	2¾	C	2,100	50	
100	30-34	G25	Med. Sc.	2¾	C	1,260	50	

Or any other lamp of 150 watts or less in a G25 bulb or smaller.

LAMPS FOR USE WITH 12-INCH REFLECTORS

*†250	105-130	G30	Med. Sc.	3⅛	C	3,950	24	On Application
†200	105-130	G30	Med. Sc.	3⅛	C	2,640	24	
150	105-130	G30	Med. Sc.	3⅛	C	1,900	24	
*†100	105-130	G25	Med. Sc.	2¾	C	1,260	50	
94	105-130	G25	Med. Sc.	2 1/16	B	960	50	
72	105-130	G25	Med. Sc.	2 1/16	B	730	50	
56	105-130	G25	Med. Sc.	2 1/16	B	570	50	
†250	30-34	G30	Med. Sc.	3⅛	C	3,920	24	
150	30-34	G25	Med. Sc.	2¾	C	2,100	50	
100	30-34	G25	Med. Sc.	2¾	C	1,260	50	

Or any other lamp of 250 watts or less in a G30 bulb or smaller.

LAMPS FOR USE WITH 16-INCH REFLECTORS, IN SD PROJECTORS

*†500	105-130	G40	Mog. Sc.	4¼	C	9,400	12	On Application
†400	105-130	G40	Mog. Sc.	4¼	C	5,920	12	
*†250	105-130	G30	Med. Sc.	3⅛	C	3,950	24	
†200	105-130	G30	Med. Sc.	3⅛	C	2,640	24	
150	105-130	G30	Med. Sc.	3⅛	C	1,900	24	
†250	30-34	G30	Med. Sc.	3⅛	C	3,920	24	

Or any other lamp of 500 watts or less in a G40 bulb or smaller.

LAMPS FOR USE WITH 16-INCH REFLECTORS, IN SC PROJECTORS

‖§1000	105-130	PS-52	Mog. Sc.	9½	C	18,000	8	On Application
§1000	220-250	PS-52	Mog. Sc.	9½	C	16,100	8	
⁂ 750	105-130	PS-52	Mog. Sc.	9½	C	12,800	8	
⁂ 750	220-250	PS-52	Mog. Sc.	9½	C	11,500	8	
⁂ 500	105-130	PS-40	Mog. Sc.	7	C	8,050	12	
⁂ 500	220-250	PS-40	Mog. Sc.	7	C	7,400	12	
⁂ 400	105-130	PS-40	Mog. Sc.	7	C	6,150	12	
⁂ 400	220-250	PS-40	Mog. Sc.	7	C	5,600	12	
⁂ 300	105-130	PS-35	Mog. Sc.	7	C	4,850	24	
⁂ 300	220-250	PS-35	Mog. Sc.	7	C	4,100	24	

Or any other lamp in a PS-52 bulb or smaller.

*Standard stereopticon lamps. Rated life less than other lamps which are designed for flood light and projector service.

†Can be burned in any position except within 45 degrees of vertically, base up.

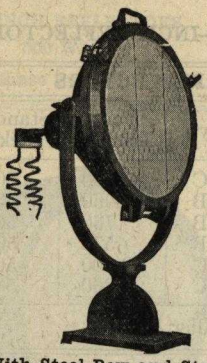
⁂Regular Filament Mazda Type C lamps. Burn only within 45 degrees of vertically, base up.

Above information is taken from incandescent lamp manufacturer's catalogue and is not guaranteed by us. Complete information as given above should be placed on requisitions for lamps.

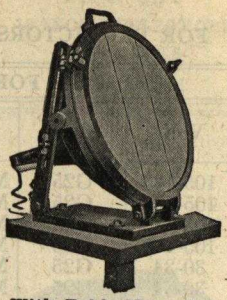
All lamps except those marked with (⁂) are focus type lamps, which have their filaments concentrated in as small a space as possible.

‖Can be furnished with medium concentrated filament.

CUTTER UNIVERSAL FLOOD-LIGHTING PROJECTORS



With Steel Bow and Stand



With Table Mounting

Cutter Universal Projectors are ideal units for serving the many purposes for which flood-lighting projectors are used. They are of rugged design, manufactured in all mounting styles, and equipped with reflectors and focusing adjustments that give any type of light distribution desired.

The body is made of cast iron, electrogalvanized, or of aluminum, and protects the reflector and lamp from damage. It is sealed tight with a sectional wire-glass door, making the unit weather and fume proof. The projector is cooled by the circulation of air within the body and by radiation from the body itself.

The Universal can be adjusted to direct the light in any plane. It is made in all mounting styles: Table; bow and stand; and bow, pipe section and stand. It may be installed in any position and still the light may be projected in the direction desired. Either narrow-beam or wide-angle-beam reflectors may be used with the Universal. An adjustable socket permits the focusing of the lamp to change the light distribution.

Mazda flood-lighting lamps with concentrated filaments are used in the Universal, though it is designed especially for the new 200 and 400-watt projector lamps.

Key to Style Letters

A—Aluminum body.
C—Cast iron body.
N—Narrow-beam reflector.
W—Wide-angle-beam reflector.
B—Steel bow and stand mounting.
T—Table mounting only.
S—Stand mounting with 3-foot pipe section.

Trade No.	Mfrs. No.	Style	Ship. Wt., Lbs.	Price Each
147576	30700	A N B (Narrow beam)	60	$42.00
147577	30701	A N T (Narrow beam)	46	40.00
147578	30702	A N S (Narrow beam)	66	44.00
147579	30703	A W B (Wide-angle beam)	60	42.00
147580	30704	A W T (Wide-angle beam)	46	40.00
147581	30705	A W S (Wide-angle beam)	66	44.00
147582	30706	C N B (Narrow beam)	85	32.00
147583	30707	C N T (Narrow beam)	70	30.00
147584	30708	C N S (Narrow beam)	91	34.00
147585	30709	C W B (Wide-angle beam)	85	32.00
147586	30710	C W T (Wide-angle beam)	70	30.00
147587	30711	C W S (Wide-angle beam)	91	34.00
147588	30712	Narrow-beam reflector only	5	7.50
147589	30713	Wide-angle beam reflector only	5	7.50
147590	30714	Style A N body only, with reflector	35	38.00
147591	30715	Style A W body only, with reflector	35	38.00
147592	30716	Style C N body only, with reflector	60	28.00
147593	30717	Style C W body only, with reflector	60	28.00
147594	30718	Steel bow for any style body	8	1.00
147595	30719	Table for bow with bolts and nuts	15	3.00
147596	30720	Low table for fastening directly to body	10	2.00
147597	30721	3-foot by 1¼-inch pipe section with floor stand and flange for connecting to bow	20	5.00
147598	30722	Floor stand only, for 1¼-inch pipe	15	3.75
147599	30724	Brass padlock with two keys	1	1.00
147600	30723	Bow flange only, for 1¼-inch pipe	4	.50

IMPERIAL REFLECTORS

TYPE RM
25 TO 60 AND 100 TO 150 WATT SIZES

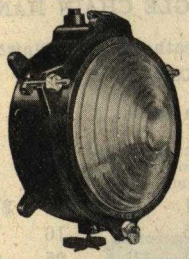
TYPE RS
60 TO 100 AND 150 TO 250 WATT SIZES

Cast-iron Case and Door Frames—Vapor, Gas and Dust-proof. Have ½-inch Threaded Hubs for Direct Connection to Rigid Conduit.

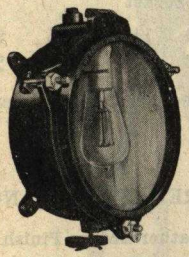
Type RM can be installed in any desired position. Light is projected at a right angle to the surface against which reflector is mounted.

Type RS is designed to be suspended so that its light is projected downward.

These reflectors constitute the most durable and efficient lighting fixtures for railroad roundhouses, turn-tables, ash pits, etc., as well as meeting illumination requirements in industrial plants. In steel mills, types RM and RS reflectors are used variously on larry, scale and bin-filling cars, to light runway where skip cars dump into hopper at top of blast furnace, to give illumination for operators attaching peel at charging boxes; also to illuminate gauges and the approach tables in rolling mills, and to light crane yards where overhead lamps cannot be used.



With Clear Semaphore Lens

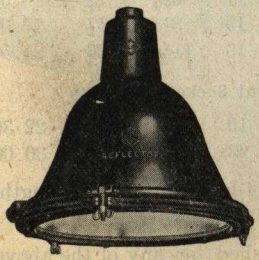


With Clear Glass

TYPE RM REFLECTOR—25 to 60 and 100 to 150-Watt

25 to 60-Watt			100 to 150-Watt	
Polished Aluminum	White Enamel	Style of Interior Reflector	Polished Aluminum	White Enamel
		With Clear Semaphore Lens		
26005	26055	Catalogue No.	26021	26071
35 lbs.	35 lbs.	Shipping Weight	50 lbs.	50 lbs.
$13.00	$13.00	List Price, each	$22.00	$22.00
		With "Noglare" (Yellow) Semaphore Lens		
26087	26097	Catalogue No.	26092	26102
35 lbs.	35 lbs.	Shipping Weight	50 lbs.	50 lbs.
$17.50	$17.50	List Price, each	$29.00	$29.00
		With Clear Glass		
26001	26051	Catalogue No.	26017	26067
35 lbs.	35 lbs.	Shipping Weight	45 lbs.	45 lbs.
$9.50	$9.50	List Price, each	$13.00	$13.00
		With "Noglare" (Yellow) Glass		
26085	26095	Catalogue No.	26090	26100
35 lbs.	35 lbs.	Shipping Weight	45 lbs.	45 lbs.
$16.00	$16.00	List Price, each	$22.25	$22.25
		With "Safety First" (Green with White Letters) Glass		
26112	26113	Catalogue No.	26114	26115
35 lbs.	35 lbs.	Shipping Weight	45 lbs.	45 lbs.
$13.00	$13.00	List Price, each	$17.00	$17.00

Type RM reflector has two hubs for conduit—one in the bottom and one in the top. A pipe plug, furnished with the reflector, serves to close the hub not in use.



TYPE RS REFLECTOR—60 to 100 and 150 to 250-Watt

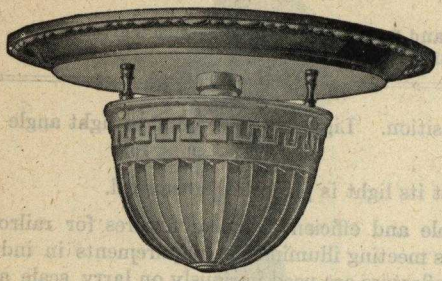
With Clear Glass			With "Noglare" (Yellow) Glass	
60 to 100	150 to 250	Watts	60 to 100	150 to 250
26083	26084	Catalogue No.	26109	26110
45 lbs.	45 lbs.	Shipping Weight	45 lbs.	45 lbs.
$19.00	$19.00	List Price, each	$26.25	$26.25

The inner surface of Type RS reflector is white enameled which serves as an interior reflector.

For prices of parts write us or see Crouse Hinds Imperial Flood Light Projector Bulletin No. 303.

BRASCOLITES

PATENTED



Type WD

TYPE WD, CLOSE CEILING STYLE

Band Finished Leather Bronze
Reflector Lumo-Vitro

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
100168	40–60–75	11	6¼	7	$8.00
100169	100–150	15	8¼	12	11.50
100170	200	19	11	22	16.00

Mogul Socket

133333	300	19	11	22	16.80
133334	400–500	23	14	42	24.50

TYPE XD, WITH SINGLE CHAIN HANGER

Band and Hanger Leather Bronze Finish
Reflector Lumo-Vitro

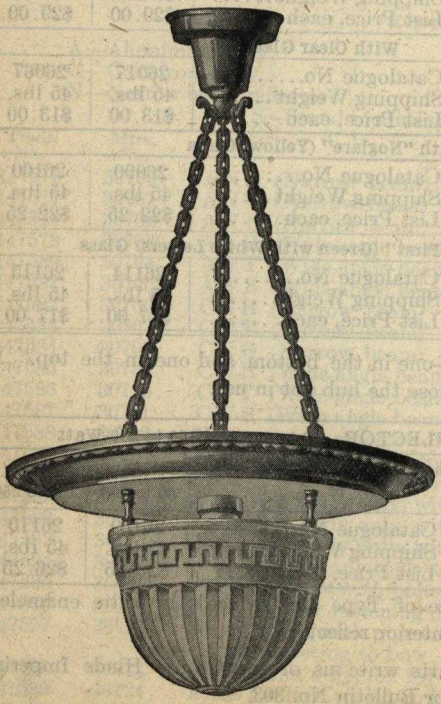
Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
100171	40–60–75	11	6¼	11	$12.50
100172	100–150	15	8¼	16	16.00
100173	200	19	11	25	20.50

Mogul Socket

133335	300	19	11	25	21.30
133336	400–500	23	14	47	29.50

Standard length, 4 feet. Additional length, per foot, 50 cents.



Type YD

TYPE YD, WITH THREE-CHAIN HANGER

Band and Hanger Leather Bronze Finish
Reflector Lumo-Vitro

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
100174	40–60–75	11	6¼	12	$13.50
100175	100–150	15	8¼	17	17.00
100176	200	19	11	26	21.50

Mogul Socket

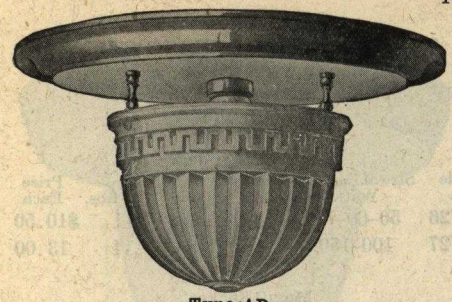
133337	300	19	11	26	22.30
133338	400–500	23	14	47	30.00

Standard length, 4 feet. Additional length, per foot, 75 cents.

Pull switch furnished for any of the above fixtures at $1.50 additional.

BRASCOLITES

PATENTED



Type AD

TYPE AD, CLOSE CEILING STYLE

All White Lumo-Vitro Finish

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149701	40–60–75	10¼	6¼	7	$7.30
149702	100–150	14¼	8¼	12	10.00
149703	200	18	11	22	14.00
	Mogul Socket				
149704	300	18	11	22	14.80
149705	400–500	22	14	42	22.00

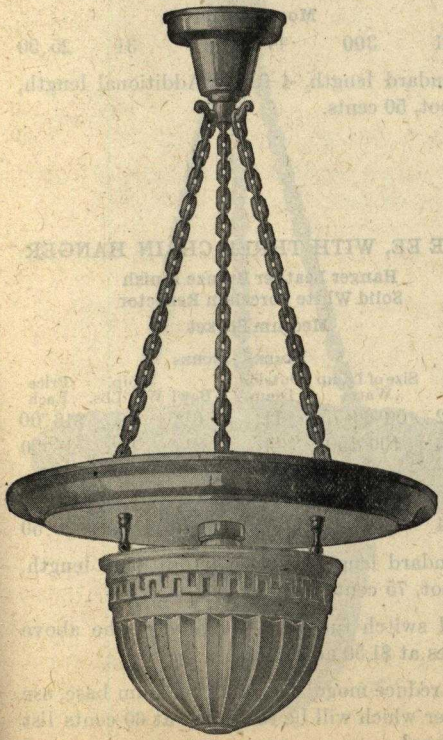
TYPE AE, WITH SINGLE CHAIN HANGER

Hanger Leather Bronze Finish
Reflector Lumo-Vitro

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149706	40–60–75	10¼	6¼	11	$11.80
149707	100–150	14¼	8¼	16	14.50
149708	200	18	11	25	18.50
	Mogul Socket				
149709	300	18	11	25	19.30
149710	400–500	22	14	47	27.00

Standard length, 4 feet. Additional length, per foot, 50 cents.



Type BE

TYPE BE, WITH THREE-CHAIN HANGER

Hanger Leather Bronze Finish
Reflector Lumo-Vitro

Medium Socket

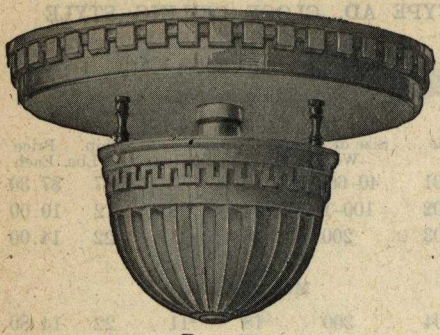
Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149711	40–60–75	10¼	6¼	12	$12.80
149712	100–150	14¼	8¼	17	15.50
149713	200	18	11	26	19.50
	Mogul Socket				
149714	300	18	11	26	20.30
149715	400–500	22	14	47	27.50

Standard length, 4 feet. Additional length, per foot, 75 cents.

Pull switch furnished for any of the above fixtures at $1.50 additional.

BRASCOLITES

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Type CE

TYPE CE, CLOSE CEILING STYLE

All White Finish
Solid White Porcelain Reflector

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches: Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149726	50–60–75	11	6¼	11	$10.50
149727	100–150	14	8¼	14	13.00
Mogul Socket					
149728	300	17½	11	25	21.00

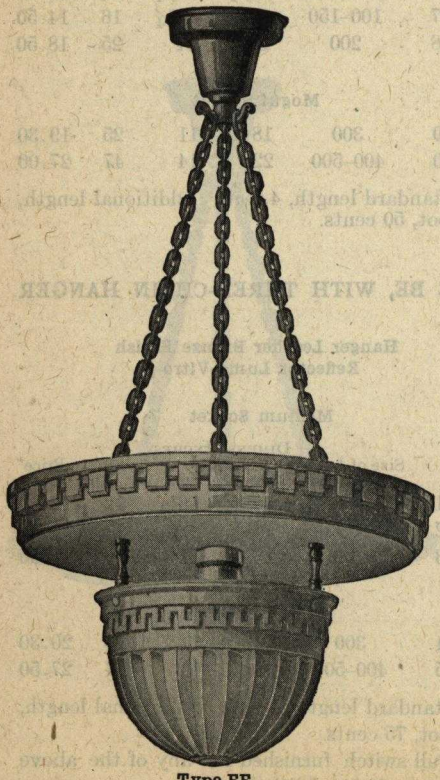
TYPE DE, WITH SINGLE CHAIN HANGER

Hanger Leather Bronze Finish
Solid White Porcelain Reflector

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches: Outside Diam.	Bowl	Ship. Wt., Lbs	Price Each
149729	50–60–75	11	6¼	15	$15.00
149730	100–150	14	8¼	18	17.50
Mogul Socket					
149731	300	17½	11	31	25.50

Standard length, 4 feet. Additional length, per foot, 50 cents.



Type EE

TYPE EE, WITH THREE-CHAIN HANGER

Hanger Leather Bronze Finish
Solid White Porcelain Reflector

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches: Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149732	50–60–75	11	6¼	16	$16.00
149733	100–150	14	8¼	19	18.50
Mogul Socket					
149734	300	17½	11	31	26.50

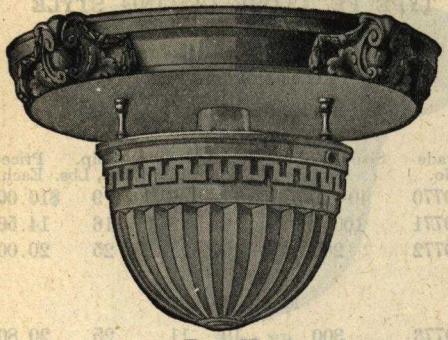
Standard length, 4 feet. Additional length, per foot, 75 cents.

Pull switch furnished for any of the above fixtures at $1.50 additional.

To reduce mogul socket to medium base, use adapter which will be furnished at 60 cents list additional,

BRASCOLITES

PATENTED



Type IB

TYPE IB, CLOSE CEILING STYLE

Band Finished Leather Bronze
Reflector Lumo-Vitro

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., In. Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149745	40–60–75	11	6¼	9	$11.50
149746	100–150	16	8¼	15	15.50
149747	200	19	11	26	20.50
	Mogul Socket				
149748	300	19	11	26	21.30
149749	400–500	23	14	45	29.50

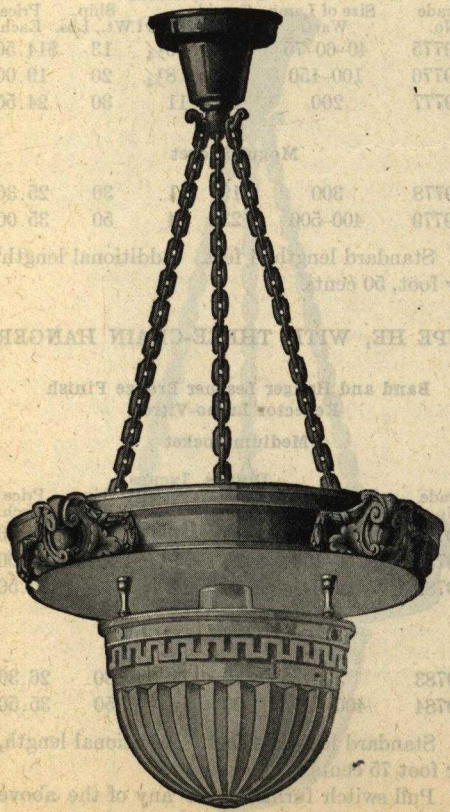
TYPE JB, WITH SINGLE CHAIN HANGER

Band and Hanger Leather Bronze Finish
Reflector Lumo-Vitro

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., In. Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149750	40–60–75	11	6¼	13	$16.00
149751	100–150	16	8¼	19	20.00
149752	200	19	11	31	25.00
	Mogul Socket				
149753	300	19	11	31	25.80
149754	400–500	23	14	50	34.50

Standard length, 4 feet. Additional length, per foot, 50 cents.



Type KB

TYPE KB, WITH THREE-CHAIN HANGER

Band and Hanger Leather Bronze Finish
Reflector Lumo-Vitro

Medium Socket

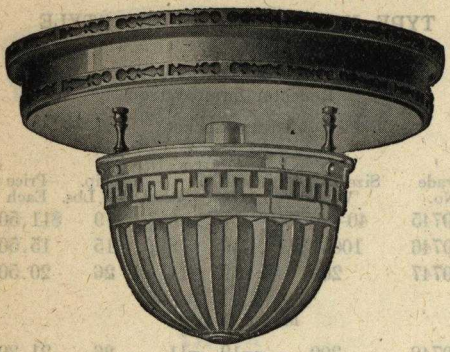
Trade No.	Size of Lamp Watts	Dimens., In. Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149755	40–60–75	11	6¼	14	$17.00
149756	100–150	16	8¼	20	21.00
149757	200	19	11	31	26.00
	Mogul Socket				
149758	300	19	11	31	26.80
149759	400–500	23	14	50	35.00

Standard length, 4 feet. Additional length, per foot, 75 cents.

Pull switch furnished for any of the above fixtures at $1.50 additional.

BRASCOLITES

PATENTED



Type FE

TYPE FE, CLOSE CEILING STYLE

Band Finished Leather Bronze
Reflector Lumo-Vitro

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149770	40–60–75	11	6¼	9	$10.00
149771	100–150	16	8¼	16	14.50
149772	200	19	11	25	20.00
	Mogul Socket				
149773	300	19	11	25	20.80
149774	400–500	23	14	46	30.00

TYPE GE WITH SINGLE CHAIN HANGER

Band and Hanger Leather Bronze Finish
Reflector Lumo-Vitro

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149775	40–60–75	11	6¼	13	$14.50
149776	100–150	16	8¼	20	19.00
149777	200	19	11	30	24.50
	Mogul Socket				
149778	300	19	11	30	25.30
149779	400–500	23	14	50	35.00

Standard length, 4 feet. Additional length' per foot, 50 cents.



Type HE

TYPE HE, WITH THREE-CHAIN HANGER

Band and Hanger Leather Bronze Finish
Reflector Lumo-Vitro

Medium Socket

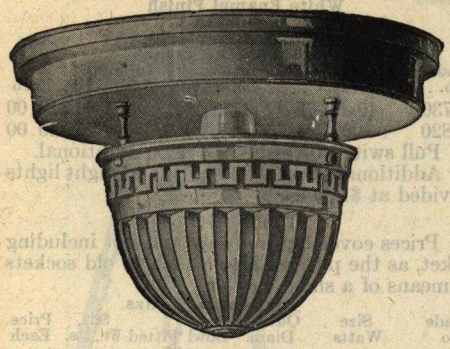
Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149780	40–60–75	11	6¼	14	$15.50
149781	100–150	16	8¼	21	20.00
149782	200	19	11	30	25.50
	Mogul Socket				
149783	300	19	11	30	26.30
149784	400–500	23	14	50	35.50

Standard length, 4 feet. Additional length, per foot 75 cents.

Pull switch furnished for any of the above fixtures at $1.50.

BRASCOLITES

PATENTED



Type NB

TYPE NB, CLOSE CEILING STYLE

Band Finished Leather Bronze Reflector Lumo-Vitro

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149795	40–60–75	11	6¼	8	$9.00
149796	100–150	16	8¼	15	13.00
149797	200	19	11	24	18.00

Mogul Socket

149798	300	19	11	24	18.80
149799	400–500	23	14	44	27.00

TYPE OB, WITH SINGLE CHAIN HANGER

Band and Hanger Leather Bronze Finish Reflector Lumo-Vitro

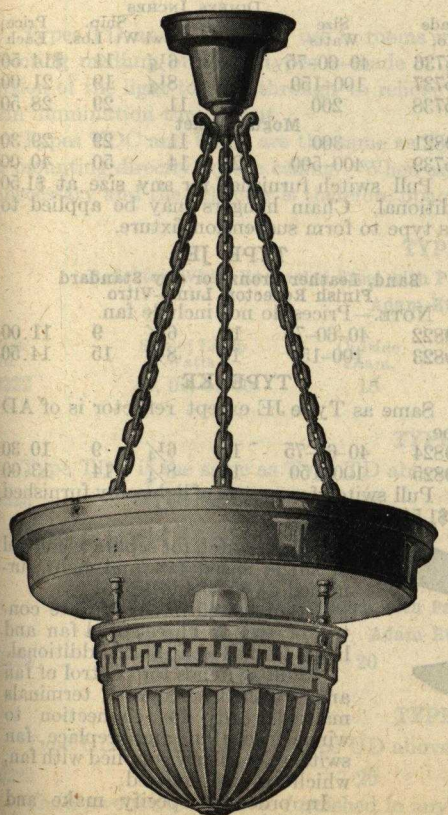
Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149800	40–60–75	11	6¼	12	$13.50
149801	100–150	16	8¼	19	17.50
149802	200	19	11	29	22.50

Mogul Socket

149803	300	19	11	29	23.30
149804	400–500	23	14	49	32.00

Standard length, 4 feet. Additional length, per foot, 50 cents.



Type PB

TYPE PB, WITH THREE CHAIN HANGER

Band and Hanger Leather Bronze Finish Reflector Lumo-Vitro

Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149805	40–60–75	11	6¼	13	$14.50
149806	100–150	16	8¼	20	18.50
149807	200	19	11	29	23.50

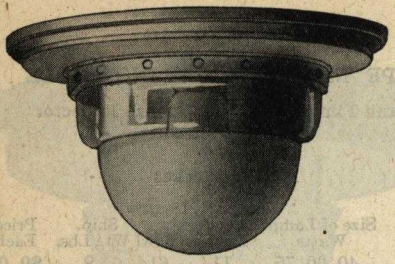
Mogul Socket

149808	300	19	11	29	24.30
149809	400–500	23	14	49	32.50

Standard length, 4 feet. Additional length, per foot, 75 cents.

Pull switch furnished for any of the above fixtures at $1.50.

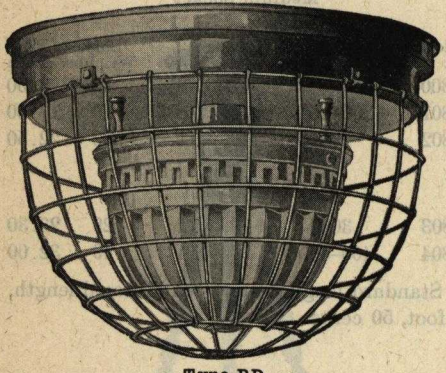
BRASCOLITES



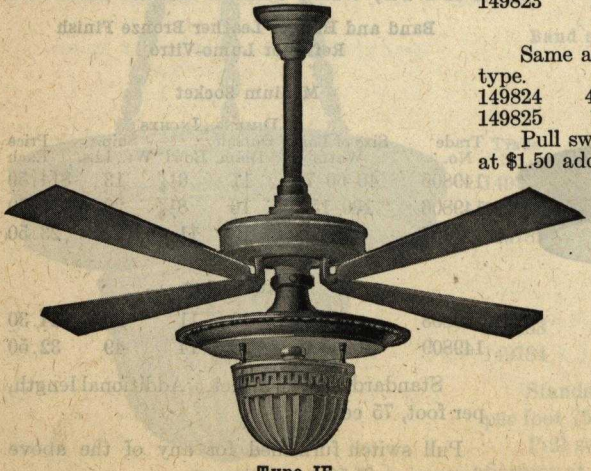
Type BC



Type GC



Type BD



Type JE

PATENTED

TYPE BC

White Enamel Finish
Reflector Lumo-Vitro
Medium Receptacle

Trade No.	Size Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
125730	40–60–75	11¾	8	11	$12.00
149820	100–150	14¼	9	13	20.00

Pull switch furnished at $1.50 additional.

Additional sockets for signal and night lights provided at $1.00 each.

TYPE GC

Prices cover fixtures only and not including socket, as the purpose is to attach to old sockets by means of a shade holder.

Trade No	Size Watts	Dimensions, Inches Outside Diam.	Bowl	Fitted	Ship. Wt., Lbs.	Price Each
125725	40–60–75	10	6¼	2¼	7	$ 7.00
125726	100 150	14½	8¼	3¼	10	10.00
125727	200–300	17½	11	3¼	20	12.50

Any size will be furnished with either 2¼, 3¼, or 4-inch fitter at no additional cost, if specified on order.

TYPE BD

Type BD is type NB with wire guard. All white finish. Designed for gymnasiums or other locations where exposed to possible mechanical injury.

Medium Socket

Trade No.	Size Watts	Dimens. Inches Outside Diam.	Bowl	Ship. Wt. Lbs.	Price Each
125736	40–60–75	11	6¼	11	$14.50
125737	100–150	16	8¼	19	21.00
125738	200	19	11	29	28.50
	Mogul Socket				
149821	300	19	11	29	29.30
125739	400–500	23	14	50	40.00

Pull switch furnished for any size at $1.50 additional. Chain hangers may be applied to this type to form suspension fixture.

TYPE JE

Band, Leather Bronze or any Standard Finish Reflector, Lumo-Vitro

NOTE.—Prices do not include fan.

149822	40–60–75	11	6¼	9	11.00
149823	100–150	15	8¼	15	14.50

TYPE KE

Same as Type JE except reflector is of AD type.

149824	40–60–75	11	6¼	9	10.30
149825	100–150	15	8¼	14	13.00

Pull switch for control of light only furnished at $1.50 additional.

Pull switch for separate control of single speed fan and light, furnished at $5.00 additional.

Pull switches for separate control of two or three-speed fan and light, furnished at $5.50 additional.

Pull switches for control of fan are furnished wired with terminals marked ready for connection to wires from fan and replace fan switches regularly supplied with fan, which may be omitted.

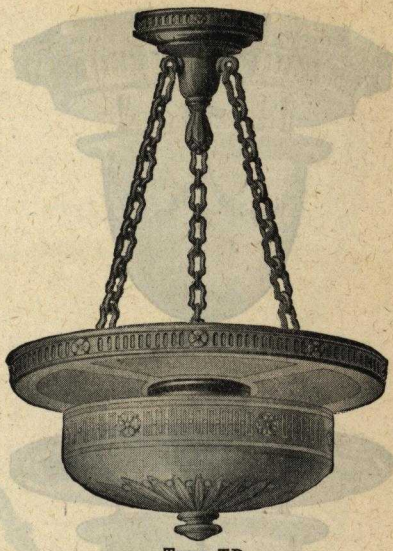
In ordering, specify make and type of fan.

BRASCOLITES

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Type UD



Type TD

Types TD and UD are for use in rooms where ceilings are from 10 to 12 feet or higher. The reflecting medium of these types is made of panels of opal glass which permit a small proportion of the light to pass through to relieve shadows on the ceiling and provide a soft uniform illumination throughout.

Types TDC and UDC are the same as Types TD and UD except that they are arranged for mounting directly on the ceiling. When arranged for ceiling mounting, the glass panels are unnecessary and the reflector is therefore opaque.

TYPE TD

Reflector, White Enameled Steel with Panels of Opal Glass to Illuminate Ceiling. Adam Etched Bowl

Trade No.	Size of Lamp Watts	Outside Diam.	—Dimensions Inside— Bowl	Length	Ship. Wt. Lbs.	Price Each
90222	40, 50, or 60	18	12	36	42	$67.00

TYPE TDC

Type TDC is the same as Type TD above, but without chain suspension or glass panels.

90223	40, 50, or 60	18	12	..	34	51.50

Types TD and TDC have three lights.

TYPE UD

Reflector, White Enameled Steel with Panels of Opal Glass to Illuminate Ceiling Adam Etched Bowl

90224	75 or 100	20	12	36	42	53.50

TYPE UDC

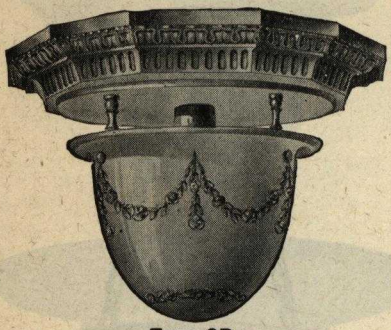
Type UDC is the same as Type UD above, but without chain suspension or glass panels.

90225	75 or 100	20	12	..	34	39.00

The above fixtures can be furnished in any standard finish. Satin old brass furnished unless otherwise specified.

BRASCOLITES

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Type OD

To fill a constantly increasing demand for fixtures which combine efficiency with artistic appearance, there has been developed a number of types which will be found very satisfactory for residence service.

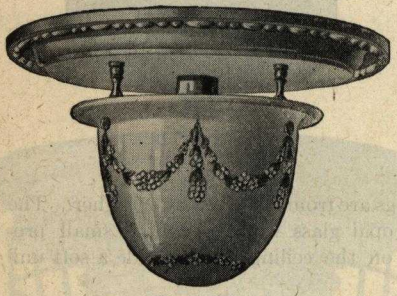
Types OD, PD, QD and RD are designed for installation in rooms with low ceilings such as bedrooms living rooms, etc., and are to be mounted directly against the ceiling.

TYPE OD

Reflector, Lumo-Vitro
Body Composition, Any Standard Finish
Rose Decorated Bowl in Natural Colors

Trade No.	Size of Lamp Watts	Dimensions, In. Outside Diam.	Bowl	Ship. Wt. Lbs.	Price Each
36775	75, 100 or 200	18	11½	26	$28.50

Pull switch concealed in body, $1.50 additional.
Old gold body furnished unless otherwise specified.



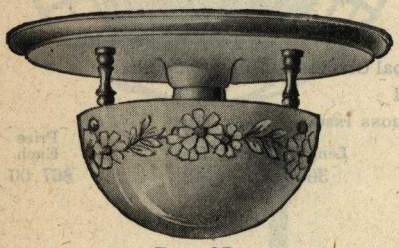
Type PD

TYPE PD

Reflector, White Enameled Steel
Band Finish, Tusk Ivory
Forget-Me-Not Decorated Bowl in Natural Colors

36776	75, 100 or 200	19	11½	24	21.50

Pull switch concealed in body $1.50 additional.



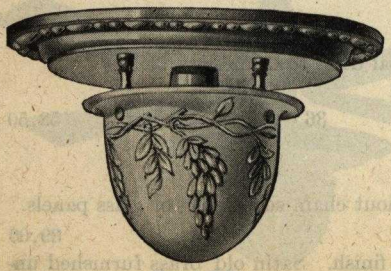
Type QD

TYPE QD

Reflector, Lumo-Vitro
Band Finish, All White
Daisy Decorated Bowl in Natural Colors

36777	50, 60, 75, or 100	14½	10	13	13.50

Pull switch concealed in body $1.50 additional.



Type RD

TYPE RD

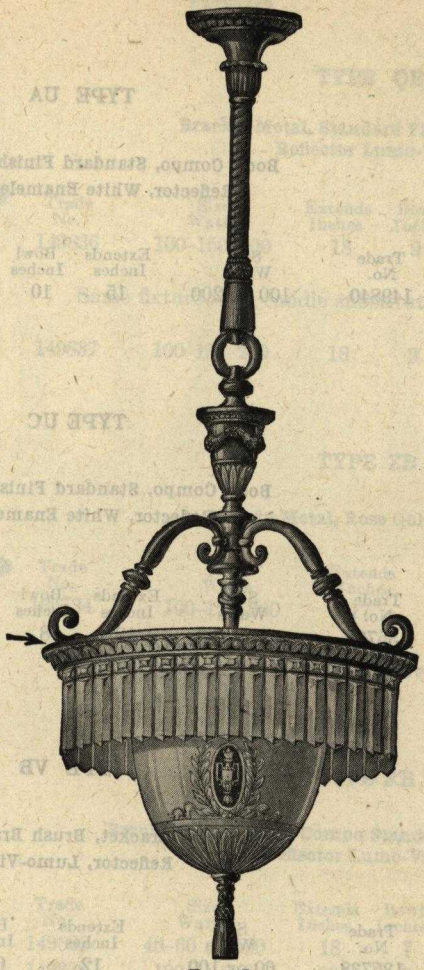
Reflector, Lumo-Vitro
Band Finish, Tusk Ivory
Wisteria Decorated Bowl in Natural Colors

36778	50, 60, 75 or 100	15	9	16	16.50

Pull switch concealed in body $1.50 additional.

BRASCOLITES

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Type L

A beautiful crystal fixture, combining the high efficiency of the Brascolite with the artistic appearance of the crystal chandelier.

Particularly suitable for ballrooms, jewelry stores, costumers, etc. Equipped with a Mogul socket for the bowl illumination and 6 medium sockets outside the bowl, behind the prisms. This applies to both sizes of Types LE and LEC.

TYPE LE

Body Cast Bronze, Any Standard Finish Except Silver or Gold
Reflector Lumo-Vitro

Trade No.	Size of Lamp Watts	Dimensions, Inches Outside Diam.	Dimensions, Inches Bowl	Ship. Wt., Lbs.	Price Each
13907	One 300 and six 25	26	16	80	$283.00
13908	One 300 and six 25	22	11½	75	240.00

Length, 4 feet 6 inches. Additional length, per foot, $3.00.

TYPE LEC

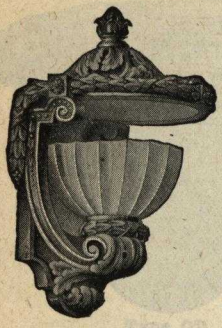
This is the same fixture as Type LE up to the arrow.

Trade No.	Dimensions, Inches Outside Diam.	Dimensions, Inches Bowl	Ship. Wt., Lbs.	Price Each
13909	26	16	65	$170.00
13910	22	11½	60	128.00

For standard finishes other than specified, add 10 per cent.

BRASCOLITES

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Type UA

TYPE UA

Body Compo, Standard Finish, Rose Gold
Reflector, White Enameled Steel

Trade No.	Size Watts	Extends Inches	Bowl Inches	Height Over All Inches	Ship. Wt., Lbs.	Price Each
149840	100 or 200	15	10	29	55	$27.50



Type UC

TYPE UC

Body Compo, Standard Finish, Rose Gold
Reflector, White Enamel Steel

Trade No.	Size Watts	Extends Inches	Bowl Inches	Height Over All Inches	Ship. Wt., Lbs.	Price Each
135737	60 or 100	13	8	21	43	$24.50

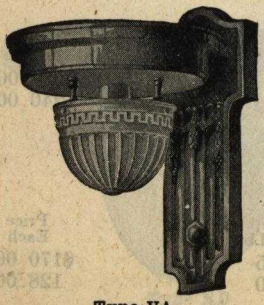


Type VB

TYPE VB

Metal Bracket, Brush Brass Finish
Reflector, Lumo-Vitro

Trade No.	Size Watts	Extends Inches	Bowl Inches	Ship. Wt., Lbs.	Price Each
135738	60 or 100	12	6¼	22	$18.50



Type VA

TYPE VA

Metal Bracket. Brush Brass Finish
Reflector, Lumo-Vitro

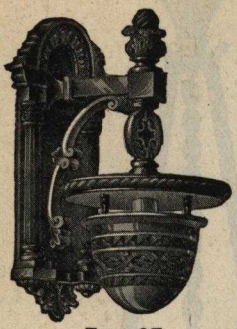
Trade No.	Size Watts	Extends Inches	Bowl Inches	Ship. Wt., Lbs.	Price Each
149841	60 or 100	12	6¼	15	$12.00

For standard finishes other than specified, add 10 per cent.

Any sprayed bronze finishes on Compo fixtures furnished without extra charge. Old ivory, 10 per cent additional. Burnished finishes, 25 per cent additional.

BRASCOLITES

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Type QE

TYPE QE

Bracket Metal, Standard Finish Rose Gold
Reflector Lumo-Vitro

Trade No.	Size Watts	Extends Inches	Bowl Inches	Length Inches	Ship. Wt., Lbs.	Price Each
149836	100–150–200	18	9	21	50	$49.00

Same fixture with candle substituted for knob at top.

149837	100–150–200	18	9	21	50	54.00



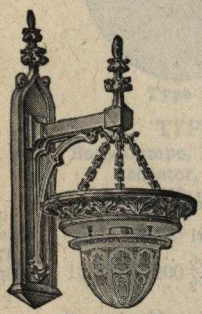
Type ZB

TYPE ZB

Body Metal, Rose Gold Finish

Trade No.	Size Watts	Extends Inches	Bowl Inches	Ship. Wt., Lbs.	Price Each
135734	100–150–200	17	11½	17	$26.00

⅜-inch insulating joint and silk-covered wire included.



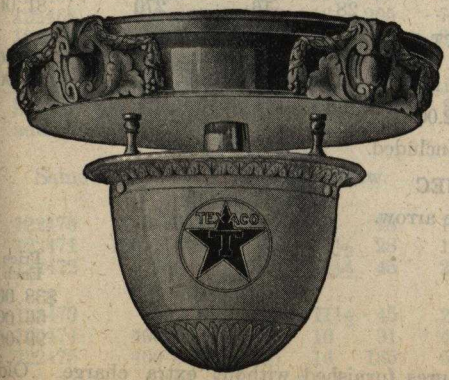
Type RB

TYPE RB

Bracket Metal, Band Compo Standard Finish Rose Gold
Reflector Lumo-Vitro

Trade No.	Size Watts	Extends Inches	Bowl Inches	Length Inches	Ship. Wt., Lbs.	Price Each
149838	40–60 or 100	18	7	26	52	$28.00
149839	100 or 200	20	9	26	62	33.00

Pull switch, $1.50 additional.



Type SD

TYPE SD

Band Finished Leather Bronze. Reflector Lumo-Vitro Emblematic or Trade Mark White Etched Bowls with Emblems in Full Colors

Medium Socket

Trade No.	Size Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
135735	200–300	19	11½	23	$30.00
Mogul Socket					
135736	400–500	23	16	36	44.00

Mogul socket furnished at 80 cents additional. Pull switch, $1.50 additional.

Prices as listed apply to any National Trade Mark or Emblem. Where individual trade mark, monogram or emblem is required, an extra charge of $10.00 net will be made for etching plate from which any number of fixtures may be made.

BRASCOLITES

PATENTED



TYPE NE

Body Compo, Standard Finish Rose Gold
Reflector Lumo-Vitro
Mogul Socket in Bowl, Candles Medium Sockets

Trade No.	Description	Dimensions, Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
	300-WATT SIZE				
149852	Four candles	23	11½	115	$78.00
149853	Without candles	23	11½	100	59.00
	400-500-WATT SIZE				
149854	Six candles	28	16	250	109.00
149855	Without candles	28	16	270	81.00
	750-1000-WATT SIZE				
149856	Eight candles	40	20	390	176.00
149857	Without candles	40	20	370	139.00

Length, 5 feet. Additional length, per foot, $2.00

½-inch insulating joint and silk-covered wire included.

TYPE NEC

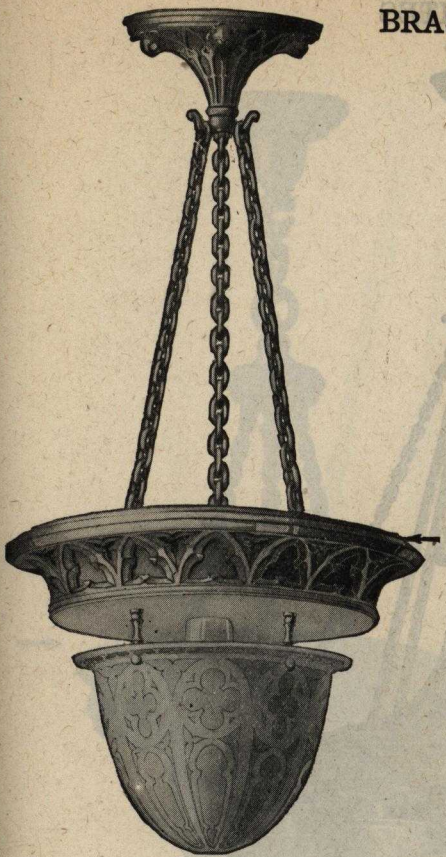
This is the same fixture as type NE up to the arrow.

Trade No.	Dimensions, Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149858	23	11½	90	$38.00
149859	28	16	190	56.00
149860	40	20	300	99.00

Any sprayed bronze finishes on Compo fixtures furnished without extra charge. Old Ivory, 10 per cent additional. Burnished finishes, 25 per cent additional.

BRASCOLITES

PATENTED



Type YB

TYPE YB

Body Compo, Rose Gold Finish
Reflector, Lumo-Vitro
Medium Socket

Trade No.	Size of Lamp Watts	Dimens., Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
149871	40–60–75	14	7	25	$21.00
149872	100–150–200	17	9	36	26.00
149873	200	22	11½	55	35.70
	Mogul Socket				
149874	300	22	11½	55	36.50
149875	400–500	27	16	122	51.00
149876	400–500	36	16	210	66.00

Length, 4 feet. Additional length, per foot, 75 cents. ⅜-inch insulating joint and silk-covered wire included in above prices.

Pull switch furnished at $1.50 additional.



Type XB

TYPE XB

Body Compo, Rose Gold Finish
Reflector, Lumo-Vitro
Medium Socket

Trade No.	Size of Lamp Watts	Dimens., In. Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
122465	100–150–200	17	9	60	$36.00
122466	200	22	11½	98	50.00
	Mogul Socket				
122467	300	22	11½	98	50.80
122468	400–500	27	16	205	71.00
122469	400–500	36	16	310	89.00

⅜-in. insulating joint and silk-covered wire included. Length of fixture, 5 feet. Additional length, per foot, 75 cents. Pull switch, $1.50 additional.

TYPE QB

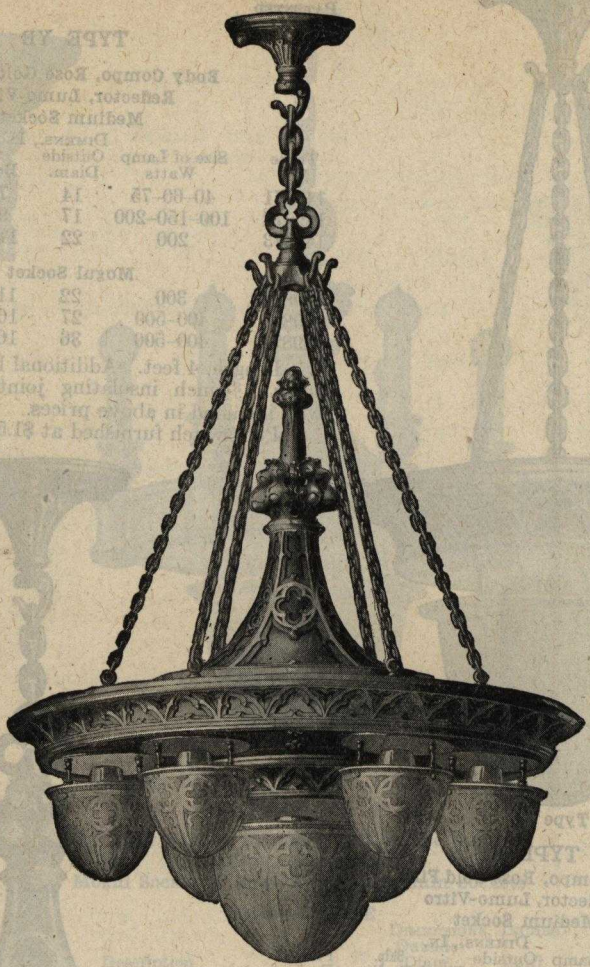
Same as Type XB up to the arrow.

	Medium Socket				
122470	140–60–75	14	7	18	14.50
122471	100–150–200	17	9½	28	19.50
122472	200	22	11½	45	28.20
	Mogul Socket				
122473	300	22	11½	45	29.00
122474	400–500	27	16	91	46.00
122475	400–500	36	16	185	55.00

Any sprayed bronze finishes on Compo fixtures furnished without extra charge. Old Ivory, 10 per cent additional. Burnished finishes, 25 per cent additional.

BRASCOLITES

PATENTED



TYPE QA

Body Compo. Rose Gold Finish. Reflector Lumo-Vitro
***Mogul Socket**

Trade No.	No. of Lights	Size of Lamp Watts	Dimensions, Inches: Outside Diam.	Dimensions, Inches: Bowl	Length Feet	Ship. Wt., Lbs.	Price Each
101089	7	1–400 or 500 and 6–200 or 300	60	16 and 11½	8	1175	$314.00
101096	5	1–400 or 500 and 4–200, 300 or 400	50	11½	6	500	213.00

TYPE QC

Same fixtures as Type QA without the Compo crown on the body.

Trade No.	Outside Diam. Inches	Ship. Wt., Lbs.	Price Each
101095	60	770	$240.00
101097	50	410	175.00

Three-inch iron loop on stem 15 inches above the canopy and silk-covered wire included. Additional length of fixture per foot, $2.00.

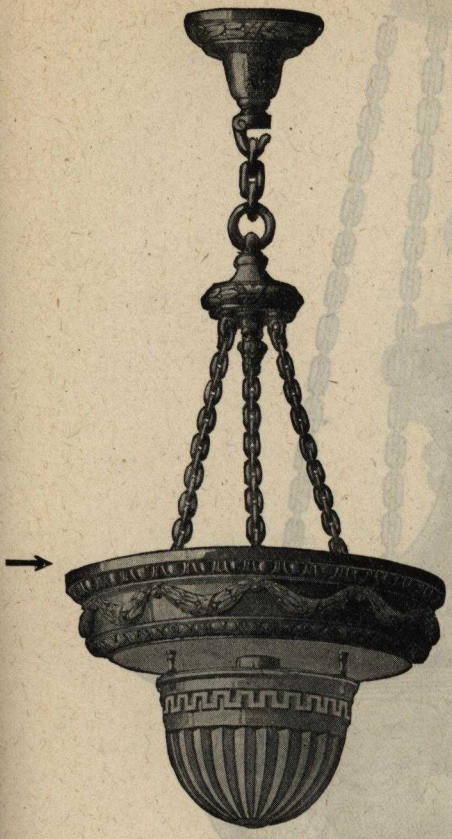
*If 200-watt lamps are used, Mogul to medium adapters will be required at 60 cents additional.

Winches furnished for raising and lowering these fixtures at $30.00 additional. Cable extra.

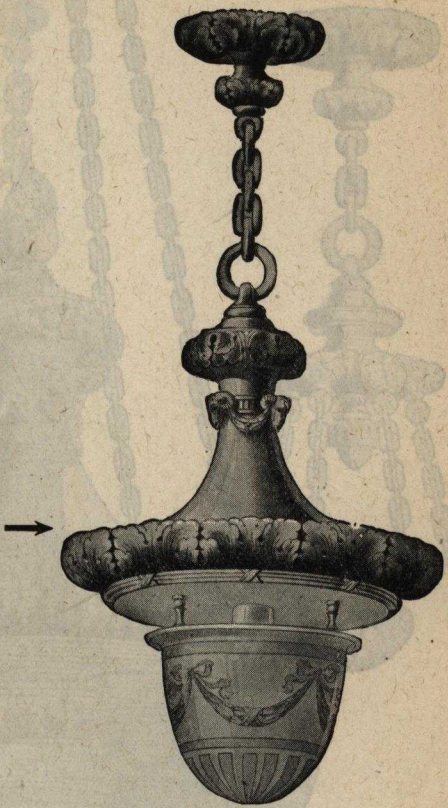
Any sprayed bronze finishes on Compo fixtures furnished without extra charge. Old ivory, 10 per cent additional. Burnished finishes, 25 per cent additional.

BRASCOLITES

PATENTED



Type ED



Type JD

TYPE ED

Body Compo, Rose Gold Finish. Reflector Lumo-Vitro

Trade No.	Size of Lamp Watts	Dimensions, Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
13911	200 Medium socket	23	11	85	$50.00
13912	300 Mogul socket	23	11	85	50.80
13913	400–500 Mogul socket	29	14	131	62.50

Silk-covered wire included. Length of fixture, 5 feet. Additional length, per foot, 75 cents. Pull switch, $1.50 additional.

TYPE FD

This is the same fixture as Type ED up to the arrow.

13914	200 Medium socket	23	11	65	28.80
13915	300 Mogul socket	23	11	85	29.60
13916	400–500 Mogul socket	29	14	131	41.00

TYPE JD

Body Compo, Rose Gold Finish. Reflector Lumo-Vitro

13917	400–500 Mogul socket	28	16	175	76.00

Silk-covered wire included. Length of fixture, 5 feet. Additional length, per foot, $1.00.

TYPE JDC

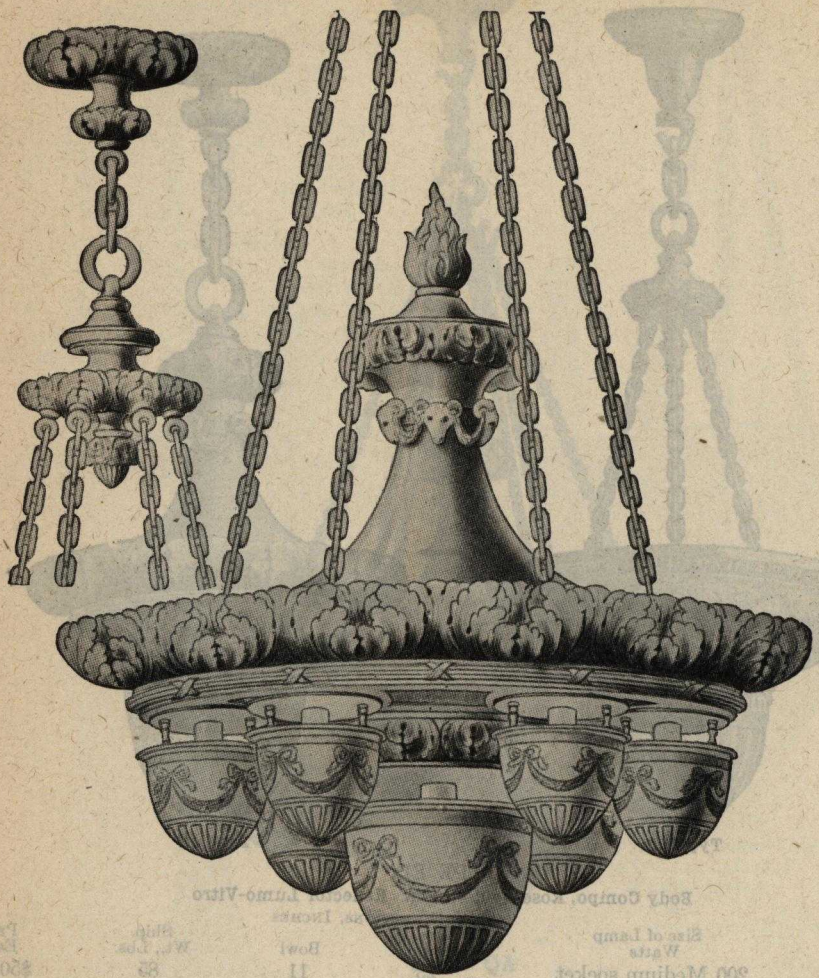
This is the same fixture as type JD up to the arrow.

13918	400–500 Mogul socket	28	16	120	56.50

Any sprayed bronze finishes on Compo fixtures furnished without extra charge. Old ivory, 10 per cent additional. Burnished finishes, 25 per cent additional.

BRASCOLITES

PATENTED



Type ID

TYPE ID

Body Compo, Rose Gold Finish
Reflectors Lumo-Vitro

Mogul Socket

Trade No.	Size of Lamps Watts	Dimensions, Inches Outside Diam.	Bowls	Ship. Wt., Lbs.	Price Each
13919	{ One 400 or 500 / Six 200 or 300 }	60	{ 16 / 11½ }	925	$383.00

3-inch solid iron loop on stem 15 inches above the canopy, and silk covered wire included. Length, 12 feet. Additional length, per foot, $2.00.

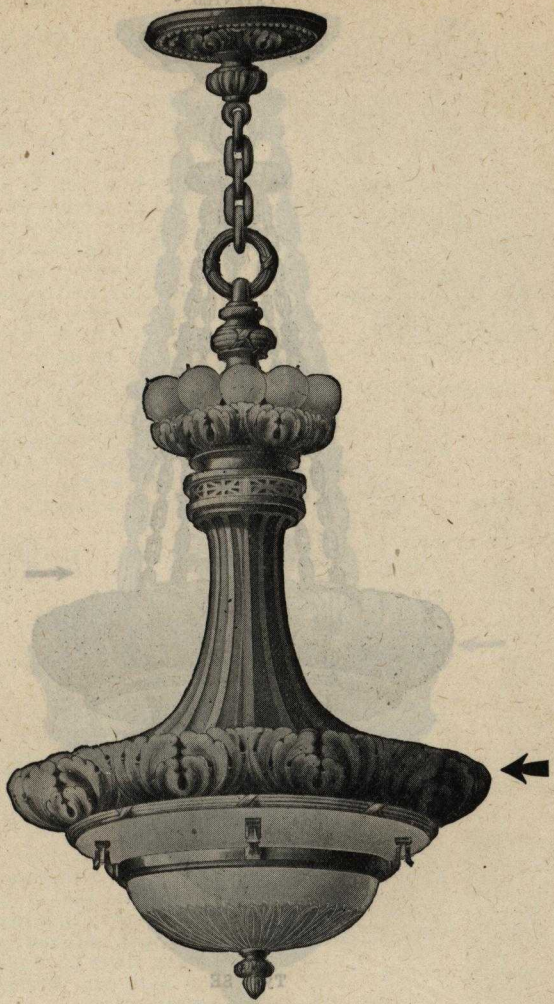
Winches furnished for raising and lowering these fixtures at $30.00 additional. Cable extra.

If 200-watt lamps are used, Mogul to medium adapters will be required at 60 cents each additional.

Any sprayed bronze finishes on Compo fixtures furnished without extra charge. Old ivory, 10 per cent additional. Burnished finishes, 25 per cent additional.

BRASCOLITES

PATENTED



TYPE RE

Body Compo, Rose Gold Finish
Reflector Lumo-Vitro

Trade No.	Description	Dimen., In. Outside Diam.	Bowl	Length Feet	Ship. Wt., Lbs.	Price Each
13920	One 300-watt Mogul socket and 4 medium sockets in crown	28	16	5	350	$128.00
13921	Same without lamps in crown	28	16	5	340	114.00
13922	One 400–500 watt Mogul socket and 8 medium sockets in crown	38	20	7	475	197.00
13923	Same without lamps in crown	38	20	7	465	170.00

½-inch insulating joint and silk-covered wire included.
Additional length of fixture, per foot, $1.00.

TYPE REC

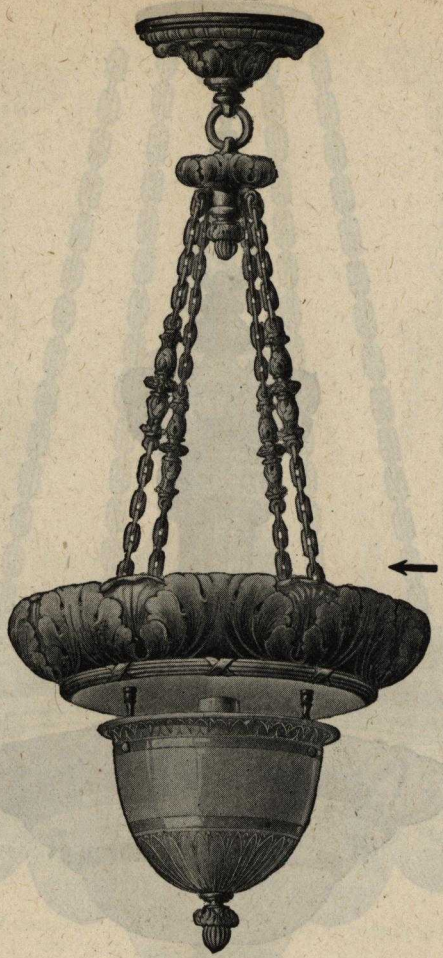
This is the same fixture as Type RE up to the arrow.

Trade No.	Size of Lamp Watts	Dimensions, Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
13924	300	28	16	190	$ 75.00
13925	400–500	38	20	250	119.00

Any sprayed bronze finishes on Compo fixtures furnished without extra charge. Old ivory, 10 per cent additional. Burnished finishes, 25 per cent additional.

BRASCOLITES

PATENTED



Type SE

TYPE SE

Body Compo, Rose Gold Finish
Reflector Lumo-Vitro

Mogul Socket

Trade No.	Size of Lamp Watts	Dimensions, Inches Outside Diam.	Bowl	Ship. Wt., Lbs.	Price Each
135716	400– 500	20	11½	55	$76.00
135717	400– 500	24	11½	75	83.00
135718	750–1000	28	16	135	96.00

Silk-covered wire included.
Length of fixture, 5 feet. Additional length, per foot, $1.00.

TYPE SEC

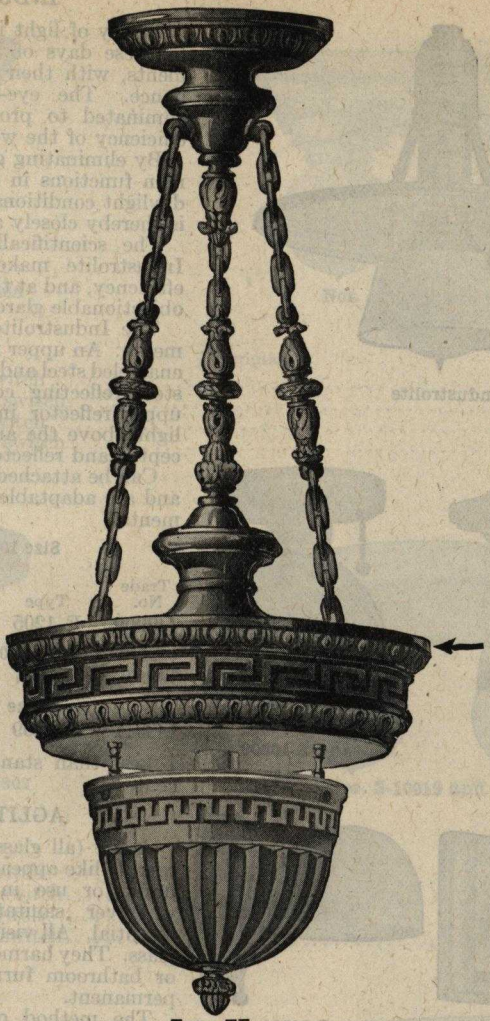
This is the same fixture as Type SE up to the arrow.

135719	400– 500	20	11½	45	40.00
135720	400– 500	24	11½	65	47.00
135721	750–1000	28	16	120	61.00

Any sprayed bronze finishes on Compo fixtures furnished without extra charge. Old ivory, 10 per cent additional. Burnished finishes, 25 per cent additional.

BRASCOLITES

PATENTED



Type TE

TYPES TE AND TEC

Body Cast Bronze, Hand Chased. Any Standard Finish. Reflector Lumo-Vitro

Type TEC is the same as Type TE up to the arrow.

Size, Watts		Dimensions, Inches Outside Diam.	Bowl	Length	Type TE Trade No.	Ship. Wt., Lbs.	Price Each	Type TEC Trade No.	Ship. Wt., Lbs.	Price Each
100–150–200	Medium socket	16	8	42	133033	70	$100.00	133037	55	$61.00
200	Medium socket	19	10	48	133034	85	139.20	133038	65	98.00
300	Mogul socket	19	10	48	133035	85	140.00	133039	65	98.80
400–500	Mogul socket	25	12	60	133036	100	190.00	133040	90	128.00

Additional length of Type TE fixture, per foot, $7.00.

TYPES UE AND UEC

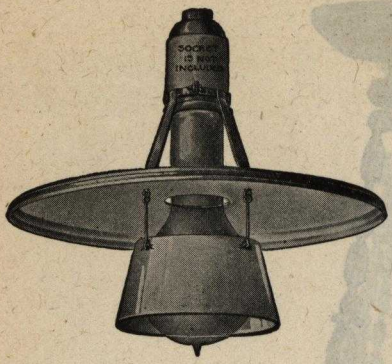
Type UE is the same as Type TE except that the body and canopy are of Compo, rose gold finish. Type UEC is the same as Type UE up to the arrow.

					Type UE			Type UEC		
100–150–200	Medium socket	16	8	42	133041	55	46.50	133045	55	22.00
200	Medium socket	19	10	48	133042	90	57.50	133046	60	30.20
300	Mogul socket	19	10	48	133043	90	58.30	133047	60	31.00
400–500	Mogul socket	25	12	60	133044	120	79.50	133048	90	46.00

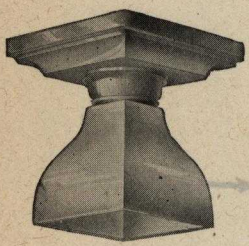
Additional length of Type UE fixture per foot, $1.00.

Any sprayed bronze finishes on Compo fixtures furnished without extra charge. Old ivory, 10 per cent additional. Burnished finishes, 25 per cent additional.

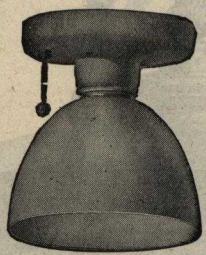
AGLITE FIXTURES AND INDUSTROLITES



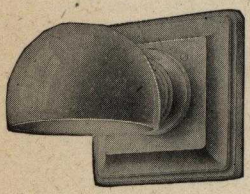
Industrolite



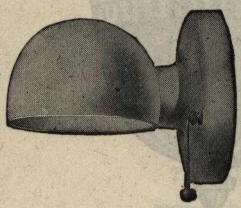
Nos. S-10489 and S-10490



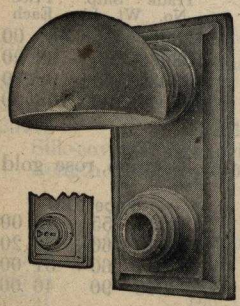
Nos. S-10808 and S-10809



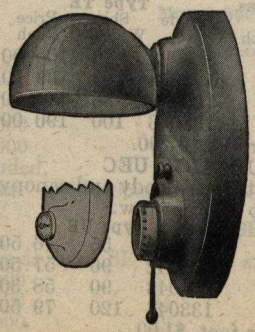
Nos. S-10491 and S-10492



Nos. S-10804 and S-10805



Nos. S-10497 and S-10498



Nos. S-10915 and S-10916

INDUSTROLITES

Plenty of light in a factory is not enough in these days of highly efficient lamp filaments, with their consequent dazzling brilliance. The eye-straining glare must be eliminated to promote to the utmost the efficiency of the workman.

By eliminating glare, the eye of the workman functions in a manner very similar to daylight conditions, and maximum efficiency is thereby closely approximated.

The scientifically correct design of the Industrolite makes possible high physical efficiency, and at the same time eliminates all objectionable glare.

The Industrolite is composed of two elements: An upper reflector of white porcelain enameled steel and a white porcelain enameled steel reflecting cone suspended below the upper reflector in such a manner that all light above the angle of 40 degrees is intercepted and reflected to the working plane.

Can be attached to any socket in a minute and are adaptable to present lighting equipments.

Trade No.	Type	Reflector Diam. In.	Std. Pkg.	Ship. Wt.,Lbs.	Price Each
		Size 100, 150, 200 Watts			
149909	F–1205	12	20	40	$2.90
		Size 300, 400, 500 Watts			
149910	F–1207	14½	20	45	4.70
		Size 750, 1000 Watts			
149911	F–1209	17½	20	80	6.80

Less than standard package, add 10 per cent.

AGLITE FIXTURES

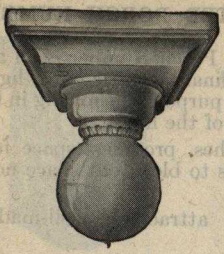
Aglite (all glass) Fixtures, with their rich marble-like appearance, are the ideal lighting units for use in bathrooms, hospitals, or wherever sanitation and cleanliness are essential. All visible parts are made of white glass. They harmonize perfectly with hospital or bathroom furnishings, and the finish is permanent.

The method of installing is simple, no insulating joint, canopy insulator or splicing of wires being required. All necessary parts are furnished with the fixture; a complete unit.

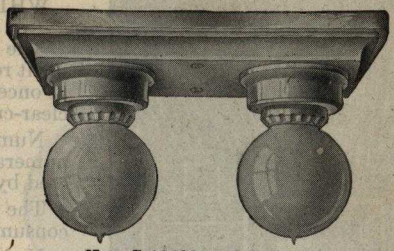
Trade No.	Mfrs. No.	Description	Ship. Wt.,Lbs.	Price Each
112041	S-10489	No switch....	6	$2.75
112042	S-10490	With switch..	6	4.25
149887	S-10808	No switch....	6	2.90
149888	S-10809	With switch..	6	4.40
112043	S-10491	No switch....	6	2.90
112044	S-10492	With switch..	6	4.40
149889	S-10804	No switch....	6	2.90
149890	S-10805	With switch..	6	4.40
112049	*S-10497	No switch....	7	4.40
112050	*S-10498	With switch..	7	5.90
149891	*S-10915	No switch....	7	4.40
149892	*S-10916	With switch..	7	5.90

*For flush plug receptacle, add $1.00 and specify when ordering.

AGLITE FIXTURES

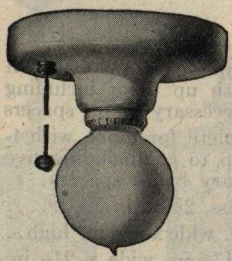


Nos. S-10487 and S-10488

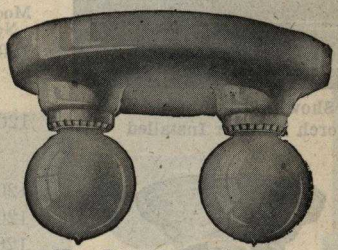


Nos. S-10493 and S-10494

Trade No.	Mfrs. No.	Description	Ship. Wt., Lbs.	Price Each
112039	S-10487	No switch	5	$1.70
112040	S-10488	With switch	5	3.20
112045	S-10493	No switch	6	3.00
112046	S-10494	With switch	6	4.50

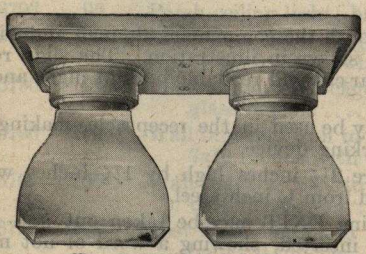


Nos. S-10806 and S-10807

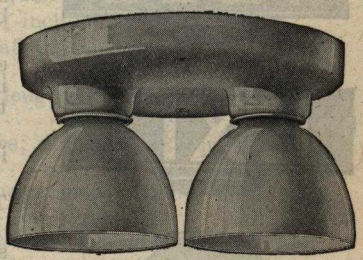


Nos. S-10919 and S-10920

Trade No.	Mfrs. No.	Description	Ship. Wt. Lbs.	Price Each
149903	S-10806	No switch	5	1.70
149904	S-10807	With switch	5	3.20
149907	S-10919	No switch	6	3.00
149908	S-10920	With switch	6	4.50



Nos. S-10495 and S-10496



Nos. S-10917 and S-10918

Trade No.	Mfrs. No.	Description	Ship. Wt., Lbs.	Price Each
112047	S-10495	No switch	7	5.10
112048	S-10496	With switch	7	6.60
149905	S-10917	No switch	8	5.10
149906	S-10918	With switch	8	6.60

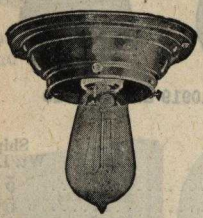
All necessary parts are furnished with the above fixtures.

WHITLOCK ILLUMINATED PORCH AND EXIT FIXTURES

Patented

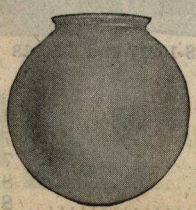


Showing Illuminated Porch Number Installed









Showing Method of Installing Porch and Exit Fixtures

WHITLOCK ILLUMINATED PORCH NUMBERS

The Whitlock Illuminated Porch Number is an attachment readily fitted to the ordinary electric porch light and at once serves the additional purpose of showing in bright, clear-cut figures the number of the house.

Numeral-slide, 2⅝x9 inches, provides space for five numerals or less, with blanks to block out space not covered by numerals.

The device is extremely attractive, well-made and consumes no extra current.

No change of lamp or wires is necessary and it may be readily attached by anyone in a few moments.

Numerals are units of pleasing design, measuring 2½ inches high by 1⅞ inches wide and are stamped from steel 1/16 inch thick.

Numerals may be readily re-arranged or exchanged at practically no expense or trouble, should this be desirable.

This device makes porch lamp serve the double purpose of lighting porch and steps and also lighting the Whitlock Number. Made for 3¼-inch or 4-inch shade ring.

Model No.	Description	Price Each
1201	Porch number complete for globe with 3¼-inch ring, with up to or including five figures and necessary blank spacers	$2.50
1202	Porch number complete for globe with 4-inch ring, with up to or including five figures and necessary blank spacers	2.50
1203	Opalescent white glass, 2⅝x9 in.	.20
1204	Figures 0 to 9, 1⅞ in. wide x 2½ in. high	.10
1205	Full blank spacer, 1⅞ in. wide x 2½ in. high	.10
1206	Half blank spacer, 5/16 in. wide x 2½ in. high	.08
1207	Third blank spacer, 15/32 in. wide x 2½ in. high	.05

WHITLOCK ILLUMINATED EXIT FIXTURES

This fixture fills a long-felt want, as it readily affords a satisfactory method of marking exits in the interior of a building.

It is made for both the commercial 3¼-inch and 4-inch ceiling bands as shown in illustration. The slide reading EXIT is clear-cut and readable both at night and in the daytime.

Ruby lamp may be used in the receptacle, making an ideal fire exit marking device.

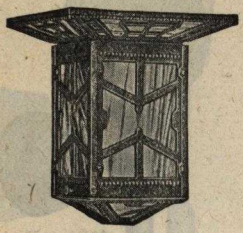
Letters measure 2½ inches high by 1⅞ inches wide. They are stamped from 1/16-inch steel.

The slide reading EXIT may be taken out and any stencil-cut plate inserted, showing a word of not more than five letters.

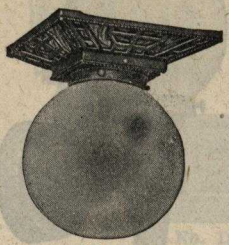
Model No.	Description	Price Each
1208	Exit fixture complete for globe with 3¼-inch ring, with slide reading EXIT	$3.50
1209	Exit fixture complete for globe with 4-inch ring, with slide reading EXIT	3.50

Prices do not include Glass Globe or Lamp

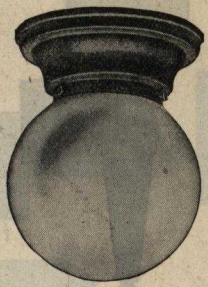
CAST METAL OUTDOOR FIXTURES



No. 90



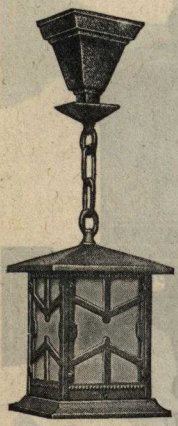
No. 94



No. 95



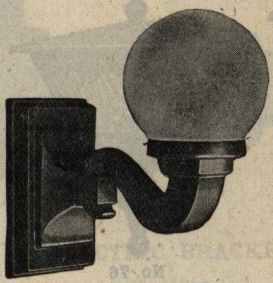
No. 109



No. 97



No. 106



No. 105



No. 103

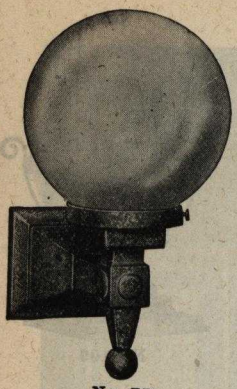
Trade No.	Mfrs. No.	Description	Price Each
56791	90	Porch ceiling light; size, 8¼x10 inches; body, 5 inches	$5.00
56792	94	Porch ceiling light; base, 8¼ inches square; 3¼ or 4-inch holder	1.90
56793	95	Porch ceiling light; base, 7 inches; 3¼-inch holder	.65
56794	109	Scroll post light; height to center of ball, 13½ inches; base, 10½ inches; scroll, 5x10 or 6x12 inches	9.00
56795	97	Pendent lantern; cage, 7x10 inches; length over all, 30 inches with glass bottom	6.50
56796	106	Wall bracket; wall to center, 9½ inches; canopy, 5¼x8½ inches; cage, 7x10 inches with glass bottom	6.80
56797	105	Wall bracket; wall to center, 9½ inches; canopy, 5¼x8½ inches; 3¼ or 4-inch holder	3.20
56798	103	Post light; height to holder, 19 inches; base, 8 inches in diameter; body, 3½ inches; 5 or 6-inch holder	5.50

When finishes are not specified, dull black will be furnished with moss glass. Mottled green finish will be furnished only when specified with amber glass. Standard glass colors are amber, green, moss or ground (C. R. I.).

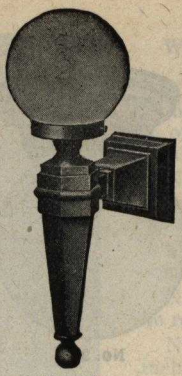
All openings are fitted with ⅜-inch iron pipe nipples.

Prices do not include globes, sockets or wiring.

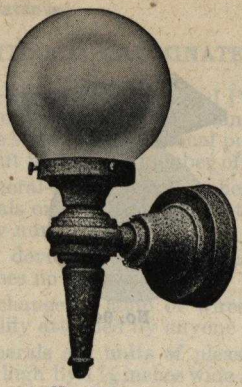
CAST METAL OUTDOOR FIXTURES



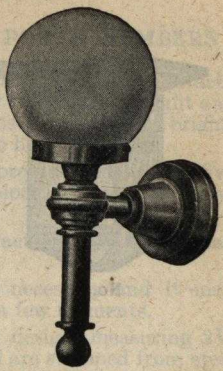
No. 75



No. 91



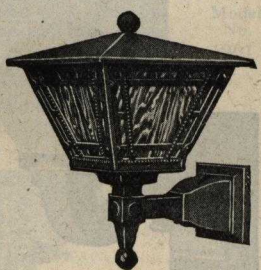
No. 101



No. 104



No. 71



No. 76



No. 78



No. 77

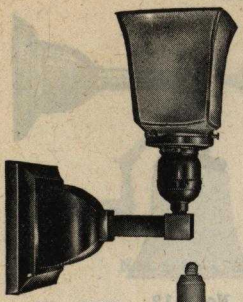
Trade No.	Mfrs. No.	Description	Price Each
56771	75	Wall bracket; height to holder, 7 inches; wall to center, 8 inches; 3¼ or 4-inch holder	$2.20
56772	91	Wall bracket; height to holder, 16 inches; wall to center, 8 inches; 3¼ or 4-inch holder	5.00
56773	91	Wall bracket; height to holder, 16 inches; wall to center, 8 inches; 5 or 6-inch holder	5.50
56774	101	Wall bracket; height to holder, 9 inches; wall to center, 8 inches; 3¼ or 4-inch holder	1.90
56775	104	Wall bracket; height to holder, 11 inches; wall to center, 8 inches; 3¼ or 4-inch holder	2.20
56776	71	Wall bracket; cage, 7x9 inches; length over all, 14 inches; wall to center, 8 inches	6.50
56777	76	Wall bracket; cage, 10x10 inches; length over all, 15 inches; wall to center, 8 inches	8.50
56778	78	Wall bracket; cage, 7x10 inches; length over all, 15 inches; wall to center, 8 inches	7.00
56779	77	Wall bracket; cage, 7x10 inches; length over all, 15 inches; wall to center, 8 inches	6.80

When finishes are not specified, dull black will be furnished with moss glass. Mottled green finish will be furnished only when specified with amber glass. Standard glass colors are amber, green, moss or ground (C. R. I.).

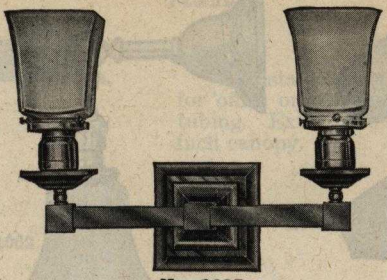
All openings are fitted with ⅜-inch iron pipe nipples.

Prices do not include globes, sockets or wiring.

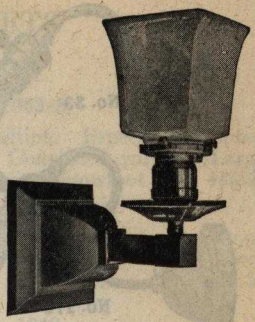
BRACKETS



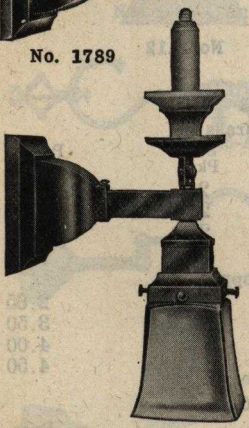
No. 1789



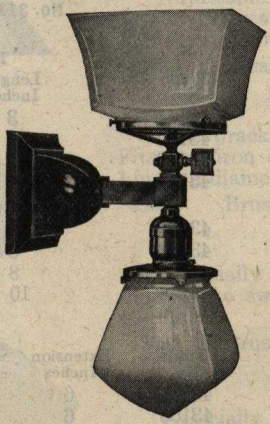
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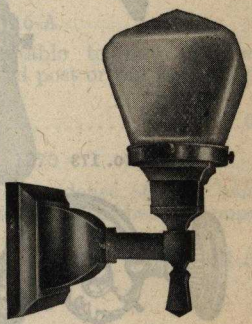
No. 1946



No. 1900



No. 1902



No. 1896



No. 1932



No. 1931

ELECTRIC BRACKETS

Trade No.	Extends Inches	Finish	Price Each
		No. 1789	
022990	6	Brushed brass	$2.00
		No. 1837	
022991	6	Brushed brass	4.50
		No. 1837 has a 12-inch spread.	
		No. 1946	
022992	6	Brushed brass	2.50
		No. 1896	
022993	6	Brushed brass	4.00

COMBINATION BRACKETS

		No. 1900	
022994	6	Brushed brass	4.00
		No. 1902	
022995	6	Brushed brass	2.75
		No. 1932	
022996	6	Brushed brass	1.35
022997	6	Oxidized copper	1.50
		No. 1931	
022998	6	Brushed brass	1.35
022999	6	Oxidized copper	1.50

FARIES WALL BRACKETS


No. 33

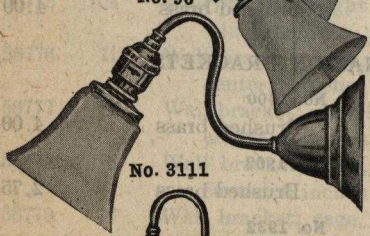

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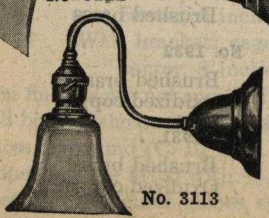

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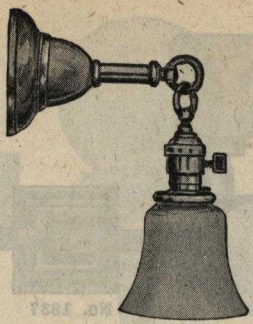

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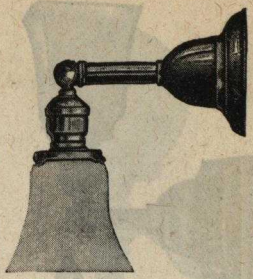

No. 73


No. 96


No. 3111


No. 3113


No. 3114


No. 3112

No. 33

Brushed Brass

Trade No.	Length Inches	Std. Pkg.	Price per Doz.
43151	3	24	$2.25
43152	6	24	3.00
43153	8	24	3.50
43154	10	24	4.00

Oxidized Copper

43155	3	24	2.65
43156	6	24	3.50
43157	8	24	4.00
43158	10	24	4.50

No. 176

Trade No.	Extension Inches	Finish	Price Each
43159	6	Brushed brass	$0.50
43160	6	Oxidized copper	.60

No. 173

43161	5	Brushed brass	.45
43162	5	Oxidized copper	.50

No. 134

With Heavy Cast Base

43163	6	Brushed brass	1.00
43164	6	Oxidized copper	1.15

No. 73

Canopy and Crowfoot

43165	8	Brushed brass	1.00
43166	8	Oxidized copper	1.20

No. 96

Canopy and Crowfoot—2-Light

43167	8	Brushed brass	1.75
43168	8	Oxidized copper	2.00

No. 3111

43169	10	Brushed brass	.90
43170	10	Oxidized copper	1.00

No. 3113

43171	10	Brushed brass	.90
43172	10	Oxidized copper	1.00

No. 3114

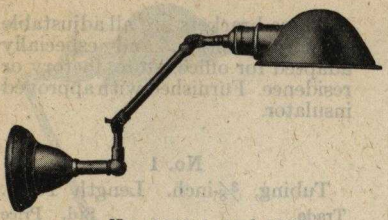
43173	6	Brushed brass	1.00
43174	6	Oxidized copper	1.20

No. 3112

43175	6	Brushed brass	.65
43176	6	Oxidized copper	.75

FARIES ADJUSTABLE BRACKETS

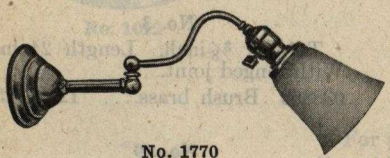
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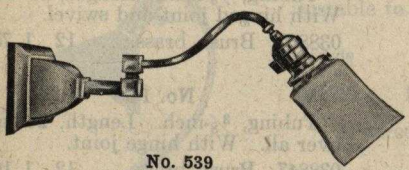
Nos. 1062-A and 1062



No. 16-A



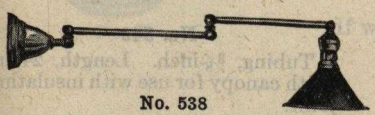
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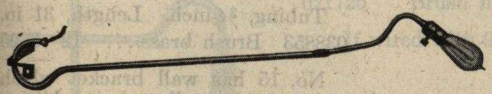
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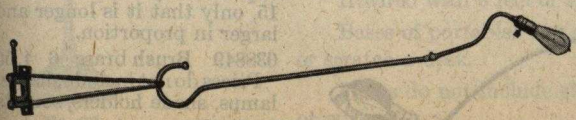
No. 537



No. 538



No. 4



No. 5

No. 1062-A

Adjustable to any position. Especially adapted for office or residence. Concealed wiring. Large tubing. Extends 15 inches. Crowfoot and 4½x3-inch canopy.

Trade No.	Description	Std. Pkg.	Price Each
43096	Brush brass	12	$1.50

No. 1062

Adjustable to any position. For office or residence. Concealed wiring. Large tubing. Extends 23 inches. Crowfoot and 4½x3-inch canopy.

43099	Brush brass	12	1.50

No. 16-A

Bed bracket. Adjustable to any position. Fits any iron or brass bed post or rail from ⅜ to 1-inch in diameter.

43097	Brush brass	12	1.00

No. 1770

Especially adapted for residence, office or bank work. One swing. Extends 12 inches. Canopy, 4½ inches.

43084	Brush brass	12	1.50

No. 539

Especially adapted for residence, office or bank work. Square swing bracket. Extends 12 inches.

43086	Brush brass	6	3.00

No. 537

Especially adapted for residence, office or bank work. One swing. Extends 15 inches. Canopy, 4½ inches.

027152	Brush brass	12	1.50

No. 538

Especially adapted for residence, office or bank work. Same as No. 537 but is two-swing. Extends 27 inches. Canopy, 4½ inches.

027151	Brush brass	6	2.75

No. 4

Adjustable to any position, for office, store, factory or residence. Furnished with approved insulator. Tubing, ½-inch. Length, 40-inch, with hinged joint.

038859	Brush brass	12	1.60

No. 5

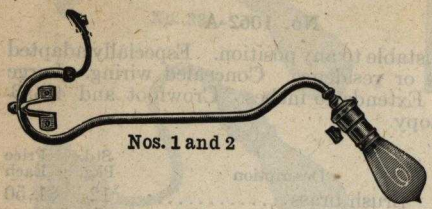
Adjustable to any position. Especially adapted for office, factory, store, doctor or dentist. Tubing, ½-inch. Length, 5 feet Furnished with approved insulator.

43098	Brush brass	6	2.40

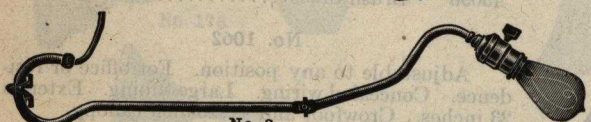
Prices do not include shades, lamps, shade holders, sockets or wiring.

FARIES ADJUSTABLE BRACKETS

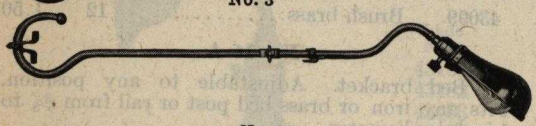
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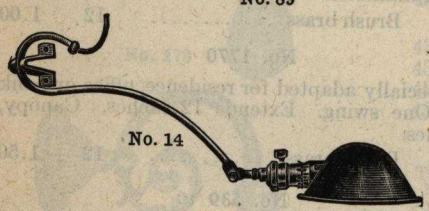
Nos. 1 and 2



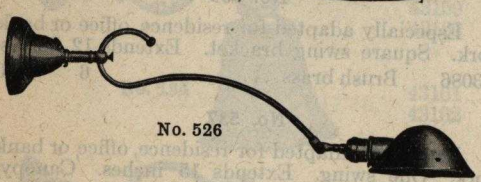
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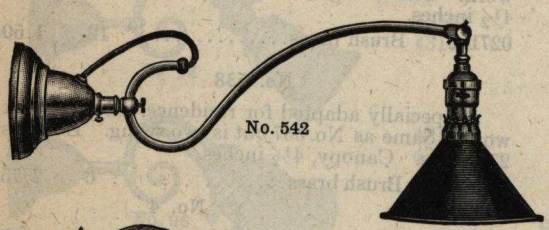
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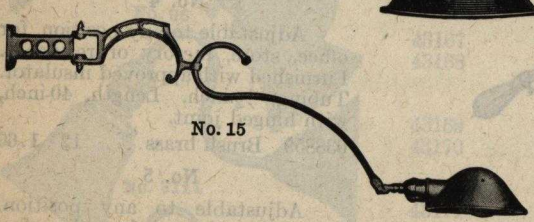
No. 14



No. 526



No. 542



No. 15



No. 20

These brackets are all adjustable to any position, and especially adapted for office, store, factory or residence. Furnished with approved insulator.

No. 1

Tubing, ⅜-inch. Length 16 in.

Trade No.	Description	Std. Pkg.	Price Each
038857	Brush brass....	12	$0.60

No. 2

Tubing, ⅜-inch. Length 24 in.

038861	Brush brass....	12	.70

No. 3

Tubing, ⅜-inch. Length 24 in. With hinged joint.

038863	Brush brass....	12	1.25

No. 89

Tubing, ⅜-inch. Length, 24 in. With hinged joint and swivel.

038865	Brush brass....	12	1.75

No. 14

Tubing, ⅜-inch. Length, 20 in. over all. With hinge joint.

038847	Brush brass....	12	1.10

No. 526

Tubing, ⅜-inch. Length, 22 in. over all. With hinge joint and canopy.

42765	Brush brass....	12	1.45

No. 542

Tubing, ⅜-inch. Length, 24 in. With canopy for use with insulating joint.

42767	Brush brass....	12	1.65

No. 15

Tubing, ⅜-inch. Length, 31 in.

038853	Brush brass....	12	3.25

No. 15 has wall bracket which swings horizontally only in addition to outer arm, which is adjustable to any position.

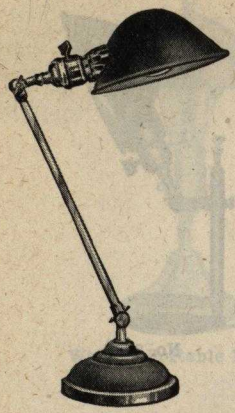
No. 20

Length, 50 inches. No. 20 is practically the same as No. 15, only that it is longer and larger in proportion.

038849	Brush brass	6	4.50

Prices do not include shades, lamps, shade holders, sockets or wiring.

FARIES ADJUSTABLE PORTABLES



No. 1012



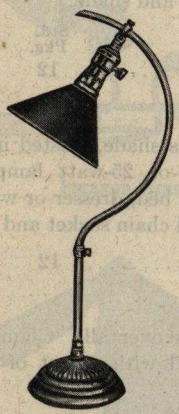
No. 1792

No. 1012

For piano, office desk, library table, or any place where an adjustable portable lamp is used. Has large tubing and is adjustable to any position. Height, 18 inches; extends 24 inches.

Trade No.	Description	Std. Pkg.	Price Each
021721	Brush brass	12	$2.00

If wired with 6 feet of silk cord, socket and plug, add $1.50.



No. 22

No. 1792

Same as No. 1012 but with two lights. Large tubing adjustable to any position. Height, 20 inches. Extends 34 inches over all.

021722	Brush brass	6	3.50

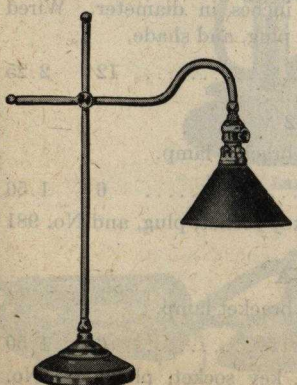
If wired with 9 feet of silk cord, socket and plug, add $2.00.

No. 22

This portable has an adjustable clip so that light can be thrown in any direction. Height, 20 to 26 inches.

021725	Brush brass	12	1.65

If wired with 9 feet of silk cord, socket and plug, add $1.50.



No. 63

No. 63

Height, 24 inches; arm, 13 inches.

43021	Brush brass	12	2.50

If wired with 9 feet of silk cord, socket and plug, add $1.50.

Bases of portables are covered with felt, and will not mar or scratch a desk.

Prices do not include shades, lamps, shade holders, sockets, or wiring.

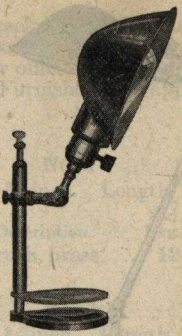
FARIES ADJUSTABLE PORTABLES



No. 3188



No. 3174



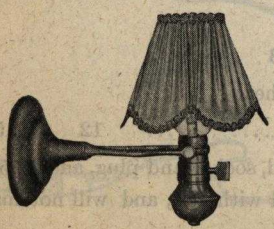
No. 3267



No. 3187



No. 152
Used as a Desk Lamp



No. 152A
Used as a Bracket Lamp

No. 3188

Height, 12 inches over all; base, 4½ inches. Combination portable and bracket. Has an adjustable joint, and shade swivels so that light can be thrown in any direction. Wired with 6 feet of silk cord, key socket, plug, and shade.

Trade No.	Description	Std. Pkg.	Price Each
43013	Brush brass	12	2.50

No. 3174

Height, 15 inches. Has a 7-inch brass shade, frosted inside, brush brass outside. For round bulb or 25-watt lamp. A practical as well as artistic portable for a bed, dresser or writing desk. Wired with 9 feet of silk cord, pull chain socket and plug.

43008	Brush brass	12	6.00

No. 3267

Height, 14 inches; spread, 11 inches over all. Clamp fits any thickness up to 1¾ inches. Wired with 6 feet of cord, socket, plug, and shade.

43012	Brush brass	12	$4.50

No. 3187

Height, 11 inches over all; base, 4½ inches. Combination portable and bracket. Shade, 6 inches in diameter. Wired with 6 feet of silk cord, key socket, plug, and shade.

43014	Brush brass	12	2.25

No. 152

Can be used either as a desk or bracket lamp.

43001	Brush brass	6	1.50

Wired with 6 feet of silk cord, key socket, plug, and No. 981 shade, add $2.25.

No. 152-A

Can be used either as a desk or bracket lamp.

43015	Brush brass	6	1.50

Wired with 6 feet of silk cord, key socket, plug, and No. 981-A silk shade, add $2.75.

ADJUSTABLE PORTABLES AND BRACKETS



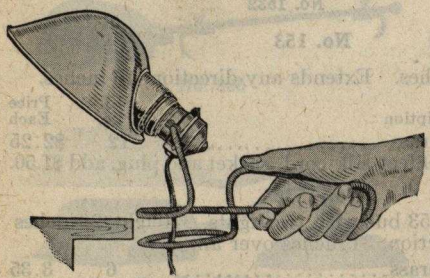
Wallace Portable Lamp

WALLACE PORTABLE ELECTRIC LAMPS

These portable lamps are suitable for use in any number of places. They can be collapsed and carried in a grip. Take up practically no room, folding into a compact ball when not in use. Concealed in the base of lamp is an automatic spiral clamp spring by means of which lamp can be hung on the wall or clamped instantly to bed-rod, dressing table, desk or chair. Iron grip rubber suction cup for sticking lamp to mirror, window pane or any other non-porous surface. Furnished with ten feet of extension cord and patent plug which connects with any electric fixture.

Finished in either brush brass, nickel or bronze.

Trade No.	Description	Price Each
89802	Complete with 10 feet of cord, push button, socket and swivel plug	$3.00

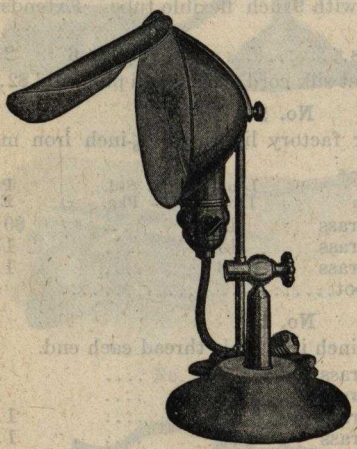


Paragon Bracket

PARAGON HANDY LAMP BRACKETS

Connect to any electric light socket and are instantly attached to any furniture by coil spring. Revolving shade and swivel joint make lamp instantly and easily adjustable to any angle desired.

57411	Bracket complete with cord, socket and shade.....	2.50



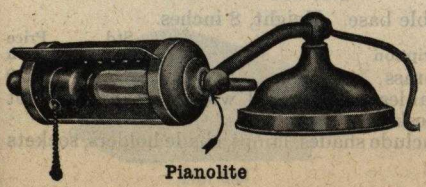
Lyhne Lamp

LYHNE LAMPS

The Lyhne Lamp is a new idea in scientific lamp construction, and a great improvement over the common type of electric portables. The reflector being a perfect parabola gives a powerful, steady, restful light without ray shadows, on the precise spot where wanted. It is adjustable to every position and for every purpose, upwards, downwards, to the front, to the back, to this side or that. There is no position to which both reflector and shade cannot be adjusted.

Trade No.	Mfrs. No.	Description	Price Each
078192	300	Full brush brass finish....	$6.00
89803	302	Full nickel.....	6.00
078195	303	Full oxidized copper finish	6.00
89804	305	Statuary Bronze.....	6.50

Prices include socket, 6 feet of green mercerized cord and Benjamin Attachment Plug.



Pianolite

PIANOLITES, No. 40

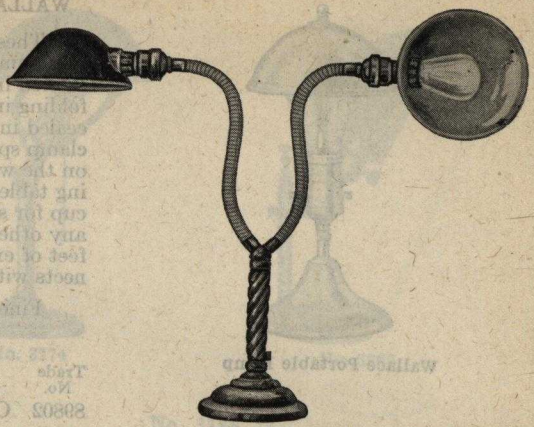
Pianolite is the smallest and neatest appearing fixture on the market. It has a pull chain socket with a 6 candle power lamp and an adjustable reflector. Extra heavy base only 4 inches in diameter.

Trade No.	Mfrs. No.	Description	Price Each
57412	40	Brush brass.....	$4.50

FARIES FLEXIBLE PORTABLES AND ARMS



No. 153



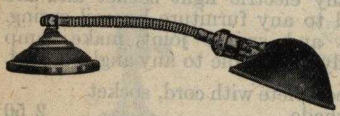
No. 1532

No. 153

Height, 26 inches. Extends any direction, 16 inches.

Trade No	Description	Std. Pkg.	Price Each
078184	Brush brass	12	$2.25

If wired with 9 feet silk cord, socket and plug, add $1.50.



No. 1947

No. 1532

Same as No. 153 but with two lights. Height, 26 inches Extends, any direction, 34 inches over all.

41431	Brush brass	6	3.35

If wired with 9 feet silk cord, socket and plug, add $2.00.

No. 1947

Flexible portable with 9-inch flexible tube. Extends 20 inches over all.

42924	Brush brass	6	2.25

If wired with 9 feet silk cord, socket and plug, add $2.00.



No. 540

No. 540

Flexible arms for factory lighting. ⅜-inch iron male thread each end.

Trade No.	Finish	Length Inches	Std. Pkg.	Price Each
42921	Brush brass	12	....	$0.90
42922	Brush brass	15	....	1.10
42923	Brush brass	18	....	1.35
Longer lengths, per foot				.90



No. 154

No. 154

Flexible arm. ⅛-inch iron male thread each end.

078186	Brush brass	9	....	.75
078187	Brush brass	12	....	.90
078188	Brush brass	15	....	1.10
078189	Brush brass	18	....	1.35
42926	Brush brass	24	....	1.80
Longer lengths, per foot				.90



No. 155

No. 155

Flexible portable base. Height, 8 inches.

Trade No.	Description	Std. Pkg.	Price Each
42932	Brush brass	12	$1.20

Bases of portables are covered with felt and will not mar or scratch a desk.

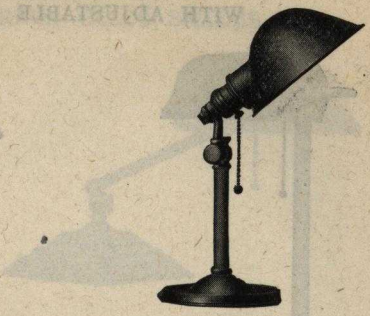
Prices do not include shades, lamps, shade holders, sockets or wiring.

FARIES ADJUSTABLE PORTABLES

WITH ADJUSTABLE METAL HOODS



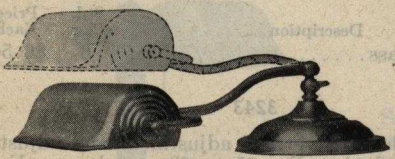
No. 3193



No. 3184



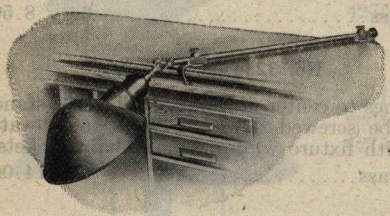
No. 885



No. 3182



No. 3067



No. 72



No. 97



No. 826

No. 3193

For flat top desk. Height, 15 inches; base, 5½ inches. Adjustable metal hood, frosted inside. Wired with 9 feet of silk cord, pull chain socket and plug.

Trade No.	Description	Std. Pkg.	Price Each
060370	Brush brass	12	$5.50

No. 3184

Adjustable to any position. A practical and artistic portable for dresser or writing desk. Height to socket, 9 inches; base, 6 inches. Wired with 6 feet of silk cord, pull chain socket and plug.

060378	Brush brass	12	6.00

No. 885

Fits any desk up to 15 inches. Adjustable metal hood, frosted inside. Wired with 9 feet of silk cord, socket and plug.

060384	Brush brass	6	5.00

No. 3182

For roll top desk or piano. Base, 7 inches. Extends 11 inches. Swing portable with vertical adjustment and adjustable metal hood, frosted inside. Wired with 9 feet of silk cord, socket and plug.

060366	Brush brass	12	6.30

No. 3067

For roll top desk or piano. Slate base, 7 x 7 inches. Extends 11 inches. Swing portable with vertical adjustment and adjustable metal hood, frosted inside. Wired with 9 feet of silk cord, socket and plug.

060368	Brush brass	12	6.30

No. 72

Regular size fits any desk up to 15 inches. Should be used with a No. 027 shade, frosted, as illustrated.

060379	Brush brass	12	1.25

No. 97

Desk clamp. Should be used with No. 027 shade as shown in illustration of No. 72.

060374	Brush brass	12	40

No. 826

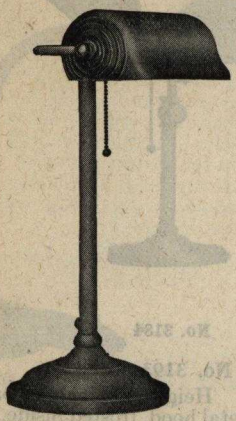
Portable metal hood, frosted inside, can be attached to any portable or roll top desk bracket. Tapped, ⅜-inch.

060375	Brush brass	6	2.50

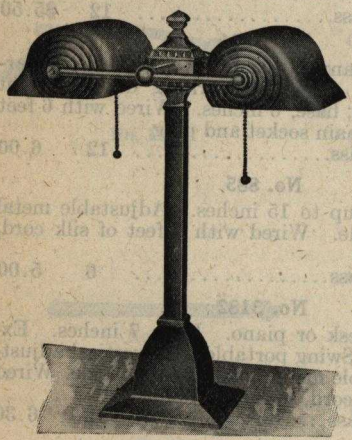
Prices do not include shade, lamps, shadeholders, sockets or wiring, except where specified.

VERDELITE PORTABLES

WITH ADJUSTABLE GREEN GLASS SHADES



No. 3248



No. 3254



No. 3246



No. 1842



No. 3243

No. 1842

Fits any desk up to 15 inches. With adjustable green glass shade. For 25 to 60-watt lamp. Wired with 9 feet of silk cord, key socket and plug.

Trade No.	Description	Std. Pkg.	Price Each
87457	Brush brass	6	$6.50

No. 3243

Swing portable with vertical adjustment and adjustable green glass shade. For 25 to 60-watt lamp. Extends 12 inches. Wired with 9 feet of silk cord, key socket and plug.

42746	Brush brass	6	7.50

No. 3248

Height 15 inches to center of shade. For 25 to 60-watt lamp. Wired with 9 feet of silk cord, pull chain socket and plug.

42750	Brush brass	6	8.50

No. 3254

Height 18 inches to center of shades. This is a stand lamp and must be screwed down. For 25 to 60-watt lamps. Wired with fixture wire and pull chain sockets.

101710	Brush brass	6	14.00

No. 3246

Height 15½ inches to center of shade. For 25 to 60-watt lamp. Wired with 9 feet of silk cord, pull chain socket and plug.

42754	Brush brass with black relief	6	16.50

No. 3247

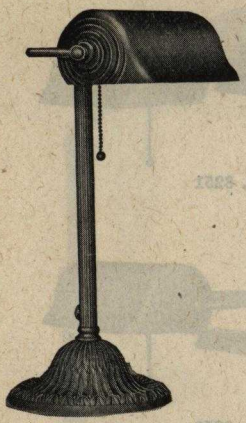
Same as No. 3246 but with two lights. Height, 15½ inches to center of shades. For 25 to 60-watt lamps. Wired with 9 feet of silk cord, pull chain sockets and plug.

42753	Brush brass with black relief	6	20.50

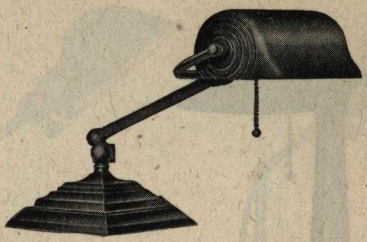
Bases are covered with felt and will not mar or scratch a polished surface.

VERDELITE PORTABLES

WITH ADJUSTABLE GREEN GLASS SHADES



No. 3262



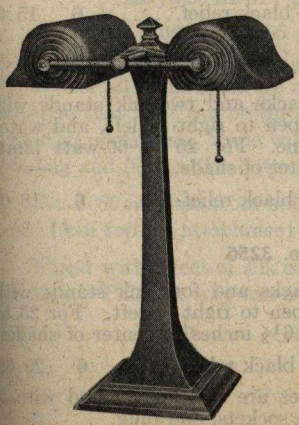
No. 3249



No. 3260



No. 3244



No. 3245

No. 3249

Swing portable with vertical adjustment with adjustable green glass shade. For 25 to 60-watt lamp. Extends 11 inches.

Trade No.	Description	Std. Pkg.	Price Each
42749	Brush brass	6	$9.00

No. 3260

Fancy cast portable. Arm swings horizontally. Vertical adjustment. Adjustable green glass shade. For 25 to 60-watt lamp. Extends 10 inches.

42757	Brush brass with black relief	12	8.00

No. 3262

Height, 16½ inches to center of shade. For 25 to 60-watt lamp.

42758	Brush brass with black relief	6	9.00

No. 3244

Height, 16½ inches to center of shade. For 25 to 60-watt lamp.

42752	Brush brass	6	10.00
42759	Statuary bronze	6	10.50

No. 3245

Height, 16½ inches to center of shades. For 25 to 60-watt lamps.

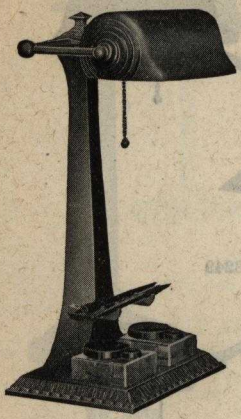
42751	Brush brass	6	14.50
42760	Statuary bronze	6	15.00

All the above portables are furnished wired with 9 feet of silk cord, pull chain sockets, and plug.

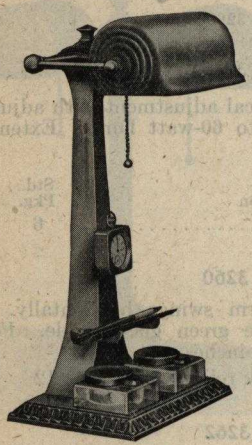
Bases are covered with felt and will not mar or scratch a polished surface.

VERDELITE PORTABLES

WITH ADJUSTABLE GREEN GLASS SHADES



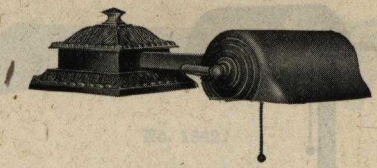
No. 3255



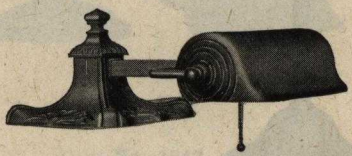
No. 3255-A



No. 3256



No. 3251



No. 3250

No. 3251

Fancy cast portable with adjustable green glass shade. For 25 to 60-watt lamp. Extends 12 inches.

Trade No.	Description	Std. Pkg.	Price Each
101708	Brush brass with black relief.....	6	$9.00
101709	Statuary bronze with green relief..	6	9.50

No. 3250

Fancy cast portable with adjustable green glass shade. For 25 to 60-watt lamp. Extends 12 inches.

101705	Brush brass with black relief.....	6	12.00
101706	Statuary bronze with green relief..	6	12.50

No. 3255

Furnished with pen racks and two ink stands with composition tops which open to the right or left. For 25 to 60-watt lamp. Height, 16½ inches to center of shade.

101701	Brush brass with black relief.....	6	15.00

No. 3255-A

Furnished with pen racks and two ink stands with composition tops which open to right or left, and watch which will keep good time. For 25 to 60-watt lamp. Height, 16½ inches to center of shade.

101712	Brush brass with black relief.....	6	18.00

No. 3256

Furnished with pen racks and four ink stands with composition tops which open to right or left. For 25 to 60-watt lamps. Height, 16½ inches to center of shades.

101703	Brush brass with black relief.....	6	20.00

All the above portables are furnished wired with 9 feet of silk cord, pull chain sockets, and plug.

Bases are covered with felt and will not mar or scratch a polished surface.

FARIES FLOOR PORTABLES

ADJUSTABLE TELESCOPING



No. 3186 No. 3185 No. 03080

ADJUSTABLE, TELESCOPING, FOR RESIDENCE OR OFFICE

Nos. 3080, 03080 and 3185 portables are adjustable in height from 2½ to 5 feet. The arms are 11 inches over all. The No. 3186 is adjustable in height from 3 to 5 feet and the arm is 11 inches over all. The arms are adjustable to any angle. The shades will not pull off, but will swivel so that light can be thrown in any direction. No set screws to mar or scratch finish in adjusting portables. Made with heavy stems and 9-inch heavy iron base covered with brass spinning and felt on the bottom of bases.

No. 3080 is wired from bottom for attaching the floor plug. Nos. 03080, 3185 and 3186 are wired from top for attachment to chandelier or bracket.

Wired with 9 feet of silk cord, socket, plug or shade. No. 3185 is furnished with detachable ash tray. This ash tray can also be furnished on No. 3080.

Trade No.	Mfrs. No.	Style Socket	Finish	Std. Pkg.	Price Each
41139	3186	Pull	Brushed brass	12	$10.00
42726	3080	Key	Brushed brass	12	7.00
41140	3185	Key	Brushed brass	12	8.00
42728	03080	Key	Brushed brass	12	7.00

PORTABLES



No. 961



No. 965



No. 967



No. 973



No. 975

MAHOGANY TABLE AND DRESSER LAMPS

No. 961

Trade No.	Mfrs. No.	Description	Price Each
148613	960	Pedestal only	$2.30
148614	225½	5½-inch shade	1.20
148615	961	Complete, height 11 inches	3.50

No. 965

148616	964	Pedestal only	2.50
148617	158	8-inch shade	2.25
148618	965	Complete, height 14 inches	4.75

No. 967

148619	966	Pedestal only	2.50
148620	608	8-inch shade	3.00
148621	967	Complete, height 14 inches	5.50

No. 973

148622	972	Pedestal only	3.00
148623	3114	14-inch shade, unlined	3.00
148624	973	Complete, height 21 inches	6.00

No. 975

148625	974	Pedestal only with pull socket	4.50
148626	6214	14-inch shade	7.00
148627	975	Complete, height 20 inches	11.50

Above lamps are wired with 6-foot silk cord, one socket and attachment plug.

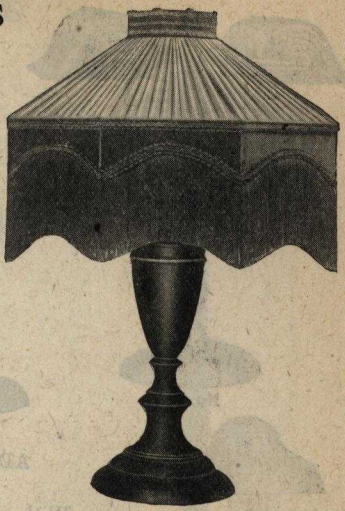
Silk shades can be furnished in either plain or figured silk in the following colors: old gold, old rose, mulberry, pink, champagne, delft blue, light blue, olive green, ruby and amber.

Standard package, 4 of one style or assorted.

PORTABLE LAMPS



No. 880



No. 898

MAHOGANY TABLE LAMPS

No. 880

Trade No.	Mfrs. No.	Description	Price Each
148638	880 M. F.	Mahogany finish without shade	$8.50
148639	880 G. M.	Genuine mahogany without shade	10.00
148640	6418	18-in. silk shade, as shown, with triple box plait trimming	13.50
148641	6424	24-in. triple plait, floor lamp size	18.00
148642	6218	18-in. silk shade, same as above except single box plait trimming	10.50
148643	6224	24-in. single plait, floor lamp size	13.50

No. 898

148644	898 M. F.	Mahogany finish without shade	9.50
148645	898 G. M.	Genuine mahogany without shade	11.50
148646	8620	20-in. silk shade, plain or figured	12.50
148647	8626	26-in. above style, floor lamp size	17.00

No. 847

148648	847	Lacquered ebony finish without shade	13.00
148649	4720	20-inch silk shade	12.00
148650	4726	26-in. above style, floor lamp size	16.00

No. 863

148651	863 M. F.	Mahogany finish without shade	11.00
148652	863 G. M.	Genuine mahogany without shade	13.00
148653	3820	20-inch silk shade	15.00
148654	3826	26-in. above style, floor lamp size	20.00

Above lamps are all wired with 8-foot parallel silk cord, two pull-chain sockets and separable attachment plug. They are 28 inches high over all and have 9-inch bases.

Silk shades can be furnished in either plain or figured silk in the following colors: Old gold, old rose, mulberry, pink, champagne, delft blue, light blue, olive green, ruby and amber.

Can supply either figured, colored, white silk, or a white diffusing lining which prevents lamp bulbs from showing through the shade.

Standard package, 4 of one style or assorted.



No. 847



No. 863

PORTABLES



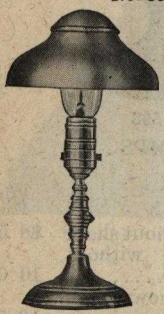
No. 332



No. 333



No. 323



No. 317



No. 339



No. 343

ADJUSTABLE DESK AND BOUDOIR PORTABLES

No. 332

With adjustable metal shades. Height over all, 17 inches.

Trade No.	Description	Price Each
148692	Wired complete with pull-chain sockets	$12.00

No. 330

Same as No. 332, except with single shade.

148693	Wired complete	8.00

No. 333

Height to top of standard, 12 inches.

148694	With adjustable closed joint, wired complete	7.50

No. 323

Height to top of standard, 12 inches.

148695	With adjustable closed joint, not wired	3.00
148696	Wired complete	5.00

No. 317

With adjustable shade. Base, 4½-inch cast iron, covered with spinning. Height, over all, 12 inches. Diameter of shade, 6 inches.

Finished in mottled verde, statuary bronze, brush brass, nickel and ivory white.

148697	Wired complete	2.75

No. 339

With 6¼-inch adjustable shade. Base, 4½-inch cast iron, covered with metal spinning. Height, over all, 16 inches. Open panels in shade are lined with colored silk. Shade can be easily adjusted to any desired position.

Finished in mottled verde antique, brush brass, statuary bronze and ivory white.

148698	Wired complete	4.50

No. 343

Height, 18 inches; diameter of shade, 9 inches. Opaque glass shade covered with stamped cuirass finished to match portable.

Finished in mottled verde, statuary bronze, and brush brass.

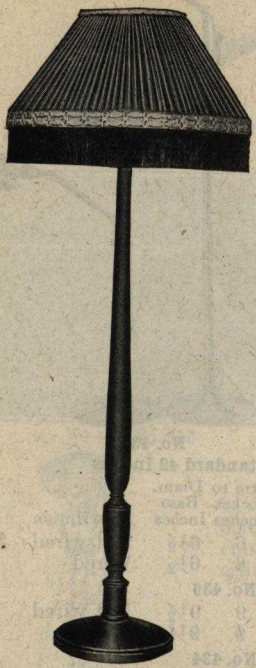
148699	Wired complete	7.50

All the above portables, except Nos. 317 and 339, have 6½-inch cast iron base, covered with metal spinning, and are wired with 8-foot parallel silk cord, separable attachment plug, approved socket and shade to match.

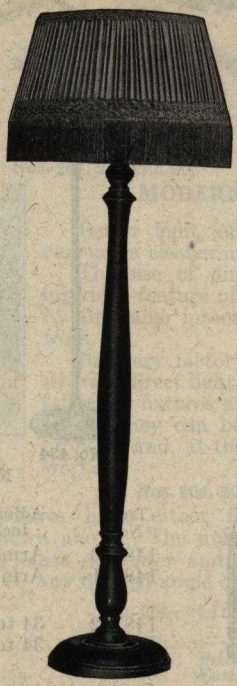
Prices on Nos. 323, 333, 330 and 332 are for brush brass finish, which will be sent unless otherwise specified. For statuary bronze, mottled verde, nickel or oxidized copper finish on Nos. 323 and 333, add 50 cents; No. 330, add 75 cents; No. 332, add $1.00.

Standard package, 12 of one style or assorted.

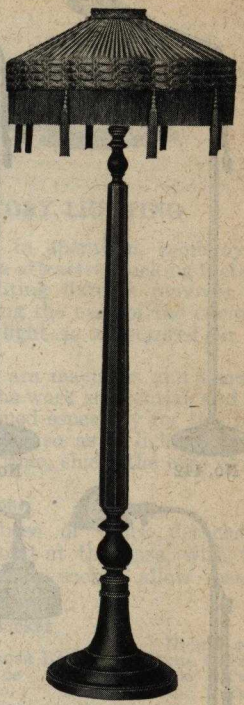
PORTABLE LAMPS



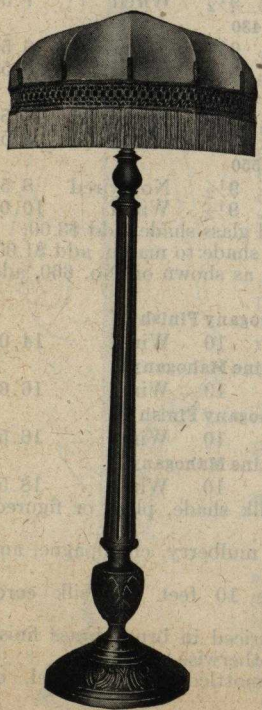
No. 786



No. 778



No. 791



No. 761

MAHOGANY PARLOR LAMPS

No. 786

Trade No.	Mfrs. No.	Description	Price Each
148665	786 M. F.	Mahogany finish without shade	$10.00
148666	786 G. M.	Genuine mahogany without shade	14.00
148667	3124	24-inch unlined silk shade	10.00
148668	3124 S.	Same style without fringe	7.00
		No. 778	
148669	778 M. F.	Mahogany finish without shade	16.00
148670	778 G. M.	Genuine mahogany without shade	19.00
148671	2824	24-inch silk shade	12.00
148672	2818	18-inch same style, table lamp size	8.50
		No. 791	
148673	791 M. F.	Mahogany finish without shade	19.00
148674	791 G. M.	Genuine mahogany without shade	22.00
148675	8826	26-inch silk shade	20.00
148676	8820	20-inch same style, table lamp size	16.50
		No. 761	
148677	761 M. F.	Mahogany finish without shade	24.00
148678	761 A. G.	Antique green gold finish without shade	26.00
148679	761 G. M.	Genuine mahogany without shade	28.00
148680	7824	24-inch silk shade	20.00
148681	7818	18-inch same style, table lamp size	15.00

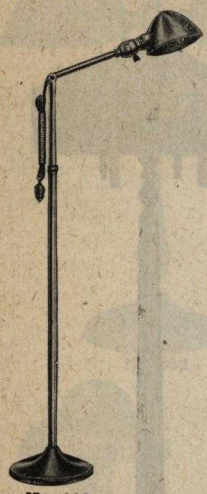
No. 786 pedestal is wired with 2 lights, otherwise all of the above lamps have 12-foot parallel silk cord, 3 pull-chain sockets and separable attachment plug.

Silk shades can be furnished in either plain or figured silk in any of the following colors: Old gold, old rose, mulberry, pink, champagne, delft blue, light blue, olive green, ruby and amber.

Can supply either figured, colored, white silk or a white diffusing lining which prevents lamp bulbs from showing through the shade.

Standard package, 4 of one style or assorted.

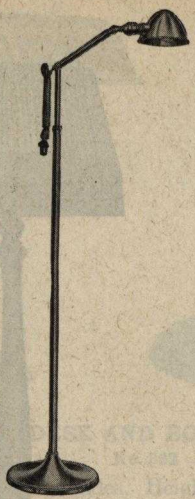
ADJUSTABLE FLOOR PORTABLES



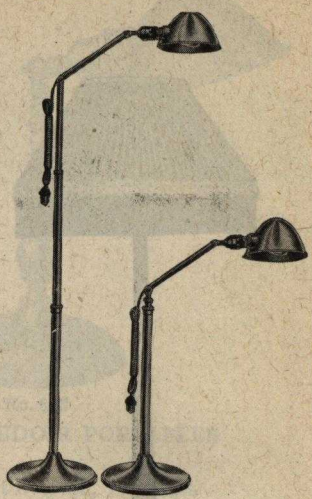
No. 442



No. 436



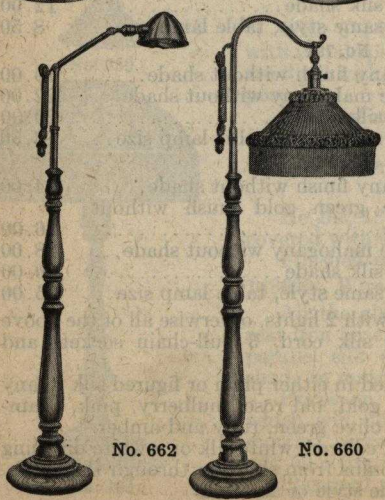
No. 434



No. 430



No. 428 No. 550



No. 662 No. 660

No. 442—Standard 42 Inches

Trade No.	Adjustment Inches	Arm to Socket Inches	Diam. Base Inches	Description	Price Each
148710	Arm only	6	6½	Not wired	$3.10
148711	Arm only	6	6½	Wired	5.00
		No. 436			
148712	34 to 72	9	9½	Not wired	5.00
148713	34 to 72	9	9½	Wired	7.00
		No. 434			
148714	34 to 72	11	9½	Not wired	5.50
148715	34 to 72	11	9½	Wired	7.50
		No. 430			
148716	14 to 72	11	9½	Not wired	6.50
148717	14 to 72	11	9½	Wired	8.50
		No. 428			
148718	34 to 72	12	9½	Not wired	6.50
148719	34 to 72	12	9½	Wired	8.50
		No. 550			
148720	34 to 60	10	9½	Not wired	8.50
148721	34 to 60	10	9½	Wired	10.00

For No. 50 metal covered glass shade, add $3.00.

For special finishes, with shade to match, add $1.00.

For No. 6414 silk shade, as shown on No. 660, add $9.00.

		No. 662—Mahogany Finish			
148722	40 to 72	11	10	Wired	14.00
		No. 662—Genuine Mahogany			
148723	40 to 72	11	10	Wired	16.00
		No. 660—Mahogany Finish			
148724	40 to 66	10	10	Wired	16.50
		No. 660—Genuine Mahogany			
148725	40 to 66	10	10	Wired	18.50

For No. 6414 14-inch silk shade, plain or figured, add $9.00.

Silk colors: Rose, gold, mulberry, champagne, and delft blue.

Portables wired include 10 feet par. silk cord, socket, plug and shade.

Metal floor lamps are priced in brush brass finish which will be sent, unless otherwise specified.

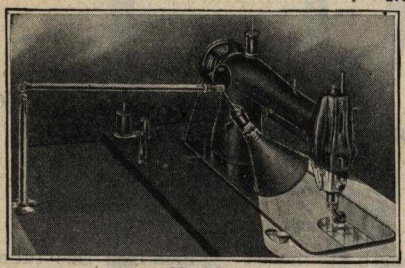
For statuary bronze, mottled verde, nickel, or oxidized copper, add $0.75.

Standard package, 12 of one style or assorted.

ADJUSTABLE FIXTURES



Nos. 204, 205 and 206



No. 250

MODERN FACTORY LIGHTING

Better light, efficiency in operation, economy in current, a cleaner and more attractive looking factory.

The use of direct lighting fixtures removes the injurious feature of straining the eyes of the operator by the same intensity of light as is required on the work.

In every factory there are machines and benches where a direct light upon the work is essential, and the following fixtures are designed especially for this purpose. They can be adjusted so as to light the work properly and, at the same time, shield the eyes of the worker.

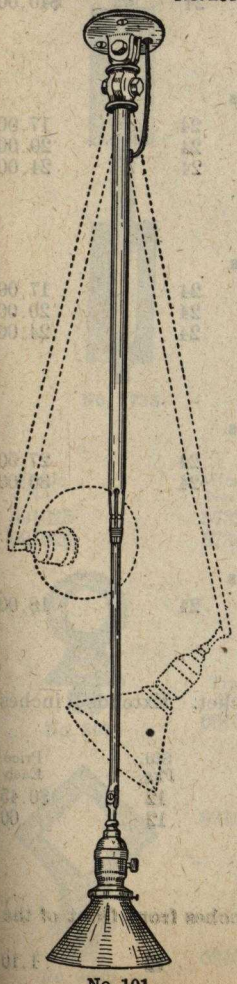
Nos. 204, 205 and 206

These fixtures have either flange base or quick detachable clamp as shown above. The universal joint at the base, with the combination joints at center and next to the socket, allow instant adjustment to any desired angle or position.

No. 204—24 Inches to Socket

Description	Black Trade No.	Black Price Each	Brush Brass Trade No.	Brush Brass Price Each	Nickel or Oxid. Copper Trade No.	Nickel or Oxid. Copper Price Each
Not wired	93336	$2.75	93338	$3.50	93340	$3.75
Complete	93337	4.00	93339	4.75	93341	5.00
No. 205—36 Inches to Socket						
Not wired	93342	3.25	93344	4.00	93346	4.25
Complete	93343	4.50	93345	5.25	93347	5.50
No. 206—48 Inches to Socket						
Not wired	93348	3.75	93350	4.50	93352	4.75
Complete	93349	5.00	93351	5.75	93353	6.00
Clamp attachment add		.30		.60		.60

Complete brackets include socket, shade and wiring.
Standard package, 12 of one style or assorted.



No. 101

No. 250 BENCH BRACKET

For use on power sewing machines. The special No. 15 shade produces better lighting results with a 10 or 15-watt Mazda lamp than can be obtained with larger lamps suspended from a drop cord, thereby reducing the consumption of current.

Height of standard:—12, 15 or 18 inches.

Length of arm:—12, 15 or 18 inches.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Price Each
93361	250	Bracket only, black finish	12	$2.20

Add for extras:—No. 15 shade, 30 cents; socket, 45 cents; attachment plug, 25 cents; wiring, 30 cents.

No. 101 CEILING FIXTURES

Has a universal joint at the top which allows fixture to be moved easily into any position, where it will remain without use of a thumb screw. By means of the 20-inch telescope tube, the fixture can be lengthened or shortened to suit requirements. All wiring concealed inside of tube. Made in various lengths as needed. Standard length, 6 feet from ceiling to socket, when extended.

93329 101 Complete, black finish 12 4.50

For each additional foot, add 50 cents.

For brush brass, nickel or oxidized copper finish, add $1.00.

FARIES BRACKET TUBES



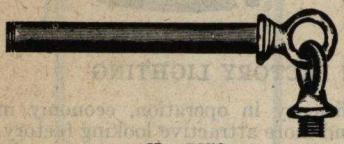
No. 65 No. 1756

No. 65

No. 65 is 1¼ inches long; has 1¼-inch base.

Brush Brass

Trade No.	Length Inches	Std. Pkg.		Price per 100
060184	1¼	100	per doz.	2.00



No. 7352

No. 1756

Brush Brass

42794	...	24	18.00

45 degree angle. For clusters and ceiling fans.



No. 71

No. 7352

Brush Brass

Fan arm. Length 7½ inches. ¼-inch iron size tube.

42793	7½	24	$40.00

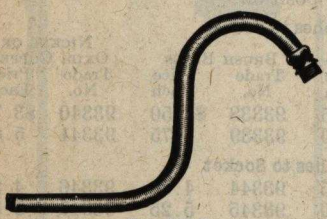


No. 80

No. 71

Brush Brass

027166	6	24	17.00
027167	8	24	20.00
027168	10	24	24.00

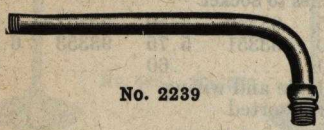


No. 1072

No. 80

Brush Brass

027169	6	24	17.00
027170	8	24	20.00
027171	10	24	24.00

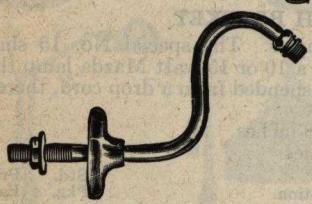


No. 2239

No. 1072

Brush Brass

027172	6	24	27.50
027173	8	24	30.00



No. 158

No. 2239

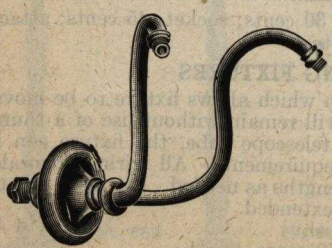
Brush Brass

42782	5	24	18.00

No. 158

No. 158 is a switchboard bracket. Extends 5 inches from the front of the board.

Trade No.	Finish	Std. Pkg.	Price Each
42784	Brush brass	12	$0.45
42785	Polished copper	12	.60



No. 1695

No. 1695

No. 1695 bracket extends 6 inches from front of the board. Spread, 5½ inches.

42787	Brush brass	12	1.10

FIXTURE CHAINS AND FITTINGS

FIXTURE CHAINS

Smooth Surface, Unfinished



No. 3733



No. 3734



No. 3735



No. 3736

Illustrations Are One Half Actual Size

Trade No.	Mfrs. No.	Price per Yard	Trade No.	Mfrs. No.	Price per Yard
091025	3733	$2.25	091027	3735	$1.00
091026	3734	1.25	091028	3736	1.75



No. 3032

FIXTURE EYELETS

Male—with Wire Hole

Trade No.	Mfrs. No.	Iron Thread Inches	Price per 100
091029	3032	⅛	$12.00

Female—with Wire Hole

091030	3033	⅛	12.00



No. 3039

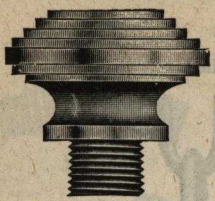
FIXTURE LOOPS

Male

091031	3039	⅛	17.00

FIXTURE FITTINGS


Nos. 117A and 118D


No. 2579A


No. 143


No. 842


No.161A


No. 122D


No. 123B


No. 103A


No. 124D


No. 104A


Nos. 139D and 139E


No. 107A

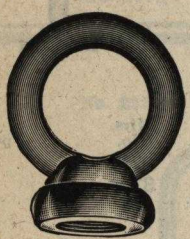
CONNECTORS, BUSHINGS AND NIPPLES

Trade No.	Mfrs. No.	Description	Size, Thread Inches	Price per 100
020213	117A	Brush brass connector.....	1/8 ir.x1/8 ir.	$10.00
020214	118D	Brush brass connector.....	3/8 ir.x3/8 ir.	30.00
55654	2579A	Brush brass connector.....	1/8 ir.x1/4 ir.	30.00
55641	143	Unfinished brass nipple.....	1/8 ir.x1/8 ir.	4.00
020212	842	Unfinished brass bushing....	3/8 ir.x1/8 ir.	10.00
020211	843	Unfinished brass bushing....	3/8 ir.x1/4 ir.	10.00
020210	844	Unfinished brass bushing....	1/4 ir.x1/8 ir.	7.00


No. 88

BRASS NOZZLES

55642	161A	Brush brass.....	1/8 ir. to burner	7.50
020219	122D	Brush brass.....	1/4 ir. to burner	18.00
55643	123B	Brush brass.....	3/8 ir. to burner	25.00
55644	103A	Brush brass.....	1/8 ir. to burner	12.00
020220	124D	Brush brass.....	1/8 ir. to burner	27.00
55645	104A	Brush brass.....	1/8 ir. to burner	12.00
020221	139D	Brush brass.....	1/8 ir. to burner	27.00
55655	139E	Brush brass.....	1/4 ir. to burner	27.00


No. 2899A

BRASS NIPPLES

Angle

Trade No.	Mfrs. No.	Description	Size, Thread Inches	Price per 100
020226	107A	Brush brass	1/8 ir. to burner	$24.00

Straight

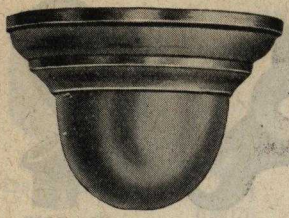
Trade No.	Mfrs. No.	O. D. Inches	Size, Thread Inches	Length Inches	Price per 100
020227	88	3/8	1/8 iron	1	$8.00
020228	88	3/8	1/8 iron	2	12.00
020229	88	3/8	1/8 iron	3	16.00
020230	88	3/8	1/8 iron	4	20.00
020231	88	3/8	1/8 iron	6	24.00


No. 2900A

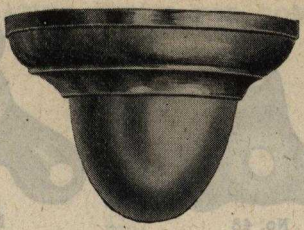
CHANDELIER LOOPS

Trade No.	Mfrs. No.	Size Inches	Description	Price per 100 Brush Brass
55656	2899A	1/8 ir.	Female thread	$10.00
55657	2900A	1/8 ir.	Male thread	10.00

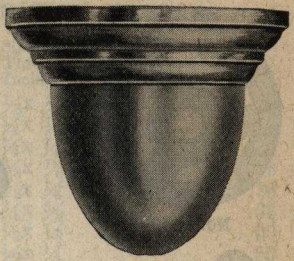
FARIES CANOPIES, CASING AND TUBING



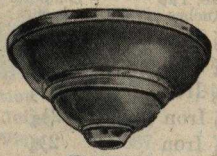
No. 2383



No. 1551



No. 2385



No. 109



No. 8113



No. 2587



No. 43



No. 42



No. 160

No. 2383

Trade No.	Size Inches	Description	Price per 100
43036	4½x3	Brush brass with ring	$28.00

No. 1551

43045	4½x3	Brush brass, with ring	28.00

No. 2385

43048	4¾x4¼	Brush brass, with ring	35.00

No. 109

43042	3½x2	Brush brass, with ring	16.00

No. 8113

43065	5 x2½	Brush brass, without ring	25.00

No. 2587

Extra Heavy Canopy

43066	6½x4	Brush brass, with ring	60.00

Above canopies furnished with any size slip ring. Always specify size desired.

No. 43

Rope Casing, ⅝ to 1¼-inch

Trade No.	Description	Price per Lb.
43055	Brush brass, 6-foot lengths....	$1.20
43056	Oxidized copper, 6-foot lengths.	1.40

No. 42

Plain Casing, ⅝ to 1¼-inch

43058	Brush brass, 6-foot lengths....	1.00
43059	Oxidized copper, 6-foot lengths.	1.20

No. 110

Plain Brazed Tubing, 18 Gauge

Sizes ⅜, 7/16, ½, 9/16 and ⅝-inch

43061	Brush brass, 6-foot lengths.....	1.00
43062	Oxidized copper, 6-foot lengths.	1.20

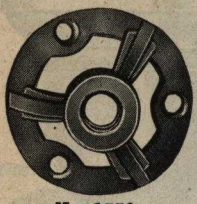
No. 160

Brass Cluster Stems, ⅜-inch Iron Pipe Size

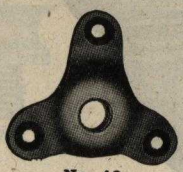
Fits any cluster.

Trade No.	Finish	Std. Pkg.	Price per Ft.
43063	Brush brass	24	$0.36

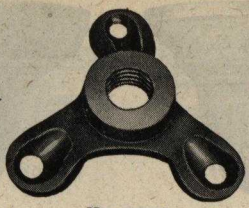
FARIES CROWFEET AND WALL PLATES



No. 1550



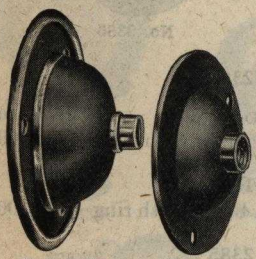
No. 48



No. 1004



No. 1753

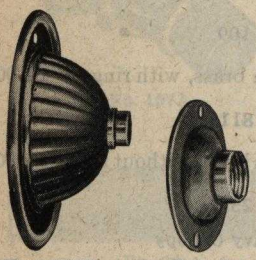


Nos. 2913 and 1684 — No. 1683

IRON CROWFEET

Trade No.	Mfrs. No.	Size, Tap Inches	Diameter Inches	Price per 100
43111	1550	⅛ Iron	2¾	$4.00
43112	1550A	¼ Iron	2¾	4.00
43113	1550B	⅜ Iron	2¾	4.00
43114	1549	⅛ Iron	2¼	3.00
43115	1549A	¼ Iron	2¼	3.00
43141	1549B	¼–27	2¼	3.00

No. 1549 is same as No. 1550.



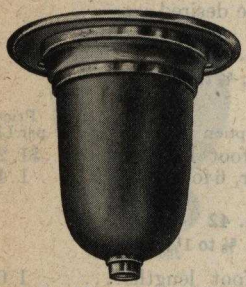
Nos. 2732 and 2731 — Nos. 95 and 95A

060175	48	⅛ Iron	3	3.00
060176	48A	¼ Iron	3	3.00
060177	48B	⅜ Iron	3	3.00
060173	1004	⅛ Iron	2¾	2.50
060174	1004A	¼ Iron	2¾	2.50
43142	1004B	¼–27	2¾	2.50

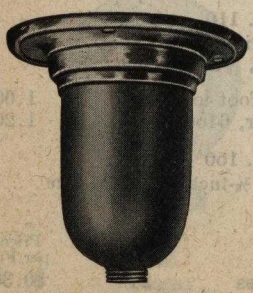
SOCKET HOOKS

⅛-inch Thread to Fit Regular Sockets

Trade No.	Mfrs. No.		Price Each
43116	1753	Dipped and lacquered	$0.15



Nos. 797 and 2725



Nos. 646 and 647

WALL PLATES

Trade No.	Mfrs. No.	Size Inches	Type	Finish	Price per 100
43117	2913	3½x1½	Male	Brush brass	$16.00
43119	1684	3½x1½	Female	Brush brass	16.00
43121	1683	2	Male	Brush brass	8.50
43123	1683	2	Female	Brush brass	8.50
43125	95A	1¼	Male	Brush brass	5.00
43127	95	1¼	Female	Brush brass	5.00
43129	2732	3½x1½	Male	Brush brass	17.00
43131	2731	3½x1½	Female	Brush brass	17.00
43133	797	3⅝x3¾	Male	Brush brass	35.00
43135	2725	3⅝x3¾	Female	Brush brass	35.00
43137	646	3⅝x3¾	Male	Brush brass	40.00
43139	647	3⅝x3¾	Female	Brush brass	40.00

Nos. 797, 2725, 646 and 647 are deep wall plates or ceiling lights, for electric pendant or bracket over gas outlet without insulating joint.

All of the above wall plates are tapped for ⅛-inch iron thread, except Nos. 646 and 647, which are for ⅜-inch iron thread.

MACALLEN ARMORED INSULATING JOINTS

INSULATING JOINTS FOR COMBINATION FIXTURES



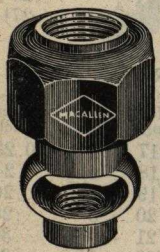
Combination Insulating Joint



Combination Insulating Joint Sectional View

Trade No.	Mfrs. No.	Size of Thread Inches	Price Each
106070	7539	1/8 x 1/8	$0.36
106071	7540	1/4 x 1/8	.36
106072	7500	1/4 x 1/4	.36
106073	7501	3/8 x 1/8	.36
106074	7502	3/8 x 1/4	.36
106075	7503	3/8 x 3/8	.36
106076	7504	1/2 x 1/8	.50
106077	7505	1/2 x 1/4	.50
106078	7506	1/2 x 3/8	.50
106079	7507	1/2 x 1/2	.50
106080	7508	3/4 x 3/8	1.25
106081	7509	3/4 x 1/2	1.25
106082	7510	3/4 x 3/4	1.25
106083	7511	1 x 1/2	1.75
106084	7512	1 x 3/4	1.75
106085	7513	1 x1	1.75
106086	7514	1 1/4 x1 1/4	3.75
106087	7515	1 1/2 x1 1/2	6.00
106088	7516	2 x2	9.00

ELECTROLIER OR SEPARABLE JOINTS



Electrolier Insulating Joint

Electrolier joints are fitted with solid male studs tapped standard iron pipe sizes.

106089	7601	3/8 x 1/8	.41
106090	7602	3/8 x 1/4	.41
106091	7603	3/8 x 3/8	.42 1/2
106092	7604	1/2 x 1/8	.56 1/2
106093	7605	1/2 x 1/4	.56 1/2
106094	7606	1/2 x 3/8	.57 1/2
106095	7607	1/2 x 1/2	.60
106096	7608	3/4 x 3/8	1.55
106097	7609	3/4 x 1/2	1.55
106098	7610	3/4 x 3/4	1.70
106099	7611	1 x 3/4	2.25
106100	7612	1 x1	2.30

BLANK INSULATING JOINTS FOR EXTERNALLY WIRED FIXTURES



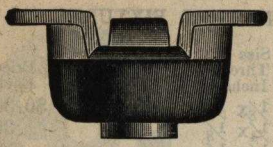
Blank Insulating Joint



Blank Insulating Joint Sectional View

106101	7739	1/8 x 1/8	.36
106102	7740	1/4 x 1/8	.36
106103	7700	1/4 x 1/4	.36
106104	7701	3/8 x 1/8	.36
106105	7702	3/8 x 1/4	.36
106106	7703	3/8 x 3/8	.36
106107	7704	1/2 x 1/8	.50
106108	7705	1/2 x 1/4	.50
106109	7706	1/2 x 3/8	.50
106110	7707	1/2 x 1/2	.50
106111	7708	3/4 x 3/8	1.25
106112	7709	3/4 x 1/2	1.25
106113	7710	3/4 x 3/4	1.25
106114	7711	1 x 1/2	1.75
106115	7712	1 x 3/4	1.75
106116	7713	1 x1	1.75
106117	7714	1 1/4 x1 1/4	3.75
106118	7715	1 1/2 x1 1/2	6.00
106119	7716	2 x2	9.00

MACALLEN INSULATING SPECIALTIES



No. 1401

INSULATED CROW FEET

Malleable Iron

Trade No.	Mfrs. No.	Size Inches	Price Each
041201	1401	1/8	$0.45
041202	1402	1/4	.45
041203	1403	3/8	.45
041204	1404	1/2	.60
041205	1405	3/4	1.25

INSULATED FIXTURE STUDS

Without Hickey, Malleable Iron

041206	1335	1/8	.37½
041207	1339	1/4	.37½
041208	1340	3/8	.40

With Hickey, Malleable Iron

041209	1329	1/8	.42½
041210	1330	1/4	.42½
041211	1334	3/8	.45

The above fixture studs fit standard outlet boxes.

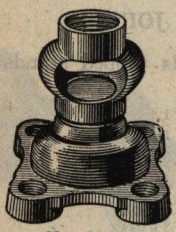


No. 1335

MALLEABLE IRON HICKEYS

Both Ends Tapped for Standard Pipe Sizes

Trade No.	Size Inches	Price Each	Trade No.	Size Inches	Price Each
041450	1/8x1/8	$0.05	041462	1/2x1/4	$0.09
041451	1/4x1/8	.05	041463	1/2x3/8	.09
041452	1/4x1/4	.05	041456	1/2x1/2	.10
041453	3/8x1/8	.06½	041464	3/4x1/2	.21
041454	3/8x1/4	.06½	041457	3/4x3/4	.25
041455	3/8x3/8	.07½	041465	1 x3/4	.27½
041461	1/2x1/8	.09	041458	1 x 1	.30



No. 1329

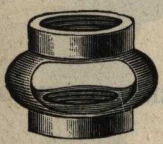
ROUND CANOPY INSULATORS

White

Trade No.	Mfrs. No.	Size Inches	Price Each	Trade No.	Mfrs. No.	Size Inches	Price Each
041212	W 9	2¼	$0.15	041242	W17	4¼	$0.23
041213	W10	2½	.16	041243	W18	4½	.24
041214	W11	2¾	.17	041244	W19	4¾	.26
041215	W12	3	.18	041245	W20	5	.28
041216	W13	3¼	.19	041246	W21	5¼	.30
041217	W14	3½	.20	041247	W22	5½	.32
041218	W15	3¾	.21	041248	W23	5¾	.34
041219	W16	4	.22	041249	W24	6	.36

Brown

041220	B 9	2¼	.10	041251	B17	4¼	.15
041221	B10	2½	.105	041252	B18	4½	.16
041222	B11	2¾	.11	041253	B19	4¾	.17
041223	B12	3	.115	041254	B20	5	.18
041224	B13	3¼	.12	041255	B21	5¼	.20
041225	B14	3½	.125	041256	B22	5½	.22
041226	B15	3¾	.13	041257	B23	5¾	.24
041227	B16	4	.14	041258	B24	6	.26



Hickey

SQUARE CANOPY INSULATORS

White

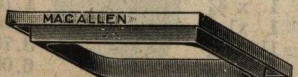
041228	SW12	3	.25	041259	SW19	4¾	.46
041229	SW13	3¼	.28	041260	SW20	5	.49
041230	SW14	3½	.31	041261	SW21	5¼	.53
041231	SW15	3¾	.34	041262	SW22	5½	.57
041232	SW16	4	.37	041263	SW23	5¾	.61
041233	SW17	4¼	.40	041264	SW24	6	.65
041234	SW18	4½	.43	....	....	....	....

Brown

041235	SB12	3	.20	041265	SB19	4¾	.34
041236	SB13	3¼	.22	041266	SB20	5	.36
041237	SB14	3½	.24	041267	SB21	5¼	.40
041238	SB15	3¾	.26	041268	SB22	5½	.44
041239	SB16	4	.28	041269	SB23	5¾	.48
041240	SB17	4¼	.30	041270	SB24	6	.52
041241	SB18	4½	.32	....	....	....	....



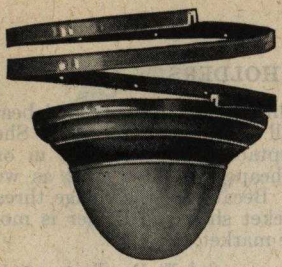
Round Canopy Insulator



Square Canopy Insulator

Prices on larger sizes quoted on application.

CANOPY INSULATORS AND HICKEYS



Canopy Insulator

E. E. B. CANOPY INSULATORS

Included in the list of approved electrical fittings, issued by the Underwriters' National Electric Association.

E. E. B. 4-inch curls canopy insulation are adapted to all sizes of round, square and oval canopies.

Straight strips for square canopies.

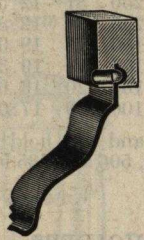
Stock slotted for 24 and 22 B. & S. gauge metal; 18 and 20 gauge are special.

4-inch curls and straight strips measure 64 to 66 inches.

One 4-inch curl contains sufficient insulation for four 5-inch, three 6-inch, or two 10-inch shells.

Short ends can be used to economize.

Securely fastened to canopy with a special hand punch, without the use of brads or rivets, which ground in many instances.



Showing Section of Insulator Attached to Canopy

Trade No.	Description	Price per 100
41089	4-inch curls	$40.00
41090	10-inch curls	40.00
41091	Straight 64 to 66-inch strips	39.00
41092	Straight 32 to 33-inch strips	19.50
41093	Hand punch, price each	2.00
41094	Extra points for pliers, price each	.10

KNU CANOPY INSULATORS

Approved by National Board of Fire Underwriters. Can be applied to any canopy, of any diameter, without the use of special tools, by any ordinary mechanic, and stays put. With a little practice 60 to 100 canopies can be insulated in an hour.

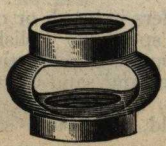


Knu Canopy Insulator

Trade No.	Description	Price per Roll
52099	In rolls 11 to 12 feet	$0.50

MALLEABLE IRON HICKEYS

Both Ends Tapped for Standard Pipe Sizes



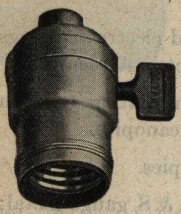
Hickey

Trade No.	Size Inches	Price Each	Trade No.	Size Inches	Price Each
041450	1/8 x 1/8	$0.05	041462	1/2 x 1/4	$0.09
041451	1/4 x 1/8	.05	041463	1/2 x 3/8	.09
041452	1/4 x 1/4	.05	041456	1/2 x 1/2	.10
041453	3/8 x 1/8	.06 1/2	041464	3/4 x 1/2	.21
041454	3/8 x 1/4	.06 1/2	041457	3/4 x 3/4	.25
041455	3/8 x 3/8	.07 1/2	041465	1 x 3/4	.27 1/2
041461	1/2 x 1/8	.09	041458	1 x 1	.30

BRYANT-PERKINS SHADE HOLDERS

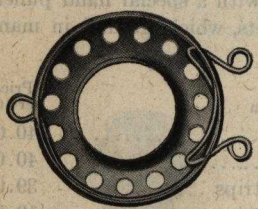
NATIONAL ELECTRICAL CODE STANDARD

SCHEDULE D

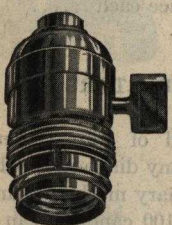




Uno Screw Holder being Attached to Socket



Uno Spring Holder No. 502

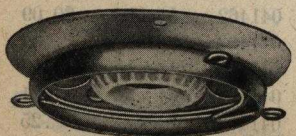




No. 440 Shade Holder being Attached to Socket



Emergency Holder No. 443



Receptacle Holder No. 522

UNO SHADE HOLDERS

Uno Shade Holders attach directly to the threaded bead, which is a standard feature of all Bryant-Perkins Brass Shell Medium Base Sockets and Receptacles. Being made in one piece, Uno Shade Holders are cheapest in first cost, as well as in cost of attaching to socket. Because of the wedge thread in the holder, the fit between socket shell and holder is more rigid than any other holder on the market.

Trade No.	Mfrs. No.	Size Inches	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price, per 100 Finished	Unfinished
121376	501	2¼	Ventilated..	50	500	35	$6.25	$5.20
121377	532	2¼	Solid.....	50	500	35	6.60	5.55
121378	502	2¼	Ventilated..	50	250	20	8.70	7.65
121379	533	2¼	Solid.....	50	250	20	9.05	8.00
121380	503	H	Ventilated..	25	250	30	9.40	8.85
121381	504	H	Ventilated..	25	100	15	11.85	11.30
121382	505	3¼	Ventilated..	25	250	37	12.50	11.10
121383	534	3¼	Solid.....	25	250	37	12.85	11.45
121384	506	3¼	Ventilated..	25	100	18	19.00	17.50
121385	535	3¼	Solid.....	25	100	18	19.35	17.85
121386	511	4	Ventilated..	10	100	20	16.65	15.25
121387	536	4	Solid.....	10	100	20	17.00	15.60

Nos. 501, 532, 503, 505, 534, 511 and 536 hold shade by means of three screws; Nos. 502, 533, 504, 506 and 535 hold shade by means of spring grip.

NEW WRINKLE SHADE HOLDERS

Designed to be used for attaching to sockets that have not the threaded bead. The method of attaching to the socket is simple yet extremely secure. All New Wrinkle Holders have the spring grip method of holding the shade.

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100 Finished
121388	440	2¼-inch, ventilated.....	50	200	20	$18.00
121389	441	Form H, ventilated.....	25	100	15	24.00
121390	442	3¼-inch, ventilated.....	25	100	15	30.00

NEW WRINKLE EMERGENCY SHADE HOLDERS

Designed especially for use in connection with porcelain sockets and receptacles. The method of attachment is by means of a screw shell, thoroughly insulated from the holder itself, which threads onto the outside of the screw shell of the lamp socket.

121391	443	2¼-inch, solid.....	25	100	8	20.00
121392	444	Form H, ventilated.....	10	50	9	25.00
121393	445	3¼-inch, ventilated.....	10	50	8	30.00

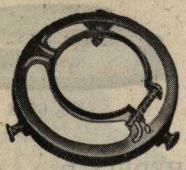
NEW WRINKLE RECEPTACLE SHADE HOLDERS

For use with removable ring porcelain receptacles.

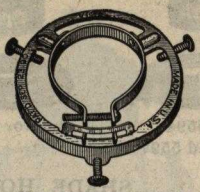
121394	521	2¼-inch, ventilated.....	25	100	8	15.00
121395	522	3¼-inch, ventilated.....	25	50	6	20.00

The standard finish on shade holders is brush or old brass, which will be shipped when no finish is specified. Polished brass and rich gilt, when specified, will be shipped without extra charge. For all other finishes except gold, silver and sand-blast, add to list price per 100, $1.75 for 2¼-inch, Form H and 3¼-inch, and $3.50 for 4-inch. Prices for gold, silver and sand-blast finishes quoted upon application.

SHADE HOLDERS



Nos. 1264-1725



Nos. 9843 and 9993



No. 119



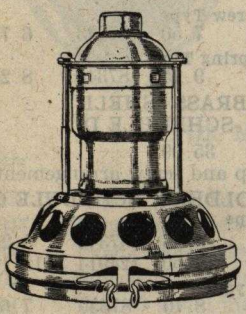
Form H

UNIVERSAL SHADE HOLDERS

For Brass Shell Sockets

Trade No.	Mfrs. No.	Size, Holder Inches	Gross, per Std. Pkg.	Wt. Lbs. per Gross	Price per Gross
039674	1264	2¼	1	7	$ 7.00
039675	1265	3¼	1	9	13.00
039676	1725	4	1	15	17.00

Standard finish, brush brass.



Form A

ACME SHADE HOLDERS

For Brass Shell Sockets

039677	9843	2¼	1	4½	8.40
039678	9993	3¼	1	8¼	21.60

Standard finish, brush brass.

P. & S. SHADE HOLDERS

For Porcelain Sockets and Receptacles

Trade No.	Mfrs. No.	Size, Holder Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price per 100
039679	119	2¼	24	288	25	$ 8.50
039680	1190	3¼	12	144	16	16.25

Standard finish on P. & S. shade holder is brush brass. Polished brass supplied at the same price. Add $3.50 per 100 for all other finishes.

IVANHOE-REGENT SHADE HOLDERS

Trade No.	Form	Size, Holder Inches	Std. Pkg.	Price per 100
040662	H	2¼	30	$25.00
040663	A	3¼	12	60.00

Above prices are for polished or brush brass finish. Oxidized copper or black, add 3 cents each, net; all other finishes, 5 cents each, net.



No. 2450

BENJAMIN SHADE HOLDERS

For Benjamin Clusters, Ventilated

Held in position by insulating socket ring.

Trade No.	Mfrs. No.	Size, Holder Inches	Form Holder	Std. Pkg.	Wt. Lbs.	Price Each
039687	2450	2¼	O	100	3	$0.15



No. 2475

To Slip Fixture Stems, Ventilated

Slips brass stems and fastens by set screw.

Trade No.	Mfrs. No.	Size, Holder Inches	Size, Slip Inches	Std. Pkg.	Wt. Lbs.	Price Each
039691	2470	2¼	⅝	100	5	$0.25
039692	2475	2¼	¾	100	5	.25



No. 2490

To Slip Fixture Stems, Unventilated

Slips brass stems and takes 3¼-inch glassware.

039693	2490	3¼	⅝	100	12	.35
039694	2495	3¼	¾	100	12	.35

To Slip Iron Pipe Stem, Unventilated

Slips ⅜-inch iron pipe fixture stem.

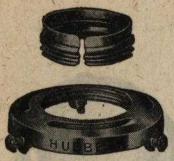
27936	2496	4	11/16	100	20	.50

Standard finish on shade holder No. 2496 is black; on all others, brush brass.



No. 2496

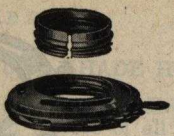
HUBBELL SHADE HOLDERS AND ATTACHMENTS



Nos. 5339, 5340 and 5595



Nos. 5594, 5596 and 5597



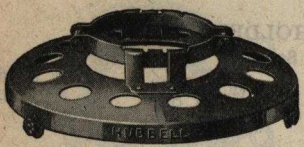
No. 5528



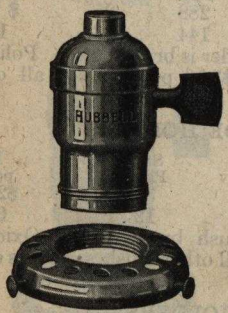
No. 6244



No. 6170



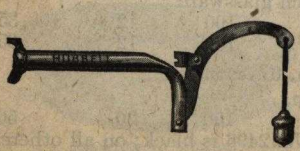
No. 6276



No. 6269



No. 5828



No. 5880

SHADE HOLDERS SCHEDULE D

Three-screw Type

Mfrs. No.	Size of Holder Inches	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Finished Trade No.	Finished Price per 100	Unfinished Trade No.	Unfinished Price per 100
5339	2¼	50	500	40	040654	$ 6.25	87333	$ 5.20
5340	3¼	25	250	27	040655	14.85	87334	13.05
5595	4	25	100	20	040656	20.55	87335	18.35
5594	2¼	50	500	42	040657	7.70	87336	6.50
5596	3¼	25	250	30	040658	15.90	87337	14.20
5597	4	25	100	20	040659	23.45	87338	21.65

No. D-1675 separate split rings, $4.00 per 100; Std. Pkg., 500.

Locking Spring Type

5528	2¼	50	250	17	040660	8.70	87339	7.65

Deep Skirted—Three-screw Type

6244	2¼	50	500	40	040674	7.50	87343	6.75

Deep Skirted—Locking Spring Type

6170	2¼	50	250	20	87345	9.25	87346	8.20

SHADE HOLDERS FOR BRASS SHELL MOGUL BASE SOCKETS, SCHEDULE D

6276	4	20	100	20	040675	35.00	.....	.....

This holder is attached by a clamp and screw arrangement.

DIRECT THREADING SHADE HOLDERS, SCHEDULE G

Three-screw Type

6269	2¼	50	500	30	87347	6.25	87349	5.20
6271	3¼	25	250	37	124913	12.50	124914	11.10

Locking Spring Type

6275	2¼	50	250	20	87348	8.70	87350	7.65

Polished brass, brush brass and rich gilt are standard finishes. Goods shipped brush brass unless otherwise specified.

All other finishes, excepting gold and silver, $1.75 per 100 on 2¼ and 3¼-inch holders; $3.50 per 100 on 4-inch holders and holders for Mogul base sockets; $1.75 per 100 for direct threading shade holders.

ATTACHMENTS FOR PULL SOCKETS SCHEDULE F

For Brass Shell Sockets

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
040664	5828	For 8, 10 and 12-inch reflectors.	25	250	21	$0.25
040666	5829	For 14-inch reflector...	25	250	22	.25
040668	5953	For 16-inch reflector...	25	100	24	.30
040669	5954	For 18 and 20-inch reflectors...	25	100	24	.30
073724	6317	For 22-inch reflector ...	25	100	25	.40

For Porcelain Sockets

076727	5957	For 8, 10 and 12-inch reflectors..	25	250	21	.25
076728	5958	For 14-inch reflector ..	25	250	22	.25
076729	5959	For 16-inch reflector ..	25	100	24	.30
124911	5960	For 18 and 20-inch reflectors...	25	100	24	.30
124912	5961	For 22-inch reflector...	25	100	25	.40

ECONOMY EXTENDERS, SCHEDULE F

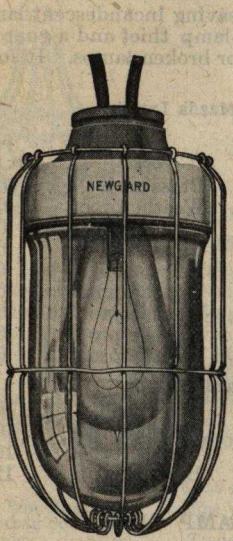
These attachments take the place of regular chain guide and are attached direct to socket interior. Adapted for use with Hubbell Sockets only and reflectors up to 10 in. in diam.

040667	5880	For standard sockets ..	25	250	18	.30
076725	6306	For electrolier sockets..	25	250	18	.30

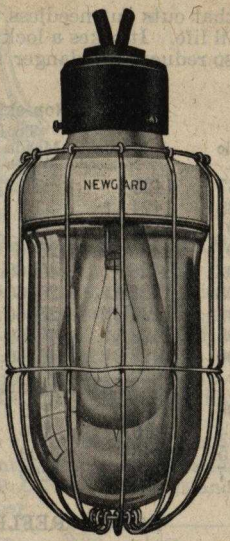
Above prices cover Attachments and Extenders in polished brass, and brush brass finishes. Brush brass furnished where no finish is specified. For special finishes add 5 cents to list price.

NEWGARD WEATHERPROOF RECEPTACLES

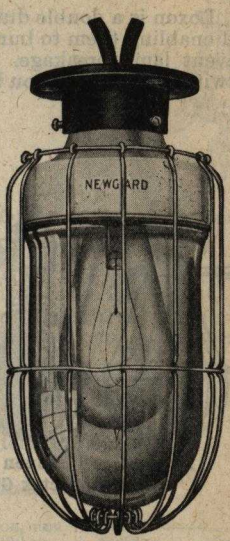
NATIONAL ELECTRICAL CODE STANDARD



Type A



Type B



Type C

FOR MAZDA LAMPS, 60 WATTS AND SMALLER

Trade No.	Description	Std. Pkg.	Wt. Lbs. Std.Pkg.	Price per Doz.
4337	Type A complete except guard	60	110	$15.00
4347	Type B complete except guard	60	140	18.00
4349	Type C complete except guard	60	140	19.00
19043	Porcelain caps with receptacle and lead wires only	60	...	6.00
19044	Type B metal fitting	60	...	3.00
19045	Type C metal fitting	60	...	4.00
19041	Clear glass globes	60	...	8.00
19042	Natural red globes	60	...	16.00
58762	Natural green globes	60	...	16.00
4351	Wire guards	60	...	8.00
19034	Rubber gaskets	60	...	1.00

FOR MAZDA LAMPS, 100 WATTS AND SMALLER

58751	Type A complete except guard	30	100	30.00
58752	Type B complete except guard	30	120	33.00
58760	Type C complete except guard	30	120	34.00
58754	Porcelain caps with receptacle and lead wires only	30	...	12.00
58756	Type B metal fitting	60	...	3.00
58757	Type C metal fitting	60	...	4.00
58755	Clear glass globes	30	...	16.00
58759	Natural red globes	30	...	36.00
58763	Natural green globes	30	...	36.00
58753	Wire guards	30	...	12.00
58758	Rubber gaskets	30	...	2.00

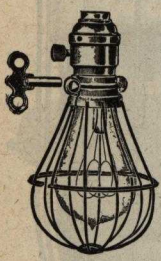
CONDUCTING LEAD WIRES

Receptacles are regularly furnished with 8-inch wires. For extra length, add five cents per foot per conductor.

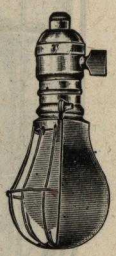
LAMP GUARDS

LOXON LAMP GUARDS

Loxon is a double duty device that cuts out needless waste by saving incandescent lamps and enabling them to burn their full life. It takes a lock to stop a lamp thief and a guard to prevent lamp breakage. Loxon also reduces fire danger from hot or broken lamps. It locks on with a key which you hold.



Loxon



Loxon Reflector Guard

Trade No.	Mfrs. No.	To Fit Lamp Mazda Watts	Volts	Style Socket	Price per Doz.
		To Fit Non-skirted Base Mazda Lamps			
43387	1423	15	....	Brass shell	$6.00
43388	1424A*	15	....	Weatherproof	6.00
43391	1424B†	15	....	Weatherproof	6.00
43301	1425	25–60	110	Brass shell	6.00
43302	1426	40–60	220	Brass shell	6.30
43303	1427A*	25–60	110	Weatherproof	6.00
43304	1427B†	25–60	110	Weatherproof	6.00
43305	1428A*	40–60	220	Weatherproof	6.30
43306	1428B†	40–60	220	Weatherproof	6.30
		To Fit Skirted Base Mazda Lamps			
43308	2444	100	....	Brass shell	10.00
43314	2446A*	100	....	Weatherproof	10.00
43315	2446B†	100	....	Weatherproof	10.00
43317	2447	200	....	Brass shell	12.50

LOXON REFLECTOR LAMP GUARDS

43311	1442	15	....	Brass shell	8.50
43312	1443	40	....	Brass shell	9.00
43313	1444	40	....	Weatherproof	9.00

*All numbers followed by A fit the following sockets: Bryant, Nos. 9366, 9448 and 9395 porcelain; No. 43310 mica. Paiste, No. 9366 porcelain. General Electric, No. 9366 porcelain. Freeman, Nos. 132, 155 and 320 porcelain. P & S, Nos. 217 and 116 porcelain.

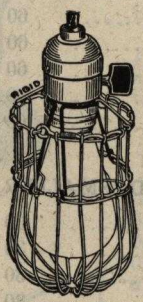
†All numbers followed by B fit the following sockets: Bryant, No. 60666 rubber. Paiste, No. 60666 rubber. Freeman, No. 160 porcelain. H. W. J. M., No. 60666 rubber, No. 1149 mica or composition.

Loxon guards are made to fit Crouse-Hinds Condulet Receptacles when so specified.

One key with every dozen guards. Extra keys, each, 5 cents.



Style A



Style H

STYLE A LAMP GUARDS

Trade No.	Mfrs. No.	To Fit Lamp Carbon C. P.	Mazda Watts	Style Socket	Price per Doz.
071737	1441	16	15	Key	$2.80

STYLE H LAMP GUARDS

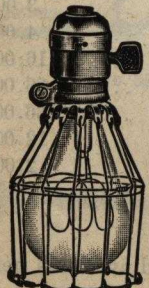
021738	1431	16	40	Brass shell	3.40
021739	1433	32	60	Brass shell	3.70
021740	2532	16	40	Weatherproof	3.40
021741	2533	32	60	Weatherproof	3.70

STYLE O LAMP GUARDS

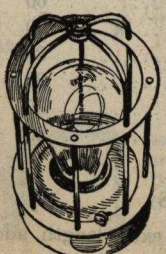
021743	1429	16	40	Brass shell	4.00
021744	1430	32	60	Brass shell	4.40
021745	1432	16	40	Weatherproof	4.00
021746	1434	32	60	Weatherproof	4.40

WALL LAMP GUARDS

021747	1436	16	40	Style A	14.40
43386	1438	16	40	Style A-1	19.60
021748	1437	16	40	Style B	21.60
43316	1439	16	40	Style C	14.40



Style O

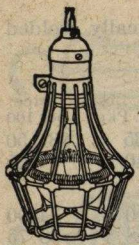


Wall Guard

Style A fits 3-inch round outlet boxes; Style A-1 fits 4-inch round outlet boxes; Style B has removable base ring.

Style C is fitted with outlet box cover and fits 3 and 4-inch boxes.

LAMP GUARDS



For Brass Sockets



For W. P. Sockets





Showing Method of Locking in Lamp

MATTHEWS HOLDFAST LAMP GUARDS

The rigid construction of the Matthews Holdfast Lamp Guard, the fact that it is permanently clamped to the socket and the spiral spring cushion in the center, make it a perfect protection against the breakage of incandescent lamps. The trap which is clamped across the bottom opening effectually prevents the unauthorized removal of lamps from the sockets. The guard is locked to the socket by bending the set screw.

The Matthews Holdfast Lamp Guard will not permit the hot lamp to get closer than 1 inch to any inflammable material, and the guard does not have to be removed from the socket to replace the lamp.

The only guard approved by all insurance companies and the underwriters.

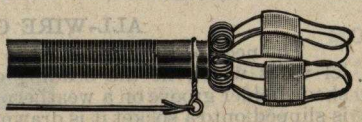
List Quantity Prices and Data for Ordering

For 6, 8, 10 and 16 C. P. Carbon and 15, 25 and 40-watt Mazda Lamps

For Brass Shell Sockets		For Weatherproof Sockets		Size	Price, per 100				
Trade No.	Mfrs. No.	Trade No.	Mfrs. No.	Wire B. W. G.	Less than 50	50 to 100	100 to 500	500 to 1000	1000 or more
048390	117B	048395	117WP	17	$48.00	$43.50	$38.50	$35.00	$32.00
048391	114B	048396	114WP	14	45.50	50.50	45.50	41.00	39.50
048392	112B	048397	112WP	12	62.50	49.00	53.00	48.50	46.00
		For 32 C. P. Carbon and 60-watt Mazda Lamps							
048393	317B	048398	317WP	17	45.50	50.50	45.50	41.00	39.50
048394	314B	048399	314WP	14	60.00	54.00	48.00	43.50	41.00
		For 50 C. P. Carbon and 75 and 100-watt Type C Pear Shape Lamps							
048394A	514B	048399A	514WP	14	62.50	59.00	53.00	48.50	46.00
		For 200-watt Type C Pear Shape Mazda Lamps and 100-watt Old Style Straight Side Mazda Lamps							
27110	714B	27111	714WP	14	133.50	121.00	109.50	99.00	94.50
		For 150-watt Old Style Straight Side Mazda Lamps							
27112	814B	27113	814WP	14	138.00	126.50	115.00	106.00	101.50
		For 300, 400 and 500-watt Type C Pear Shape Mazda Lamps with Brass or Weatherproof Mogul Sockets							
100834	914B	100835	914WP	14	156.50	147.50	138.00	126.50	115.00
		For 750 and 1000-watt Type C Pear Shape Mazda Lamps with Brass or Weatherproof Mogul Sockets							
100836	1014B	100837	1014WP	14	177.00	168.00	159.00	147.50	136.00
		Extra Trap Locks for Renewal Purposes							
048400	....	.....	.....	16	4.80	4.60	3.70	3.20	3.00

All guards are furnished with a trap lock to prevent the unauthorized removal of lamps. Collars of guards for brass shell sockets are 1¼ inches for weatherproof sockets 1½ inches.

MATTHEWS EASY LAMP CHANGERS



Trade No.	Mfrs. No.	Description	List Price, Each — Less than 6	6 to 11	12 or More
27107	1	For 2 and 4 c. p. lamps, 1½ to 2½ in. greatest diam...	$6.00	$5.70	$5.20
27108	2	For 6 to 16 c. p. and 15 to 60 watts Mazda Lamps ...	6.00	5.70	5.20
27109	3	For 32 to 50 c. p. and 100 to 150 watt Mazda Lamps.. and odd shapes up to 5 inches in diameter.....	7.00	6.70	6.20

We do not furnish poles. These can be obtained from any house furnishing store. Ask for curtain pole 1 inch in diameter.

HUBBELL LAMP GUARDS



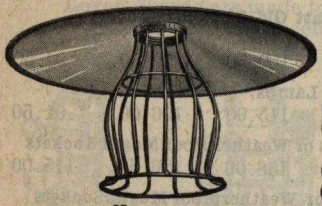
No. 5485



No. 5573



No. 5766



No. 5534



No. 5685



No. 5691

Hubbell Lamp Guards are the only electrically welded guards. No solder or tie wires are used.

WITH OPEN BOTTOM

Trade No.	Mfrs. No.	Size Watts	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
047851	5485	40, 60	150	35	$31.50
047852	5487	75	150	40	34.25

WITH CLOSED BOTTOM

047853	5573	40, 60	150	40	34.00
047854	5578	75	150	48	38.75
076674	5766	40, 60	150	58	48.00

No. 5766 has half reflector attached, as illustrated.

TUBULAR

The lamp is inserted into closed bottom and tubular guards by unscrewing the guard from the metal top.

047855	5634	25	60	20	34.00

All the above guards fasten rigidly to the socket shell by means of the clamping ring and do not require a shade holder.

FOR USE WITH HUBBELL SHADES

The threaded neck of these guards is made sufficiently large to engage the threaded neck of shade.

		Open Bottom			
047856	5534	40, 60	150	35	31.50
047857	5536	75	150	40	34.25
		Closed Bottom			
047858	5632	40, 60	150	35	34.00
047859	5633	75	150	40	38.75

Above prices do not include shades.

LOCKING GUARDS

Locking guards fasten directly to brass shell of socket without shade holder or clamping ring. They grip the socket securely and guard the lamp against breakage and theft.

		For Standard Sockets			
047860	5685	40, 60	150	53	43.75
047861	5635	75	150	75	55.00
076677	5762	100, 200	100	51	72.50
		For Porcelain Weatherproof Sockets			
076675	5730	40, 60	150	53	43.75
076676	5731	75	150	75	55.00
029112	5820	100, 200	100	51	72.50
		For Molded Weatherproof Sockets No. 60666			
029113	5810	40, 60	150	53	43.75
029114	5818	75	150	75	55.00

LOCKING GUARDS WITH HALF REFLECTORS

		For Standard Sockets			
076678	5764	40, 60	150	63	58.25
		For Weatherproof Sockets			
076679	5765	40, 60	150	63	58.25

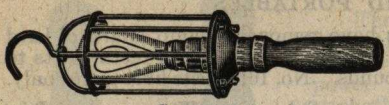
One key is furnished with each dozen guards. Extra keys, 5 cents each, net.

ALL-WIRE GUARDS

The neck of the all-wire lamp guard consists of two parallel wires which fit the beading on a brass shell socket or the shade holder groove on a weatherproof socket. After the guard is slipped onto a socket it is drawn up tight by means of a screw on the side of the guard. By means of this screw the guard can be drawn up until it is absolutely rigid.

		For Brass Shell Sockets			
047862	5691	40, 60	150	35	29.50
047863	5692	75	150	41	32.25
		For Weatherproof Sockets			
047864	5693	40, 60	150	35	29.50
047865	5694	75	150	41	32.25

PORTABLE LAMP GUARDS

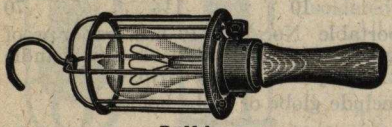


Crescent

CRESCENT

A very strong and convenient portable, made of Bessemer steel, copper-plated. Takes any 3/8-inch standard brass socket, but is furnished without socket.

Trade No.	Mfrs. No.	To Fit Lamp Watts	Style Socket	Price Each
021751	4645	40	Keyless	$2.50
021752	4676	60	Keyless	2.50

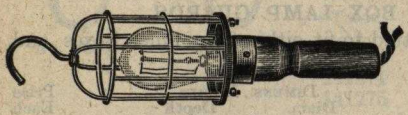


Bulldog

BULLDOG

Furnished with key or keyless socket, securely embedded in handle, giving a firm, rigid base.

021749	4675	60	Key	3.50
021750	2590	60	Keyless	3.50

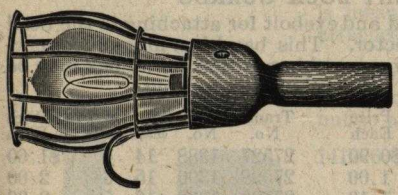


Dreadnaught

DREADNAUGHT

A very strong portable guard made of Bessemer steel, built to withstand hard usage. Has a porcelain keyless socket fitted with spring contact firmly embedded in handle. Metal part copper-plated finish.

59937	4000	60	Keyless	3.50



National

NATIONAL

A solid one-piece portable of unusual strength. The convenient open end allows easy lamp change. Made of steel heavily tinned and has porcelain keyless socket.

021755	1451	40	Weatherproof	2.50
021756	1452	60	Weatherproof	2.50

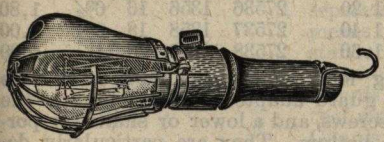


Safety Vapor-proof

SAFETY VAPOR-PROOF

Designed to meet the requirements of the garage or wherever gases or inflammable materials may be used. Has heavy steel frame, strong handle, handy grip hook and vapor-proof receptacle. Heavy tinned finish.

59938	3001	25	Vapor-proof	5.00

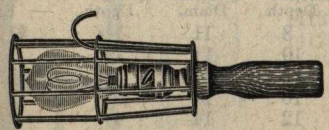


Cable Rack

CABLE RACK

A very handsome portable with black enamel handle. The cage portion is half guard and half reflector so as to direct the reflected light where it is needed. Handle is equipped with a hook. Designed principally for use around telephone switchboards. Furnished with key or keyless socket securely embedded in handle giving a firm and rigid base. Cage and reflector portion heavily tinned finish. Takes a 60-watt, 110-volt Mazda lamp.

59939	2000	60	Key	2.80
59940	2001	60	Keyless	2.80

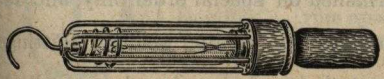


Monitor

MONITOR

A low priced guard furnished without socket.

41853	1453	40	.....	1.70
41854	1454	60	.....	1.80



Crescent Tubular

CRESCENT TUBULAR

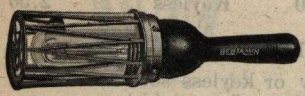
A slender portable for use behind switchboard, examining boilers, among machine parts, for garages, automobiles, and places where space is limited. Extreme diameter, only 2 inches. Length with hook, 13 inches.

59941	2598	25	Keyless	3.50

BENJAMIN SPECIALTIES



No. 160P



No. 261VP

HAND PORTABLES

Fibre hand portables have removable lamp guard of hard fiber and fiber half shade. There are no exposed metal parts to cause short circuits or grounds. No. 161 P lists fibre guard only.

Trade No.	Mfrs. No.	Std. Pkg.	Wt. Lbs.	Price Each
27546	160 P	10	18	$2.00
120461	161 P	10	1½	.70

Vapor-proof hand portable No. 261VP has vapor-proof globe, reflector, metal guard with hinged hook and handle containing receptacle with Benjamin Lamp Grip.

No. 261 P does not include globe or globe holder.

120463	261 V P	10	17	2.70
120464	261 P	10	6½	2.00



No. 1400

OUTLET BOX LAMP GUARDS

Guard bases are slotted to fit either 3 or 4-inch boxes and will take 60-watt lamps.

Trade No.	Mfrs. No.	Dimens., Inches Diam.	Depth	Price Each
120465	1400	4	5¾	$0.80

PENDENT LOCK GUARDS

Have a grooved band and eyebolt for attaching to the bead of an enameled steel reflector. This band has hinged connection and catch for holding guard in position. Padlock may be passed through the rim and eyebolt for locking.

Trade No.	Mfrs. No.	Dimens., Ins. Diam.	Depth	Price Each	Trade No.	Mfrs. No.	Dimens., Ins. Diam.	Depth	Price Each
120466	1377	6	1¼	$0.90	27527	1388	14	4	$1.60
27522	1378	7	1¼	1.00	27528	1390	15	6¾	2.00
27523	1380	8	1½	1.10	27529	1392	16	5	2.30
27524	1382	9	1¾	1.20	27530	1394	18	5¾	2.80
120467	1383	10	2¾	1.30	27531	1396	20	7	3.60
27525	1384	11	1¾	1.40	27532	1398	22	7½	4.20
27526	1386	12	2¾	1.50	....	....	..	...	....



No. 1386

CEILING LOCK GUARDS

Have hinge adapted for attaching to the ceiling by two wood screws, and a fastening plate opposite the hinge, likewise attached by screws. The plate is designed to receive a loop on the guard. Padlock may be used if desired.

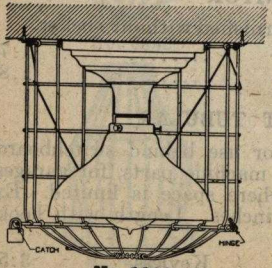
27533	†1350	10	7	1.20	27536	1356	16	6¾	1.80
27534	†1352	12	8	1.40	27537	1358	18	8¾	3.00
27535	†1354	14	9	1.60	27538	1360	20	11	4.00

The two-piece ceiling lock guards Nos. 1362–1374 have strong cylindrical upper guard adapted for attaching to the ceiling by three or more screws, and a lower or shallower portion hinged to it at the bottom. They are particularly designed for single unit ceiling fixtures.



No. 1356

Trade No.	Mfrs. No.	Cylindrical Guard, Inches Diam.	Depth	Hinged Guard, Inches Diam.	Depth	Price Each
27539	†1362	11	8	11	1¾	$1.60
27540	†1364	11	10	11	1¾	1.70
27541	†1366	11	12	11	1¾	1.80
27542	†1368	14	10	14	4	2.20
27543	†1370	14	12	14	4	2.50
27544	†1372	18	12	18	5¾	4.20
27545	†1374	18	16	18	5¾	4.80



No. 1364

†These guards are furnished on special order only, and require two weeks' notice.

Wire parts are of strong steel, tinned after welding. Fittings are galvanized.

Prices for all of above lock guards are less brass padlock shown. For the latter with two keys, add 50 cents to list.

KEYSTONE LAMP GUARDS



No. 12504



No. 18996

PORTABLE LAMP GUARDS

These guards are all of the same general construction but differ in design to meet individual preferences. They are exceptionally strong, being designed for use in pits, factories, garages, power houses, and mines, or wherever rough usage makes strength in the lamp guards of first consideration. The cages will easily sustain an average man's weight. The handles are of kiln-dried maple. The end hooks are riveted, clamped and soldered to the guards.

All types are designed for the insulation of 600 volts and are approved by the National Board of Underwriters.

STANDARD TYPE

To remove the cage of the Standard Type, the use of a screw driver is necessary to loosen two screws at the base of the cage.

Trade No.	Mfrs. No.	For Lamps C. P.	Length Inches	Weight Ounces	Price Each
141273	12504	16	13	22	$2.00
141274	32146	32	13	..	2.40
141275	12505	Special lamp guard socket			.35

ESSCO TYPES

In the Essco Types the cages are non-separable, by which is meant that the handle, holder and cage are permanently attached.

Closed End Style

In this style the end piece with hook is hinged to the cage by means of a rivet, the other end being attached with a thumb nut to allow replacement of lamp.

141276	18996	..	13	25	2.00

Open End Style

The open end style allows unhindered replacement of the lamp and is equipped with a side hook instead of the end hook.

141277	18997	..	10	20	1.70



No. 18997

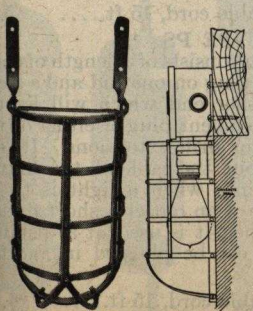


No. 18943

CONDUIT BOX TYPE LAMP GUARDS

Designed for attaching directly to standard iron or steel conduit boxes where the lamp sockets are placed inside the boxes. They are adapted for exposed or concealed conduit work, and particularly for use where the boxes are set flush with the concrete in car or locomotive pit construction. Supplied with separate base rings which are drilled for attaching to box by means of the screws which hold the regular box cover. The standard ring is 2¾ inches between centers of screw holes, and is suitable for all standard 3¼-inch round or octagon boxes. Guards are attached to base rings by screw bayonet joints so that renewals may be made without disturbing base or box cover. Guards project 5¾ inches over all; depth inside, 5⅛ inches; diameter inside, 2⅞ inches. Prices do not include lamps or sockets.

Trade No.	Mfrs. No.	Description	Wt. Oz.	Price Each
141278	18943	Guard with base ring.....	12	$1.50
141279	18944	Guard only.....	..	1.25
141280	18945	Base ring only.....	..	.25



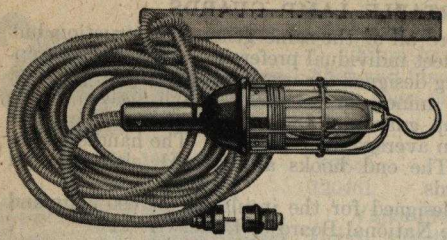
No. 44042

WALL TYPE LAMP GUARDS

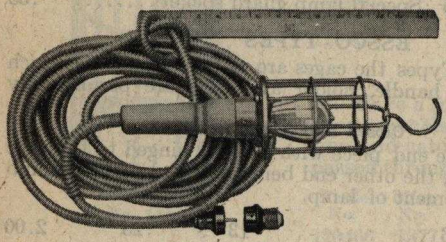
Designed for protecting lamps in mines, tunnels, subways, locomotive or car pits, as well as for other general uses where a wall type is required. Lamps may be replaced by loosening the two screws that hold the two bottom ribs and spreading the ribs apart. Supplied in black enamel finish, and are 12 inches long over all, 5 inches wide and 4 inches deep. Prices do not include sockets, lamps or other attachments.

141281	44042	Wall type guard only.....	..	.70

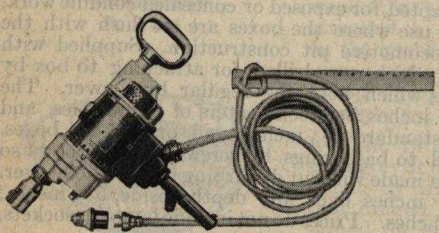
STEELITE PORTABLE FIXTURES



Type PVG2



Type PPG



Type PREF
Attached to Electric Drill



Type PS

Steelite Fixtures have been designed to overcome the difficulties encountered in extension or portable lighting.

In Steelite Fixtures the cable is steel armored. very flexible and strong, it will not kink or break, the steel armor stands the wear caused by dragging the cable over floor and rough edges.

The cable at the handle end of the guard is re-enforced with an additional armor which absorbs the strain at this point. The guards have large wooden handles and strong steel wire guards, which protect the lamp from injury. The plugs are made of composition; the cap armored with brass, is screwed and cemented to a bushing which is sweated to the armor. The plugs are compounded. Each fixture is assembled complete ready to use and bears the Underwriters label.

TYPE PVG2

The guard is vapor-proof and has a glass globe which entirely surrounds and keeps the lamp in an air tight space so that in case the fixture is used where there are explosive gases, it will be impossible for the gas to come in contact with the live part of the fixture. This fixture is for use in gas plants, oil refineries, paint and varnish factories, garages, arsenals, powder factories or other places where they have explosive or highly inflammable materials.

Trade No.	Description	Price Each
65189	Length portable cord, 25 ft.....	$12.00

TYPE PPG

Type PPG is of the same construction as Type PVG2 with the exception that the guard is of the open type. This fixture is for use in factories of various kinds with the exception of those enumerated above.

65190 Length portable cord, 25 ft..... 11.00

TYPE PREF

Type PREF Drill Extensions consist of a length of Steelite cable with one end re-enforced and the other end an attachment plug, in the base of which there is an enclosed type of fuse. The cable should be fastened securely to the electric tool by means of a clamp or, as in some type, inserted in the handle and held by means of a set screw.

65191 Length portable cord, 15 ft..... 6.20

TYPE PRE

Type PRE is the same as Type PREF with the exception that the attachment plug does not have the fuse.

65192 Length portable cord, 15 ft..... 5.50

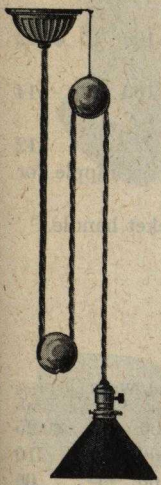
TYPE PS

Type PS Extension consists of a length of cable with an attachment plug on one end and a stage connector on the other end which will fit the male end of the attachment plug of either of the above type fixtures or drill extensions. Its object is to lengthen out the cable of the fixture or drill, as for instance when a light is to be used near the source of an outlet a short fixture can be used, and when it is used at a distance Type PS Extension can be plugged in and the cable lengthened.

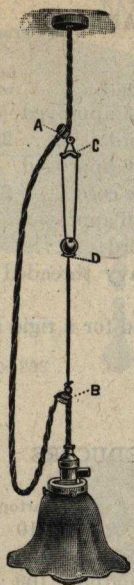
65193 Length portable cord, 15 ft..... 6.80

Extra cable, per foot, 30 cents

CORD ADJUSTERS



No. 021515



No. 021524

TWO-BALL CORD ADJUSTERS

These adjusters permit the lengthening of the cord to three times its normal length, thereby giving a very wide range to the lamp. When not in use the lamp is pushed up toward the ceiling where it is out of the way.

Style A adjuster is made especially for factories, shops, garages, stockrooms, etc.

Style B is used in offices, homes, public buildings, etc. It has a polished metal surface and is especially well finished.

Style A

Trade No.	Description	Price Each
021515	Black	$1.40
021516	Gold	1.40
021517	Aluminum	1.40
021518	Special finishes	1.80

Special finishes are white, blue, green, etc., and brush brass.

Style B

021519	Polished brass	2.20
021521	Oxidized brass	2.20
021523	Brush brass	2.20
021522	Special finishes	2.40

Special finishes are nickel, oxidized copper, etc.

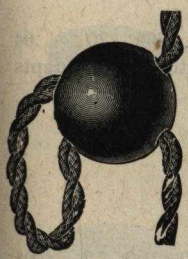
When equipped with extra heavy loaded lower balls for use with heavy glass shades, add 25 cents each to above prices.

INNOVATE CORD ADJUSTERS

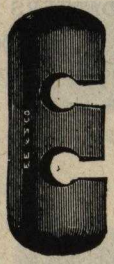
021524	For new code or re-enforced cord	.80

WOOD ADJUSTING BALLS

Trade No.	Description	Std. Pkg.	Price per 100
021528	For Type C cord	100	$1.15
021529	For re-enforced portable cord	100	1.15



No. 021528



No. 021530

IMPROVED CORD ADJUSTERS

021530	Ebonized wood	1000	.75

UNIVERSAL CORD SPOOLS

Made of hard wood enameled black. Standard size is 3¾ inches and takes 6 feet of cord. Factory size is 5⅛ inches and takes 12 feet of cord.

021531	Standard size	100	10.00
021532	Factory size	100	14.00
021525	Re-enforced cord size	100	18.00

FIBER ADJUSTERS

51772	For twisted cord	....	2.00
51775	For re-enforced cord	....	6.00

ADAPTABLE LAMP CHANGERS

This changer is adjustable to any style or size of lamp and adaptable to any angle. It slips on and grips the lamp without any jar; is made of steel throughout; weighs only 8 ounces; nickel-plated; measures 14 inches over all; 1¼ inches in diameter; has no wearing parts and will last a lifetime. The device works on any length of pole that a man can handle and the spiral spring acts as a flexible shaft. It is operated by pulling on chain attached above spiral spring.

Trade No.	Description	Price Each
021527	Without pole	$5.00
41855	Poles in 5-foot lengths, per foot	.70



No. 021531



No. 51772



No. 021527

SOCKET FITTINGS

SOCKET HANDLES



No. 1240

Trade No.	Mfrs. No.	Size of Hole Inches	Size of Nipple Inches	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
094390	1240	9/32	1/8	For No. 16 approved lamp cord	25	100	15	$0.12
094391	1388	13/32	3/8	For No. 16 approved portable cord	25	100	12	.14
094392	2751	13/32	3/8	For No. 16 approved lamp cord	..	...	..	.12

A strong socket handle, heavy threaded brass nipple for socket securely imbedded in end.

Designed to meet the demand for a rigid socket handle.



No. 2751

SOCKET REDUCERS



No. 392



No. 9357

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
075695	421	Mogul to medium	10	100	22	$0.25
065483	392	Medium to candelabra	25	100	6	.10
065482	391	Candelabra to miniature	100	100	1	.06

SOCKET ADAPTERS

094401	9357	Socket adapter	100	500	20	.04

Inserting this device in a Thompson-Houston socket adapts it for use with Edison base lamp.



No. 1274



No. 1273

SOCKET RINGS

094393	1274	Composition, double flange	100	100	2	.04
094394	1273	Composition, single flange.	100	100	2	.04
094395	1435	Porcelain, single flange	100	100	4	.05



No. 1435



No. 9399

SOFT RUBBER RINGS

094396	9399	For use with weather-proof sockets	...	100	...	.03½

BUSHINGS



No. 50787

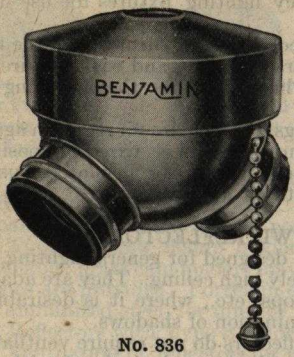


No. 9165

Trade No.	Mfrs. No.	Description	Size of Hole Inches	Size of Cap Inches	Std. Pkg.	Price per 1000
094397	50787	Composition	13/32	3/8	500	$10.00
094398	9165	Composition	9/32	1/8	1000	7.50

BENJAMIN WIRELESS MULTIPLE CLUSTERS

NATIONAL ELECTRICAL CODE STANDARD



No. 836



No. 82



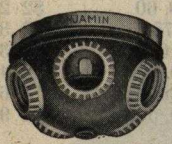
No. 23



No. 32



No. 19



No. 15



No. 16K



No. 34T



No. 37K

WIRELESS CLUSTERS FOR STAND LAMPS

Pull Chain Type

Benjamin Wireless Stand Lamp Clusters furnish an easily wired unit for table and floor lamps, with the sockets and entire mechanism combined into one simple, convenient device.

Clusters with one pull chain pull all the lamps on or off with one motion. Clusters with two pull chains operate either one and one, or one and two lights at each pull.

CLUSTERS ONLY, WITHOUT MOUNTING PARTS

With One Pull Chain

Trade No.	Mfrs. No.	No. of Lights	Std. Pkg.	Price Each
120324	836	2	10	$1.40
120325	837	3	10	1.65
	With Two Pull Chains			
120326	846	2	10	1.70
120327	847	3	10	1.95

Bottom tapped for ¼-inch, top tapped for ⅛-inch iron pipe.

For top or bottom tappings other than standard, special quotations will be made on request.

WIRELESS CLUSTER BODIES

Trade No.	Mfrs. No.	No. of Lights	Diameter Inches	Std. Pkg.	Price Each
			Type 8		
020864	82	2	2½	10	$1.00
			Type 2		
020865	22	2	3	10	1.35
020866	23	3	3	10	1.60
106172	24	4	3	10	1.85
			Type 3		
020887	32	2	3⅜	10	1.60
020888	33	3	3⅜	10	1.85
			Type 18		
120317	18	1	2½	10	.50
120318	19	2	3	10	.90
			Type 1		
020867	12	2	4	10	1.60
020868	13	3	4	10	1.85
020869	14	4	4	10	2.10
020870	15	5	4	10	2.35
020871	16	6	4	10	2.60
			Type K		
020872	13K	3	4	10	1.85
020873	14K	4	4	10	2.10
020874	15K	5	4	10	2.35
020875	16K	6	4	10	2.60
020876	17K	7	4	10	2.85
			Type 3T		
120319	32T	2	4½	10	1.75
120320	33T	3	4½	10	2.00
120321	34T	4	4½	10	2.25
120322	35T	5	4½	10	2.50
120323	36T	6	4½	10	2.75
			Type 3K		
020889	33K	3	4½	10	2.00
020890	34K	4	4½	10	2.25
020891	35K	5	4½	10	2.50
020892	36K	6	4½	10	2.75
020893	37K	7	4½	10	3.00

Standard finish is brush brass. Polished brass and dead black finish furnished without extra charge, if specified. Other finishes are special.

Above prices, except for Type 18, include flanges for ⅜-inch iron pipe. Cluster bodies may be furnished with cast iron flange, tapped for ½-inch pipe, or with steel covers adapted for 3-inch or 4-inch outlet boxes, at an advance of 10 cents list each.

Series connected clusters, Types 1½ and 2½, may be furnished at the same price as Type 1 multiple clusters; Type 3½T, at same price as Type 3T.

BENJAMIN REFLECTOR SOCKETS

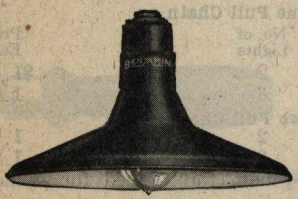
NATIONAL ELECTRICAL CODE STANDARD

Benjamin Reflector Sockets are durable, high efficiency lighting fixtures for use under any kind of industrial condition, indoors or outdoors.

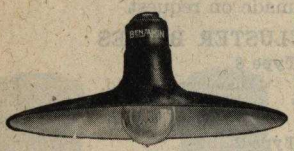
These fixtures have a one-piece porcelain enameled steel reflector, furnished in the three styles as shown, together with an improved, extra heavy separable fitting and easy to wire porcelain socket. Sockets have Benjamin Lamp Grip, a device which prevents the loosening and falling of lamps.

Wide bearing surfaces at top of reflector for the heavy fittings give maximum strength against side pressure or vibration. Reflector may be raised on stem and socket wired in position. Fittings are regularly tapped for ½-inch pipe. Fitting, tapped ⅜-inch, or insulated bushing ($\frac{13}{32}$-inch opening) for attaching lamp cord, may be ordered without advance in price, or ½-inch insulated bushing at an advance of 5 cents list.

Standard finish is green outside.



No. X-5423



No. X-5402



No. 6168



No. 5527

SHALLOW BOWL REFLECTORS

Shallow bowl reflectors are designed for general lighting, and should be used with a moderately high ceiling. They are adapted to the lighting of machine shops, etc., where it is desirable to obtain an almost complete elimination of shadows.

Ordinarily, shallow bowl reflectors do not require ventilation, but to meet special conditions, they may be ordered with ventilating openings for indoor use without extra charge; for outdoor use, with protecting hood, at an advance of 20 cents list.

Trade No.	Mfrs. No.	Reflector Diam., In.	Lamp Size Watts	Price Each
047261	X-5437	12	25, 40, 50, 60	$2.50
120344	X-5421	12	75	2.50
120351	X-5423	14	100	2.80
120352	X-5425	16	150, 200	3.40
047269	X-5427	18	200	4.00
047273	X-5509 (Mogul)	18	300, 400, 500	4.20

FLAT CONE REFLECTORS

Flat cone reflectors are best adapted to the lighting of warehouses, railroad platforms and yards, or where it is desired that one unit light a large area.

047260	X-5431	14	25, 40, 50, 60	$2.50
120343	X-5401	14	75	2.50
047263	X-5402	16	100, 150	2.80
047264	X-5403	18	200	3.40
120349	X-5405	20	200	4.00

DEEP BOWL REFLECTORS

Deep bowl reflectors are designed for localized and general illumination. The advent of the Mazda C lamp makes it important that, for indoor use, the lamp filament be hidden in order to avoid excessive glare. All deep bowl reflectors are ventilated.

27416	X-6166	7	40, 60	$2.20
120345	X-6161	8	75	2.30
27417	X-6167	8	100	2.30
27418	X-6168	9	150, 200	2.40
27441	X-6171 (Mogul)	11	300	3.60
27438	X-6172 (Mogul)	13	400, 500	4.90

ANGLE REFLECTORS

Angle reflectors Nos. 5522–5527 have enameled steel reflectors and hood; not ventilated. Reflectors Nos. 5536–5538 have enameled steel reflector and copper hood properly ventilated. All have two-piece, easy-to-wire porcelain socket with Benjamin Lamp Grip. Height dimensions include vertical fitting tapped ½ inch; ¾ inch or 1 inch may be ordered at an advance of 15 cents list. Angle fittings may be substituted at the price of corresponding vertical fittings. Standard finish is black.

Trade No.	Mfrs. No.	Size of Reflector, In. Height	Diam.	Lamp Size Watts	Price Each
27437	5522	11⅜	8½x13½	60, 75	$2.80
27434	5525	13⅛	8½x13½	100, 150	3.00
27435	5527	17½	14 x20	200	6.00
120346	5536	17½	14 x20	200	6.00
120347	5537	19	14 x20	300, 400, 500	6.50
120348	5538	21½	14 x20	750, 1000	6.80

Pull chain medium base sockets with lamp grip supplied with medium base reflector sockets above at an additional price of 60 cents list.

Prices are less wires and lamps.

BENJAMIN SHADE HOLDER REFLECTORS



Type B Holder for Standard Brass Shell Sockets



Type C Holder for Standard Brass Shell Sockets



Type N Neck for 2¼-inch Standard Form O Shade Holders



Type P Holder for Standard Porcelain Sockets



Type S Holder for Benjamin Screw Threaded Devices

Benjamin shade holder reflectors constitute a scientifically designed metal line with built-in holders, shown in detail above. Usually the holders are attached direct, but in some cases a copper extension is inserted to position the lamp accurately.

Type B screw clamp holders are regularly furnished for brass sockets. Type C quick-attachable, brass cam holders may be ordered at an additional price of 2 cents list. Two reflector finishes are provided: Porcelain enameled steel, for weatherproof work and all-round durability; and aluminized steel, for interior installations.

Reflectors with Type S holders are susceptible to a great variety of applications.

Ventilation of reflectors for 60-watt lamps and smaller, except Type S, is provided by usual openings in the shade holders. All reflectors for 100-watt lamps and larger, except where noted in listing, have ventilating openings in the neck. Enameled steel Type S reflectors for outdoor use will be furnished less openings, when specified, without change in price, or with cap to shield ventilating openings at an additional price of 20 cents list.



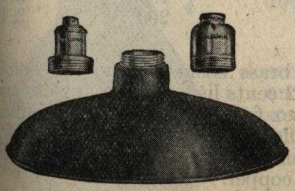
With Type B Holder



With Type N Neck



With Type P Holder



With Type S Holder

SHALLOW BOWL—DISTRIBUTING

PORCELAIN ENAMELED STEEL

Trade No.	Mfrs. No.	Reflector Diam., In.	Lamp Size Watts	Price Each
With Type B Holder for Brass Shell Sockets				
106183	11020B	8	10, 20	$0.97
106184	11040B	10	25, 40	1.08
106185	11060B	12	40, 60	1.25
106220	11075B	12	75	1.50
106186	11100B	15	100	1.97
106188	11200B	15	200	2.00
With Type N Neck for Standard 2¼-inch Shade Holders				
106190	11020N	8	10, 20	.88
106191	11040N	10	25, 40	.98
106192	11060N	12	40, 60	1.16
106221	11075N	12	75	1.40
106193	11100N	15	100	1.96
106195	11200N	15	200	1.96
With Type P Holder for Porcelain Sockets				
106197	11020P	8	10, 20	1.02
106198	11040P	10	25, 40	1.14
106199	11060P	12	40, 60	1.20
106222	11075P	12	75	1.50
106200	11100P	15	100	2.10
106202	11200P	15	200	2.10
With Type S Holder for Benjamin Screw Thread Sockets and Fixtures				
106204	*11020S	8	10, 20	1.00
106205	*11040S	10	25, 40	1.10
106206	*11060S	12	40, 60	1.25
106223	11075S	12	75	1.50
106207	11100S	15	100	2.00
106209	11200S	15	200	2.00
106219	11300S (Mogul)	18	300	3.00

*Not ventilated.

Benco keyless and pull chain sockets, unit shell threaded sockets, and Benjamin outlet box fittings are for use with Type S reflectors.

Standard reflector finish is green outside. Holders have natural finish as follows: Types B and C, brass; Types N, P and S, copper.

Quotations made on reflectors for 150 and 250-watt Mazda B lamps.

BENJAMIN SHADE HOLDER REFLECTORS

PORCELAIN ENAMELED STEEL



Extensive Reflector with Type B Holder

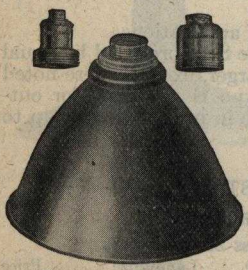
DEEP BOWL—EXTENSIVE

With Type B Holder for Brass Shell Sockets

Trade No.	Mfrs. No.	Reflector Diam., In.	Lamp Size Watts	Pr Ea
106362	12040B	6¼	25, 40	$0.
106363	12060B	7¼	60	1.
106412	12075B	8¼	75	1.
106364	12100B	8¼	100	1.
106366	12200B	8¼	200	1.

With Type N Neck for Standard 2¼-inch Shade Holders

106374	12040N	6¼	25, 40	
106375	12060N	7¼	60	
106413	12075N	8¼	75	1.
106376	12100N	8¼	100	1.
106378	12200N	8¼	200	1.



Extensive Reflector with Type S Holder

With Type P Holder for Porcelain Sockets

106386	12040P	6¼	25, 40	
106387	12060P	7¼	60	1.
106414	12075P	8¼	75	1.
106388	12100P	8¼	100	1.
106390	12200P	8¼	200	1.

With Type S Holder for Benjamin Screw Thread Sockets and Fixtur

106398	*12040S	6¼	25, 40	
106399	*12060S	7¼	60	1.
106415	12075S	8¼	75	1.
106400	12100S	8¼	100	1.
106402	12200S	8¼	200	1.

ANGLE

With Type B Holder for Brass Shell Sockets

106484	15040B	6½	25, 40	1.
106485	15060B	8	60	1.
106416	15075B	8	75	1.
106486	15100B	10	100	2.
106487	15200B	10	200	2.



Angle Reflector with Type B Holder

With Type N Neck for Standard 2¼-inch Shade Holders

106496	15040N	6½	25, 40	1.
106497	15060N	8	60	1.
106417	15075N	8	75	1.
106498	15100N	10	100	1.
106499	15200N	10	200	2.

With Type P Holder for Porcelain Sockets

106508	15040P	6½	25, 40	1.
106509	15060P	8	60	1.
106418	15075P	8	75	1.
106510	15100P	10	100	2.
106511	15200P	10	200	2.

With Type S Holder for Benjamin Screw Thread Sockets and Fixtures

106520	*15040S	6½	25, 40	1.
106521	*15060S	8	60	1.
106419	15075S	8	75	1.
106522	15100S	10	100	2.
106523	15200S	10	200	2.



Angle Reflector with Type S Holder

*Not ventilated.

Type B screw clamp holders are regularly furnished for brass sockets. Type C quick attachable, brass cam holders supplied at an additional price of 2 cents list. Benco keyless and pull chain sockets, unit shell threaded sockets, Benjamin outlet box fittings, and threaded ceiling fixtures are equipped with screw thread for attaching Type S reflectors.

Standard finish on above reflectors is green outside. Holders have natural finish and are furnished as follows: Types B and C, brass; Types N, P and S, copper.

Quotations made on reflectors for 150 and 250-watt Mazda B lamps.

BENJAMIN SHADE HOLDER REFLECTORS

ALUMINIZED STEEL—DEEP BOWL



With Type B Holder

WITH TYPE B HOLDER FOR BRASS SHELL SOCKETS

Extensive Distribution

Trade No.	Mfrs. No.	Reflector Diam., In.	Lamp Size Watts	Price Each
106423	22060B	7¼	60	$0.80
106473	22075B	8¼	75	.94
106424	22100B	8¼	100	.97
106426	22200B	8¼	200	1.20

Intensive Distribution

106429	23060B	7¼	60	.80
106474	23075B	8¼	75	.94
106430	23100B	8¼	100	.97
106432	23200B	8¼	200	1.20



With Type N Neck

WITH TYPE N NECK FOR STANDARD 2¼" SHADE HOLDERS

Extensive Distribution

106434	22040N	6¼	25, 40	.60
106435	22060N	7¼	60	.70
106475	22075N	8¼	75	.85
106436	22100N	8¼	100	.88
106438	22200N	8¼	200	1.10

Intensive Distribution

106440	23040N	6¼	25, 40	.60
106441	23060N	7¼	60	.70
106476	23075N	8¼	75	.85
106442	23100N	8¼	100	.88
106444	23200N	8¼	200	1.10



With Type P Holder

WITH TYPE P HOLDER FOR PORCELAIN SOCKETS

Extensive Distribution

106447	22060P	7¼	60	.84
106477	22075P	8¼	75	.98
106448	22100P	8¼	100	1.02
106450	22200P	8¼	200	1.26

Intensive Distribution

106453	23060P	7¼	60	.84
106478	23075P	8¼	75	.98
106454	23100P	8¼	100	1.02
106456	23200P	8¼	200	1.26



With Type S Holder

WITH TYPE S HOLDER FOR BENJAMIN SCREW THREAD SOCKETS AND FIXTURES

Extensive Distribution

106458	*22040S	6¼	25, 40	.70
106459	*22060S	7¼	60	.80
106479	22075S	8¼	75	.94
106460	22100S	8¼	100	1.00
106462	22200S	8¼	200	1.20

Intensive Distribution

106464	*23040S	6¼	25, 40	.70
106465	*23060S	7¼	60	.80
106480	23075S	8¼	75	.94
106466	23100S	8¼	100	1.00
106468	23200S	8¼	200	1.20

*Not ventilated.

Type B screw clamp holders are regularly furnished for brass sockets. Type C quick-attachable, brass cam holder supplied at an additional price of 2 cents list. Benco keyless and pull chain sockets, unit shell threaded sockets, Benjamin outlet box fittings, and threaded ceiling fixtures are equipped with screw thread for attaching Type S reflectors.

Standard finish on above reflectors is green outside. Holders have natural finish and are furnished as follows: Types B and C, brass; Types N, P and S, copper.

BENJAMIN SHADE HOLDER REFLECTORS

ALUMINIZED STEEL



Focusing Reflector with Type B Holder

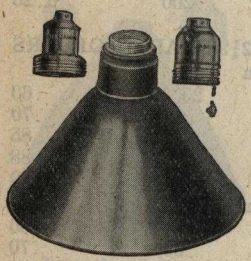
FOCUSING

With Type B Holder for Brass Shell Sockets

Trade No.	Mfrs. No.	Reflector Diam., In.	Lamp Size Watts	Price Each
106571	24060B	8	25, 60	$0.80
106531	24075B	8	75	.94
106572	24100B	10	100	1.20

With Type N Neck for Standard 2¼-inch Shade Holders

106576	24060N	8	25.60	.70
106532	24075N	8	75	.85
106577	24100N	10	100	1.10



Focusing Reflector with Type S Holder

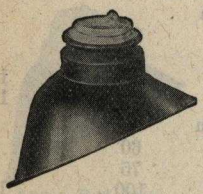
With Type P Holder for Porcelain Sockets

106581	24060P	8	25, 60	.86
106533	24075P	8	75	.98
106582	24100P	10	100	1.26

With Type S Holder for Benjamin Screw Thread Sockets and Fixtures

106586	*24060S	8	25, 60	.80
106534	24075S	8	75	.94
106587	24100S	10	100	1.20

ANGLE



Angle Reflector with Type B Holder

With Type B Holder for Brass Shell Sockets

106490	25040B	6½	25, 40	.57
106491	25060B	8	60	.80
106535	25075B	8	75	.94
106492	25100B	10	100	1.24
106493	25200B	10	200	1.36

With Type N Neck for Standard 2¼-inch Shade Holders

106502	25040N	6½	25, 40	.48
106503	25060N	8	60	.70
106536	25075N	8	75	.85
106504	25100N	10	100	1.20
106505	25200N	10	200	1.30



Angle Reflector with Type S Holder

With Type P Holder for Porcelain Sockets

106514	25040P	6½	25, 40	.62
106515	25060P	8	60	.84
106537	25075P	8	75	.98
106516	25100P	10	100	1.36
106517	25200P	10	200	1.46

With Type S Holder for Benjamin Screw Thread Sockets and Fixtures

106526	*25040S	6½	25, 40	.60
106527	*25060S	8	60	.80
106538	25075S	8	75	.94
106528	25100S	10	100	1.26
106529	25200S	10	200	1.36

*Not ventilated.

Type B screw clamp holders are regularly furnished for brass sockets. Type C quick-attachable, brass cam holders supplied at an additional price of 2 cents list. Benco keyless and pull chain sockets, unit shell threaded sockets, Benjamin outlet box fittings, and threaded ceiling fixtures are equipped with screw thread for attaching Type S reflectors.

Standard finish on above reflectors is green outside. Holders have natural finish and are furnished as follows: Types B and C, brass; Types N, P and S, copper.

Quotations made on reflectors for 150 and 250-watt Mazda B lamps.

BENJAMIN INDUSTRIAL FIXTURES

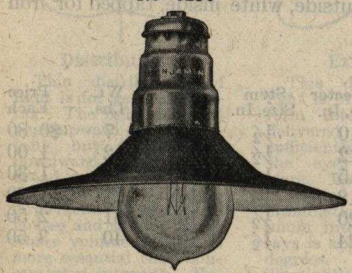
SOCKETS ARE NATIONAL ELECTRICAL CODE STANDARD FOR MAZDA C LAMPS



No. 6129



No. 6130



No. 6109



No. 6274



No. 6179

The fixtures listed below have enameled steel reflector as indicated, and either ventilated head or skeleton holder. They all have two-piece, easy-to-wire porcelain socket with Benjamin Lamp Grip. Reflectors are easily removed to facilitate wiring. Hoods and holders are tapped ½ inch. For ¾-inch add 10 cents list; for 1 or 1¼-inch add 15 cents list. For fixture with ½-inch suspension fitting No. 6031M add 65 cents list; with fitting No. 6049M, add 80 cents list.

FIXTURES WITH SHALLOW BOWL REFLECTORS

Trade No.	Mfrs. No.	Description	Reflector Size, In.	Lamp Size Watts	Price Each
120478	6134	Copper hood	16	200	$5.00
120479	6135	Steel hood	16	200	4.40
87263	6126	Copper hood	18	300, 400, 500	5.90
87264	6127	Steel hood	18	300, 400, 500	5.20
87265	6128	Copper hood	20	750, 1000	8.25
87266	6129	Steel hood	20	750, 1000	7.10

FIXTURES WITH REFLECTORS AND SKELETON HOLDERS

Fixtures Nos. 6115–6230 have special skeleton holder and reflector as indicated. They are intended for service where hood is unnecessary and a maximum amount of ventilation is desired.

120480	6115	Shallow bowl	16	200	4.00
87275	6125	Shallow bowl	18	300, 400, 500	4.60
87276	6130	Shallow bowl	20	750, 1000	6.00
120481	6228	Flat cone	16	200	4.00
120482	6229	Flat cone	18	300, 400, 500	4.60
120483	6230	Flat cone	20	750, 1000	5.00

FIXTURES WITH FLAT CONE REFLECTORS

120484	6144	Copper hood	16	200	5.00
120485	6145	Steel hood	16	200	4.40
120486	6146	Copper hood	18	300, 400, 500	5.70
120487	6148	Steel hood	18	300, 400, 500	5.00
120488	6108	Copper hood	20	750, 1000	6.90
120489	6109	Steel hood	20	750, 1000	5.70

FIXTURES WITH DEEP BOWL REFLECTORS

120490	6265	Copper hood	12	200	4.30
120491	6266	Steel hood	12	200	3.80
120492	6267	Copper hood	12	300, 400, 500	4.80
120493	6268	Steel hood	12	300, 400, 500	4.00
87269	6273	Copper hood	15	750, 1000	6.70
87270	6274	Steel hood	15	750, 1000	5.60
120494	6222	Skeleton holder	12	200	3.40
120495	6223	Skeleton holder	12	300, 400, 500	3.50
120496	6224	Skeleton holder	15	750, 1000	4.70

FIXTURES WITH FLUTED BOWL REFLECTORS

Fixtures Nos. 6066–6227 have a highly efficient deep bowl fluted reflector. An increased diffusing and reflecting surface is secured, and the light distributed without being intercepted by the bulb. A loss of approximately 12 per cent through bulb absorption is thus eliminated.

120497	6066	Copper hood	14	200	5.90
120498	6067	Steel hood	14	200	5.40
120499	6068	Copper hood	14	300, 400, 500	6.40
120500	6069	Steel hood	14	300, 400, 500	5.60
120501	6178	Copper hood	17	750, 1000	7.80
120502	6179	Steel hood	17	750, 1000	6.70
120503	6225	Skeleton holder	14	200	4.90
120504	6226	Skeleton holder	14	300, 400, 500	5.00
120505	6227	Skeleton holder	17	750, 1000	5.90

Standard finish is black enamel.
Prices are less wires and lamps.

BENJAMIN REFLECTORS



No. H515

Reflectors Nos. H508 to H518 and H410 to H418 inclusive, are porcelain enameled steel, green outside, white inside, and have heel to fit standard shade holders.

Flat Cone

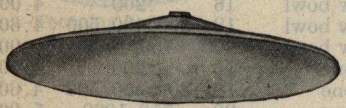
Trade No.	Mfrs. No.	Reflector Size, In.	Holder Size, In.	Std. Pkg.	Wt. Lbs.	Price Each
130756	H508	8	2¼	10	5	$0.50
130757	H510	10	2¼	10	6	.60
130758	H512	12	2¼	10	10	.80
130759	H515	15	3¼	10	12	1.20
130760	H518	18	3¼	10	26	1.70



No. H410

Shallow Bowl

130761	H410	10	2¼	10	7	.70
130762	H412	12	2¼	10	13	.90
130763	H414	14	2¼	10	15	1.10
130764	H416	16	3¼	10	19	1.50
130765	H418	18	3¼	10	36	1.90



No. H15

Reflectors Nos. H10 to H24 inclusive are porcelain enameled steel, green outside, white inside, tapped for iron pipe stem.

Trade No.	Mfrs. No.	Reflector Size, In.	Stem Size, In.	Std. Pkg.	Wt. Lbs.	Price Each
130766	H10	10	½	10	7	$0.80
130767	H12	12	½	10	12	1.00
130768	H15	15	½	10	16	1.30
130769	H18	18	½	10	21	1.80
130770	H20	20	½	10	31	2.50
130771	H24	24	½	10	40	3.50



No. TN114

Reflectors Nos. TN114, TN214 and TN116 are paint enameled tin, green outside, white inside, fit the cluster back and require no holders.

Trade No.	Mfrs. No.	Reflector Size, In.	Type of Cluster	Std. Pkg.	Wt. Lbs.	Price Each
130772	TN114	14	1, 7 or K	10	7	$0.60
130773	TN214	14	2	10	7	.60
130774	TN116	16	1, 7 or K	10	7	.70



No. H115

Reflectors Nos. H813, H115, H215, H118, H316 and H318 are porcelain enameled steel, white both sides, fit the wireless cluster back, and require no holders. Nos. H316 and H318 have deep neck.

Trade No.	Mfrs. No.	Reflector Size, In.	Type of Cluster	Std. Pkg.	Wt. Lbs.	Price Each
130775	H813	13	8	10	11	$1.20
130776	H115	15	1, 7 or K	10	12	1.20
130777	H215	15	2	10	12	1.20
130778	H118	18	1, 7 or K	10	14	2.00
130779	H316	16	3T	10	20	1.80
130780	H318	18	3T	10	25	2.10



No. H316

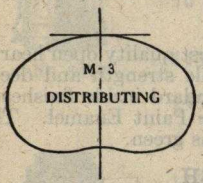
HUBBELL REFLECTORS

FOR INDUSTRIAL ILLUMINATION

Thoroughly efficient illumination is more than a humanitarian necessity in industrial plants. It secures and perpetuates economies apart from the beneficial effect upon employees. Scientifically correct illumination may be reckoned in terms of time saved in producing a given amount of work, in greater accuracy of operatives, in minimizing accidents and in promoting better working facilities by providing brighter and more cheerful surroundings.

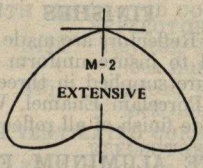
The most important consideration in factory illumination is not to have more brilliant light but to make more and better use of the light available. Light runs its free course unless controlled at its source. The light effused from lamps should be diffused by reflectors, otherwise it is lost; also its cost. It should be directed from where it isn't wanted to where it is needed — guided without deviation from the lamp to the object of illumination. This may be accomplished with unerring precision by using Hubbell Reflectors, which should be selected with proper regard to their functional qualifications in association with various sizes and shapes of lamps.

These Reflectors are correctly designed for new installations and designed to correct existing faults in old lighting systems. They are shaped and finished to distribute light over extended areas, to concentrate it in a brilliant beam, or to give any intermediate distribution desired. Following are shown four fundamental distributions for which they are designed.



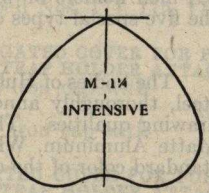
Distributing

This distribution of light is for general lighting. The light does not pass upward or horizontally but is deflected downward, covering a broad area at low intenity. For use in lighting large factory rooms, warehouses and similar places where volume of light is more essential than concentrated intensity. Reflectors giving this distribution should be spaced three times the mounting height for general illumination.



Extensive

This distribution of light is of high and uniform intensity. It is delivered from reflectors sufficiently deep to shield the eyes from direct glare. Used wherever it is desired to have even illumination. The maximum intensity of light rays is approximately 45 degrees. For uniform illumination, reflectors for this distribution should be spaced at a distance equal to two times the height above the plane to be lighted.



Intensive

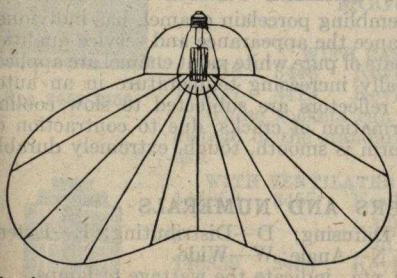
This is for evenly illuminating groups of machines, such as lathes, looms and knitting machines. The deep bowl reflector delivering this highly intensified light cuts off the glare from the line of vision and for uniform illumination, these reflectors should be spaced at a distance equal to one and one-quarter times the mounting height. Where lamps are placed unusually high, the intensive type is more satisfactory than the extensive.

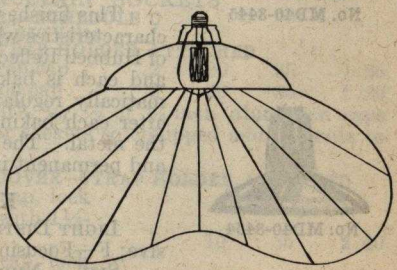


Focusing

Where high intensity over a small area is desired this type of distribution is required. The smaller units for this type may be used for concentrating light over vises bench lathes, etc. The larger units, mounted pendent or on brackets, furnish excellent light for inspection tables and for operations requiring close application of light. These reflectors should be spaced at a distance three-quarters times mounting height for even illumination.

The Same Distribution from Reflectors Different in Shape and Inside Finish



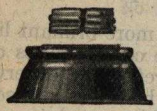


Diffusion of light does not depend alone upon the size and shape of a reflector. Two reflectors vastly different in form and dimensions may give identical light distributions, as shown in the accompanying illustrations. Frequently a small reflector with aluminum inside finish is capable of diffusing light over the same area as a larger and differently shaped type with a white enamel reflecting surface. The sameness in light distribution is accounted for by the difference in finishes.

In selecting reflectors it is well to give more consideration to the inside finish and light distributing qualities than to the shape and size.

HUBBELL REFLECTORS

REFLECTOR HOLDERS



H Holder



No. 3445



Nos. 3453 to 3456



S Holder



P Holder

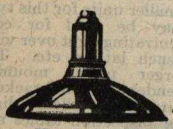
The Hubbell line of reflectors offers practically unlimited range of selection with the added advantages of a variety of holders to make complete any desired combinations. Every Hubbell Reflector has a standard extension neck which is built-in and a permanent part of the reflector. The neck has a flanged top which fits all standard medium sockets with 2¼-inch holders or with 3¼-inch holders for Mogul socket, also any of the five special types of Hubbell Holders illustrated above.



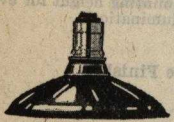
No. MD40H



No. MD40P



No. MD40S



No. MD40-3445



No. MD40-3454



No. MD40

FINISHES

The bodies of Hubbell Reflectors are made of best quality open hearth steel, thoroughly annealed to insure uniform tensile strength and deep-drawing qualities. They are supplied in three standard inside finishes—Matte Aluminum, White Porcelain Enamel, White Paint Enamel. The standard color of the outside finish of all reflectors is green.

MATTE ALUMINUM FINISH

Before the aluminum is applied, the reflector bodies are immersed in a chemical bath which removes from the pores of the metal all dirt and greasy substances. They are then scrubbed in a special solution and quickly dried to prevent rust formation. A binding coat of aluminum is then applied by air brush and heat dried, after which a heavier coat of aluminum is applied. They are then given a transparent coating which protects the aluminum and preserves its reflective qualities. The final coating forms a hard, smooth surface, resistant to injury when reasonable care is exercised in cleaning.

PORCELAIN ENAMEL FINISH

As the inside is the working side of a reflector, it is most essential that the finish be smooth and uniform to prevent distorted reflection of light. The porcelain enamel finish of Hubbell Reflectors is absolutely free from cracks, blow-holes and indentions. The reflectors are given three coats of best quality pure white enamel, all of which are baked on at high temperature, forming a finish with the gloss and hardness of glass.

WHITE PAINT ENAMEL FINISH

This finish, while closely resembling porcelain enamel, has individual characteristics which greatly enhance the appearance and service qualities of Hubbell Reflectors. *Several coats of pure white paint enamel are applied, and each is baked on at gradually increasing temperature in an automatically regulated oven. The reflectors are subjected to slow cooling after each baking to prevent formation of cracks, due to contraction of the metal. The finish in final form is smooth, tough, extremely durable and permanent in color.*

KEY TO LETTERS AND NUMERALS

Light Distribution.— B—Diffusing; D—Distributing; E—Extensive; F—Focusing; I—Intensive; N—Angle; W—Wide.

Size.— Numerals 25, 40, 60, etc., indicate the wattage of lamps.

Holders.— H—Hubbell Screw Holder; P—Porcelain Socket Holder; S—Detachable Screw Casing; 3445—Medium Strap Holder Socket; 3413—Mogul Strap Holder Socket; 3451, 3453, 3454, 3455, 3456, 3459, Medium Covered Strap Holders; 3457, 3458, 3485, Mogul Covered Strap Holders.

Inside Finishes.—A—Aluminum; M—Porcelain Enamel; T—Paint Enamel.

HUBBELL REFLECTORS

MEDIUM BASE PORCELAIN SOCKETS

FOR REFLECTORS—SCHEDULE C

Key and Pull, 250 Watts, 250 Volts; Keyless, 660 Watts, 250 Volts

WITH CAST IRON CAP—STRAP HOLDER ATTACHED



No. 3476

Trade No.	Mfrs. No.	Description	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
145843	3477	Key, ⅜-in. cast iron cap	10	50	40	$0.85
145844	3445	Keyless, ⅜-in. cast iron cap	10	50	30	.80
145845	3476	Pull, ⅜-in. cast iron cap	10	50	35	1.35
145846	3479	Key, ½-in. cast iron cap	10	50	40	.85
145847	3410	Keyless, ½-in. cast iron cap	10	50	30	.80
145848	3478	Pull, ½-in. cast iron cap	10	50	35	1.35

All Hubbell brass and aluminum porcelain socket caps are interchangeable with the sockets listed above.

For sockets with either Hubbell Nos. 150, 151, 152 or 153 brass caps add 15 cents to list.

For sockets with either Hubbell Nos. 154 or 155 aluminum caps add 30 cents to list.

For sockets with Hubbell No. 163 cap with Knostrain bushing add 70 cents to list.

For sockets with Hubbell No. 173 ½-inch aluminum cap add 50 cents to list.

For sockets with either Hubbell Nos. 174, 175, 176 or 177 angle caps add 70 cents to list.



No. 3477

WITH VENTILATED CORRUGATED COVER FOR PAINT ENAMELED REFLECTORS—STRAP HOLDER ATTACHED

145849	3412	Keyless, ⅜-in. iron cap with lock nut	10	50	55	1.20
145850	3451	Keyless, ½-in. iron cap with lock nut	10	50	55	1.20



No. 3445

WITH VENTILATED CORRUGATED COVER FOR PORCELAIN ENAMELED REFLECTORS—STRAP HOLDER ATTACHED

145851	3453	Keyless, ½-in. iron cap with lock nut for reflectors with ⅝-in. L extension. 3¼ ins. over all	2	50	60	1.22
145852	3454	Keyless, ½-in. iron cap with lock nut for reflectors with 1⅛-in. L extension, 3¾ ins. over all	2	50	65	1.24
145853	3455	Keyless, ½-in. iron cap with lock nut for reflectors with 1½-in. L extension, 4⅛ ins. over all	2	30	70	1.26
145854	3456	Keyless, ½-in. iron cap with lock nut for reflectors with 2¼-in. L extension, 4⅞ ins. over all	2	30	80	1.30
145855	3459	Keyless, ½-in. iron cap with lock nut, for MB200 and MW200 reflectors	1	30	85	1.45



Nos. 3453-3456

MOGUL BASE PORCELAIN SOCKETS

FOR REFLECTORS—SCHEDULE C

1500 Watts, 250 Volts

WITH CAST IRON CAP—STRAP HOLDER ATTACHED

145856	3446	Keyless, ⅜-in. cast iron cap	2	20	35	1.80
145857	3413	Keyless, ½-in cast iron cap	2	20	35	1.80

These sockets can be furnished with ⅜, ½ or ¾-inch aluminum caps instead of the standard cast iron. For sockets so equipped add 50 cents to list.



No. 3413

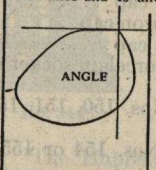
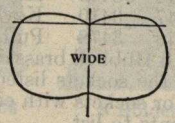
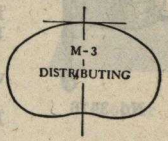
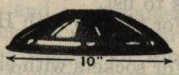
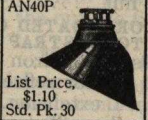
WITH VENTILATED CORRUGATED COVER—STRAP HOLDER ATTACHED

145858	3457	Keyless, ½-in. iron cap, lock nut, for reflectors with 1⅛-in. L extension	1	10	35	2.40
145859	3458	Keyless, ½-in. iron cap, lock nut, for reflectors with 2¼-in. L extension	1	10	35	2.50
145860	3485	Keyless, ½-in. iron cap, lock nut, for MD1000 and MW1000 reflectors	1	10	50	3.10

Illustrations are one-fourth actual size.

HUBBELL REFLECTORS

SCHEDULE C

REFLECTORS FOR TYPE B LAMPS IN SIZES 10, 15, 20 AND 25 WATTS		ANGLE These Reflectors hang approximately at an angle of 30° distributing light as shown. Spacing distance is 1¼ times the distance the lamp hangs from the surface to be illuminated. Designed for lighting surfaces of lathes, presses and other machines and to afford eye protection.		WIDE These flat dome porcelain enamel reflectors are for spreading light over great areas where it is neither desired nor essential to have even illumination.	DISTRIBUTING These shallow dome porcelain enamel reflectors are for general lighting. They do not allow light to pass upward or horizontally Spacing distance should be three times the mounting height of lamp.
					
		Porcelain Enameled Green Outside White Inside 	Paint Enameled Green Outside Matte Aluminum Inside 	Porcelain Enameled Green Outside—White Inside 	Porcelain Enameled Green Outside—White Inside 
H—Hubbell Screw Collar Holder. For all brass shell, medium base sockets, beaded or threaded shells.		MN40H  List Price, $1.65 Std. Pk. 50	AN40H  List Price, 80c Std. Pk. 50	MW25H  List Price, $1.13 Std. Pk. 50	MD40H  List Price, $1.51 Std. Pk. 50
P—Brass Clamp Holder. For most any make of porcelain socket.		MN40P  List Price, $1.80 Std. Pk. 30	AN40P  List Price, $1.10 Std. Pk. 30	MW25P  List Price, $1.28 Std. Pk. 30	MD40P  List Price, $1.66 Std. Pk. 30
S—Hubbell Keyless Porcelain Socket with aluminum detachable screw casing. For ⅜" pipe.		MN40S  List Price, $2.20 Std. Pk. 20	AN40S  List Price, $1.50 Std. Pk. 20	MW25S  List Price, $1 68 Std. Pk. 20	MD40S  List Price, $2.06 Std. Pk. 20
No. 3445—Hubbell Keyless Porcelain Socket with strap holder. For ⅜" pipe.		MN40 3445  List Price, $2.20 Std. Pk. 50	AN40-3445  List Price, $1.50 Std. Pk. 50	MW25-3445  List Price, $1.68 Std. Pk. 50	MD40 3445  List Price, $2.06 Std. Pk. 50
Nos. 3451, 3453, 3454 — Hubbell Porcelain Sockets with strap holder and Japanned ventilated corrugated cover. For ½" pipe.		MN40 3454  List Price, $2.64 Std. Pk. 50	AN40-3451  List Price, $1.90 Std. Pk. 50	*	MD40-3454  List Price, $2.50 Std. Pk. 50
L — Extension. For any standard 2¼" Holder.		MN40  List Price, $1.40 Std. Pk. 50	AN40  List Price, 70c Std. Pk. 50	*	MD40  List Price, $1.26 Std. Pk. 50

Charts patented, Mar. 21, 1916.

Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

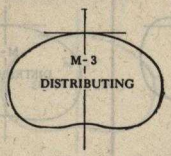
*Not a practical combination.

HUBBELL REFLECTORS

SCHEDULE C

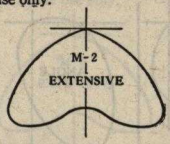
DISTRIBUTING

These paint enameled reflectors are used for general lighting. They do not allow light to pass upward or horizontally. Spacing distance for general illumination is three times the mounting height of lamps. The shallow bowl reflector, matte aluminum interior surface, is used for the same purposes as the shallow dome having white paint interior surface.



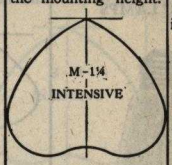
EXTENSIVE

These deep bowl reflectors are for interior and exterior lighting of industrial plants. The eyes are protected while the light is reflected. For even illumination, lamps should be spaced twice the distance of the mounting height. The white paint enamel interior finish is for inside use only.



INTENSIVE

This deep bowl type is for even lighting of machines and benches and to shield the eyes from lamp glare. Spacing distance 1¼ times the mounting height.



FOCUSING

This type used for local lighting where a strong concentration of light is desired. Spacing distance ¾ times mounting height for even illumination.



Paint Enameled Green Outside—White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Porcelain Enameled Green Outside White Inside	Paint Enameled Green Outside White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Paint Enameled Green Outside MatteAluminumInside
 10"	 6¼"	 6¼"	 6¼"	 6¼"	 6"
TD40H  List Price, 90c Std. Pk. 50	AD25H  List Price, 65c Std. Pk. 50	ME40H  List Price, $1.25 Std. Pk. 50	TE40H  List Price, 95c Std. Pk. 50	AI40H  List Price, 95c Std. Pk. 50	AF25H  List Price, 76c Std. Pk. 50
TD40P  List Price, $1.20 Std. Pk. 30	AD25P  List Price, 95c Std. Pk. 30	ME40P  List Price, $1.40 Std. Pk. 30	TE40P  List Price, $1.25 Std. Pk. 30	AI40P  List Price, $1.25 Std. Pk. 30	AF25P  List Price, $1.06 Std. Pk. 30
TD40S  List Price, $1.60 Std. Pk. 20	AD25S  List Price, $1.35 Std. Pk. 20	ME40S  List Price, $1.80 Std. Pk. 20	TE40S  List Price, $1.65 Std. Pk. 20	AI40S  List Price, $1.65 Std. Pk. 20	AF25S  List Price, $1.46 Std. Pk. 20
TD40-3445  List Price, $1.60 Std. Pk. 50	AD25-3445  List Price, $1.35 Std. Pk. 50	ME40 3445  List Price, $1.80 Std. Pk. 50	TE40-3445  List Price, $1.65 Std. Pk. 50	AI40-3445  List Price, $1.65 Std. Pk. 50	AF25-3445  List Price, $1.46 Std. Pk. 50
TD40-3451  List Price, $2.00 Std. Pk. 50	☆	ME40-3453  List Price, $2.22 Std. Pk. 50	TE40-3451  List Price, $2.05 Std. Pk. 50	AI40-3451  List Price, $2.05 Std. Pk. 50	AF25-3451  List Price, $1.86 Std. Pk. 50
TD40  List Price, 80c Std. Pk. 50	☆	ME40  List Price, $1.00 Std. Pk. 50	TE40  List Price, 85c Std. Pk. 50	AI40  List Price, 85c Std. Pk. 50	AF25  List Price, 66c Std. Pk. 50

Charts patented, Mar. 21, 1916.

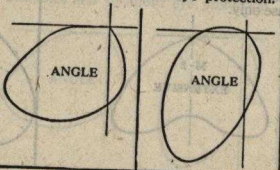
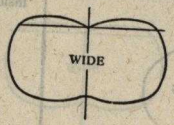
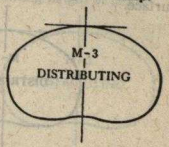
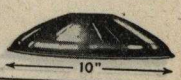
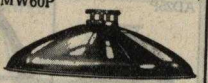
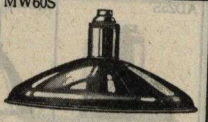
Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

*Not a practical combination.

HUBBELL REFLECTORS

SCHEDULE C

REFLECTORS FOR 40 AND 50 WATT TYPE "B" LAMPS		ANGLE These Reflectors hang approximately at an angle of 30° distributing light as shown. Spacing distance is 1¼ times the distance the lamp hangs from the surface to be illuminated. Designed for lighting surfaces of lathes, presses and other machines and to afford eye protection. 	WIDE These flat dome porcelain enamel reflectors are for spreading light over great areas where it is neither desired nor essential to have even illumination. 	DISTRIBUTING These shallow dome porcelain enamel reflectors are for general lighting. They do not allow light to pass upward or horizontally Spacing distance should be three times the mounting height of lamp. 
		Porcelain Enameled Green Outside White Inside 	Paint Enameled Green Outside Matte Aluminum Inside 	Porcelain Enameled Green Outside—White Inside 	Porcelain Enameled Green Outside—White Inside 
H — Hubbell Screw Collar Holder. For all brass shell, medium base sockets, beaded or threaded shells.		MN40H  List Price, $1.65 Std. Pk. 50	AN40H  List Price, 80c Std. Pk. 50	MW60H  List Price, $1.38 Std. Pk. 50	MD40H  List Price, $1.51 Std. Pk. 50
P—Brass Clamp Holder For most any make of porcelain socket.		MN40P  List Price, $1.80 Std. Pk. 30	AN40P  List Price, $1.10 Std. Pk. 30	MW60P  List Price, $1.53 Std. Pk. 30	MD40P  List Price, $1.66 Std. Pk. 30
S—Hubbell Keyless Porcelain Socket with aluminum detachable screw casing. For ⅜" pipe.		MN40S  List Price, $2.20 Std. Pk. 20	AN40S  List Price, $1.50 Std. Pk. 20	MW60S  List Price, $1.93 Std. Pk. 20	MD40S  List Price, $2.06 Std. Pk. 20
No. 3445—Hubbell Keyless Porcelain Socket with strap holder. For ⅜" pipe.		MN40-3445  List Price, $2.20 Std. Pk. 50	AN40-3445  List Price, $1.50 Std. Pk. 50	MW60-3445  List Price, $1.93 Std. Pk. 50	MD40-3445  List Price, $2.06 Std. Pk. 50
Nos. 3451, 3453, 3454 — Hubbell Porcelain Sockets with strap holder and Japanned ventilated corrugated cover For ½" pipe.		MN40-3454  List Price, $2.64 Std. Pk. 50	AN40-3451  List Price, $1.90 Std. Pk. 50	☆	MD40-3454  List Price, $2.50 Std. Pk. 50
L — Extension. For any standard 2¼" Holder		MN40  List Price, $1.40 Std. Pk. 50	AN40  List Price, 70c Std. Pk. 50	☆	MD40  List Price, $1.26 Std. Pk. 50

Charts patented, Mar. 21, 1916.

Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

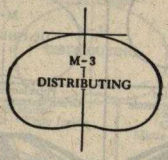
*Not a practical combination.

HUBBELL REFLECTORS

SCHEDULE C

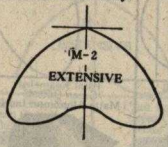
DISTRIBUTING

These paint enameled reflectors are used for general lighting. They do not allow light to pass upward or horizontally. Spacing distance for general illumination is three times the mounting height of lamps. The shallow bowl reflector, matte aluminum interior surface, is used for the same purposes as the shallow dome having white paint interior surface.



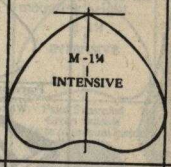
EXTENSIVE

These deep bowl porcelain enamel reflectors are for interior and exterior lighting of industrial plants. The eyes are protected while the light is reflected. For even illumination, lamps should be spaced twice the distance of the mounting height. The white paint enamel interior finish is for inside use only.



INTENSIVE

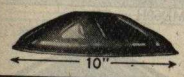
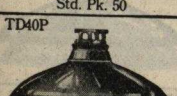
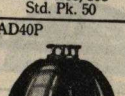
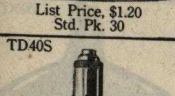
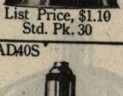
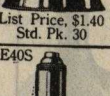
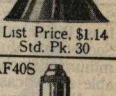
This deep bowl type is for even lighting of machines and benches and to shield the eyes from lamp glare. Spacing distance 1¼ times the mounting height.



FOCUSING

This type used for local lighting where a strong concentration of light is desired. Spacing distance ¾ times mounting height for even illumination.



Paint Enameled Green Outside—White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Porcelain Enameled Green Outside White Inside	Paint Enameled Green Outside White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Paint Enameled Green Outside Matte Aluminum Inside
 10"	 7¼"	 6¼"	 6¼"	 6¼	 6⅝"
TD40H  List Price, 90c Std. Pk. 50	AD40H  List Price, 80c Std. Pk. 50	ME 40H  List Price, $1.25 Std. Pk. 50	TE 40H  List Price, 95c Std. Pk. 50	AI40H  List Price, 95c Std. Pk. 50	AF 40H  List Price, 84c Std. Pk. 50
TD40P  List Price, $1.20 Std. Pk. 30	AD40P  List Price, $1.10 Std. Pk. 30	ME40P  List Price, $1.40 Std. Pk. 30	TE40P  List Price, $1.25 Std. Pk. 30	AI40P  List Price, $1.25 Std. Pk. 30	AF40P  List Price, $1.14 Std. Pk. 30
TD40S  List Price, $1.60 Std. Pk. 20	AD40S  List Price, $1.50 Std. Pk. 20	ME40S  List Price, $1.80 Std. Pk. 20	TE40S  List Price, $1.65 Std. Pk. 20	AI40S  List Price, $1.65 Std. Pk. 20	AF40S  List Price, $1.54 Std. Pk. 20
TD40-3445  List Price, $1.60 Std. Pk. 50	AD40-3445  List Price, $1.50 Std. Pk. 50	ME40-3445  List Price, $1.80 Std. Pk. 50	TE40-3445  List Price, $1.65 Std. Pk. 50	AI40-3445  List Price, $1.65 Std. Pk. 50	AF40-3445  List Price, $1.54 Std. Pk. 50
TD40-3451  List Price, $2.00 Std. Pk. 50	☆	ME40-3453  List Price, $2.22 Std. Pk. 50	TE40-3451  List Price, $2.05 Std. Pk. 50	AI40-3451  List Price, $2.05 Std. Pk. 50	AF40-3451  List Price, $1.94 Std. Pk. 50
TD40  List Price, 80c Std. Pk. 50	☆	ME40  List Price, $1.00 Std. Pk. 50	TE40  List Price, 85c Std. Pk. 50	AI40  List Price, 85c Std. Pk. 50	AF40  List Price, 74c Std. Pk. 50

Charts patented, Mar. 21, 1916.

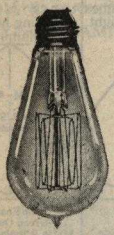
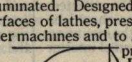
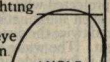
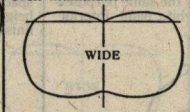
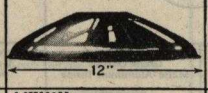
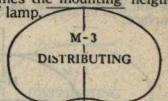
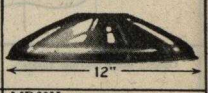
Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

*Not a practical combination.

HUBBELL REFLECTORS

SCHEDULE C

REFLECTORS FOR 60 WATT TYPE "B" LAMP		ANGLE These Reflectors hang approximately at an angle of 30° distributing light as shown Spacing distance is 1¼ times the distance the lamp hangs from the surface to be illuminated. Designed for lighting surfaces of lathes, presses and other machines and to afford eye protection		WIDE These flat dome porcelain enamel reflectors are for spreading light over great areas where it is neither desired nor essential to have even illumination.	DISTRIBUTING These shallow dome porcelain enamel reflectors are for general lighting. They do not allow light to pass upward or horizontally Spacing distance should be three times the mounting height of lamp
		 Porcelain Enameled Green Outside White Inside 	 Paint Enameled Green Outside Matte Aluminum Inside 	 Porcelain Enameled Green Outside—White Inside 	 Porcelain Enameled Green Outside—White Inside 
H—Hubbell Screw Collar Holder. For all brass shell, medium base sockets. Beaded or threaded shells.		MN60H  List Price, $1.92 Std. Pk. 50	AN60H  List Price, $1.10 Std. Pk. 50	MW60H  List Price, $1.38 Std. Pk. 50	MD60H  List Price, $1.73 Std. Pk. 50
P—Brass Clamp Holder For most any make of porcelain sockets.		MN60P  List Price, $2.07 Std. Pk. 30	AN60P  List Price, $1.40 Std. Pk. 30	MW60P  List Price, $1.53 Std. Pk. 30	MD60P  List Price, $1.88 Std. Pk. 30
S—Hubbell Keyless Porcelain Socket with aluminum detachable screw casing. For ⅜" pipe.		MN60S  List Price, $2.47 Std. Pk. 20	AN60S  List Price, $1.80 Std. Pk. 20	MW60S  List Price, $1.93 Std. Pk. 20	MD60S  List Price, $2.28 Std. Pk. 20
No. 3445—Hubbell Keyless Porcelain Socket with strap holder. For ⅜" pipe.		MN60-3445  List Price, $2.47 Std. Pk. 50	AN60-3445  List Price, $1.80 Std. Pk. 50	MW60-3445  List Price, $1.93 Std. Pk. 50	MD60-3445  List Price, $2.28 Std. Pk. 50
Nos. 3451, 3453, 3454 — Hubbell Porcelain Sockets with strap holder and Japanned ventilated corrugated cover. For ½" pipe.		MN60-3454  List Price, $2.91 Std. Pk. 50	AN60-3451  List Price, $2.20 Std. Pk. 50		MD60-3454  List Price, $2.72 Std. Pk. 50
L — Extension. For any standard 2¼" Holder.		MN60  List Price, $1.67 Std. Pk. 50	AN60  List Price, $1.00 Std. Pk. 50		MD60  List Price, $1.48 Std. Pk. 50

Charts patented, Mar. 21, 1916.

Separate sockets for use with above reflectors are listed on one of the following pages.

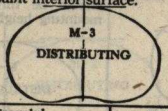
See previous pages for complete description and information regarding finishes and key to type numbers.

*Not a practical combination.

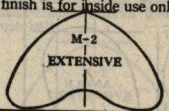
HUBBELL REFLECTORS

SCHEDULE C

DISTRIBUTING
These paint enameled reflectors are used for general lighting. They do not allow light to pass upward or horizontally. Spacing distance for general illumination is three times the mounting height of lamps. The shallow bowl reflector, matte aluminum interior surface, is used for the same purposes as the shallow dome having white paint interior surface.



EXTENSIVE
These deep bowl reflectors are for interior and exterior lighting of industrial plants. The eyes are protected while the light is reflected. For even illumination, lamps should be spaced twice the distance of the mounting height. The white paint enamel interior finish is for inside use only.

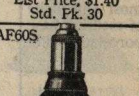
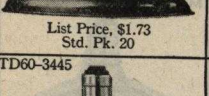
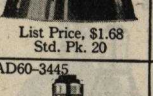


INTENSIVE
This deep bowl type is for even lighting of machines and benches and to shield the eyes from lamp glare. Spacing distance 1¼ times the mounting height.



FOCUSING
This type used for local lighting where a strong concentration of light is desired. Spacing distance ¾ times mounting height for even illumination.



Paint Enameled Green Outside—White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Porcelain Enameled Green Outside White Inside	Paint Enameled Green Outside White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Paint Enameled Green Outside Matte Aluminum Inside
 12"	 8¼"	 7¼"	 7¼"	 7¼"	 8"
TD60H	AD60H	ME60H	TE60H	AI60H	AF60H
 List Price, $1.03 Std. Pk. 50	 List Price, 98c Std. Pk. 50	 List Price, $1.49 Std. Pk. 50	 List Price, $1.06 Std. Pk. 50	 List Price, $1.10 Std. Pk. 50	 List Price, $1.10 Std. Pk. 50
TD60P	AD60P	ME60P	TE60P	AI60P	AF60P
 List Price, $1.33 Std. Pk. 30	 List Price, $1.28 Std. Pk. 30	 List Price, $1.64 Std. Pk. 30	 List Price, $1.36 Std. Pk. 30	 List Price $1.40 Std. Pk. 30	 List Price, $1.40 Std. Pk. 30
TD60S	AD60S	ME60S	TE60S	AI60S	AF60S
 List Price, $1.73 Std. Pk. 20	 List Price, $1.68 Std. Pk. 20	 List Price, $2.04 Std. Pk. 20	 List Price, $1.76 Std. Pk. 20	 List Price, $1.80 Std. Pk. 20	 List Price, $1.80 Std. Pk. 20
TD60-3445	AD60-3445	ME60-3445	TE60-3445	AI60-3445	AF60-3445
 List Price, $1.73 Std. Pk. 50	 List Price, $1.68 Std. Pk. 50	 List Price, $2.04 Std. Pk. 50	 List Price, $1.76 Std. Pk. 50	 List Price, $1.80 Std. Pk. 50	 List Price, $1.80 Std. Pk. 50
TD60-3451		ME60-3453	TE60-3451	AI60-3451	AF60-3451
 List Price, $2.13 Std. Pk. 50	☆	 List Price, $2.46 Std. Pk. 50	 List Price, $2.16 Std. Pk. 50	 List Price, $2.20 Std. Pk. 50	 List Price, $2.20 Std. Pk. 50
TD60		ME60	TE60	AI60	AF60
 List Price, 93c Std. Pk. 50	☆	 List Price, $1.24 Std. Pk. 50	 List Price, 96c Std. Pk. 50	 List Price, $1.00 Std. Pk. 50	 List Price, $1.00 Std. Pk. 50

Charts patented, Mar. 21, 1916.

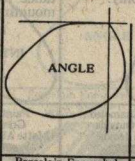
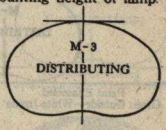
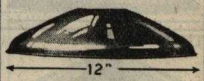
Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

*Not a practical combination.

HUBBELL REFLECTORS

SCHEDULE C

REFLECTORS FOR 75 WATT TYPE "C" LAMPS		ANGLE These Reflectors hang approximately at an angle of 30° distributing light as shown. Spacing distance is 1¼ times the distance the lamp hangs from the surface to be illuminated.		WIDE These flat dome porcelain enamel reflectors are for spreading light over great areas where it is neither desired nor essential to have even illumination.	DISTRIBUTING These shallow dome porcelain enamel reflectors are for general lighting. They do not allow light to pass upward or horizontally. Spacing distance should be three times the mounting height of lamp.
					
		Porcelain Enameled Green Outside White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Porcelain Enameled Green Outside—White Inside	Porcelain Enameled Green Outside—White Inside
					
H—Hubbell Screw Collar Holder. For all brass shell, medium base sockets having either beaded or threaded shells.		MN75H List Price, $2.20 Std Pk 50	AN75H List Price, $1.22 Std. Pk. 50	MW75H List Price, $2.20 Std Pk 50	MD75H List Price, $1.85 Std. Pk. 50
P—Brass Clamp Holder. For most any make of medium base porcelain socket		MN75P List Price $2.35 Std Pk. 30	AN75P List Price, $1.52 Std Pk 30	MW75P List Price, $2.35 Std. Pk. 30	MD75P List Price, $2.00 Std. Pk 30
No 3445—Hubbell Keyless Porcelain Socket with strap holder. For ⅜" pipe.		MN75-3445 List Price, $2.75. Std. Pk. 50	AN75-3445 List Price, $1.92 Std. Pk 50	MW75—3445 List Price, $2.75 Std Pk 50	MD75—3445 List Price, $2.40 Std Pk. 50
Nos. 3451, 3454, 3455 — Hubbell Porcelain Sockets with strap holder and Japanned ventilated corrugated cover. For ½" pipe.		MN75-3455 List Price, $3.21 Std Pk. 50	AN75-3451 List Price, $2.32 Std. Pk 50	MW75—3455 List Price, $3.21 Std Pk 50	MD75—3455 List Price, $2.86 Std Pk 50
L — Extension. For any standard 2¼" Holder.		MN75 List Price, $1.95 Std. Pk. 50	AN75 List Price, $1.12 Std. Pk. 50	MW75 List Price, $1.95 Std. Pk 50	MD75 List Price, $1.60 Std. Pk. 50

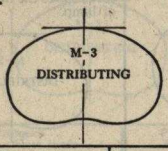
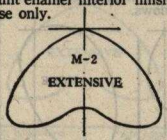
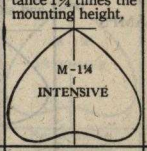
Charts patented, Mar. 21, 1916

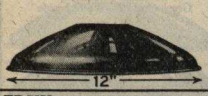
Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

HUBBELL REFLECTORS

SCHEDULE C

DISTRIBUTING	EXTENSIVE	INTENSIVE	FOCUSING
These reflectors are used for general lighting. They do not allow light to pass upward or horizontally. Spacing distance for general illumination is three times the mounting height of lamps. The shallow bowl reflector matte aluminum inside surface is used for the same purposes as the shallow dome, having white inside surface.	These deep bowl reflectors are for interior and exterior lighting of industrial plants. The eyes are protected while the light is reflected. For even illumination, lamps should be spaced twice the distance of the mounting height. The white paint enamel interior finish is for inside use only.	These deep bowl reflectors are for interior lighting where high mounting heights are necessary. Spacing distance 1¼ times the mounting height.	This type used for local lighting where a strong light is desired. Spacing distance ¾ times mounting height for even illumination.
			

Paint Enameled Green Outside—White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Porcelain Enameled Green Outside White Inside	Paint Enameled Green Outside White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Paint Enameled Green Outside Matte Aluminum Inside
					
TD75H	AD75H	ME75H	TE75H	AI75H	AF75H
					
List Price, $1.14 Std. Pk. 50	List Price, $1.14 Std. Pk. 50	List Price, $1.59 Std. Pk. 50	List Price, $1.12 Std. Pk. 50	List Price, $1.20 Std. Pk. 50	List Price, $1.20 Std. Pk. 50
TD75P	AD75P	ME75P	TE75P	AI75P	AF75P
					
List Price, $1.44 Std. Pk. 30	List Price, $1.44 Std. Pk. 30	List Price, $1.74 Std. Pk. 30	List Price, $1.42 Std. Pk. 30	List Price, $1.50 Std. Pk. 30	List Price, $1.50 Std. Pk. 30
TD75-3445	AD75-3445	ME75-3445	TE75-3445	A175-3445	AF75-3445
					
List Price, $1.84 Std. Pk. 50	List Price, $1.84 Std. Pk. 50	List Price, $2.14 Std. Pk. 50	List Price, $1.82 Std. Pk. 50	List Price, $1.90 Std. Pk. 50	List Price, $1.90 Std. Pk. 50
TD75-3451	AD75-3451	ME75-3454	TE75-3451	A175-3451	AF75-3451
					
List Price, $2.24 Std. Pk. 50	List Price, $2.24 Std. Pk. 50	List Price, $2.58 Std. Pk. 50	List Price, $2.22 Std. Pk. 50	List Price, $2.30 Std. Pk. 50	List Price, $2.30 Std. Pk. 50
TD75	AD75	ME75	TE75	AI75	AF75
					
List Price, $1.04 Std. Pk. 50	List Price, $1.04 Std. Pk. 50	List Price, $1.34 Std. Pk. 50	List Price, $1.02 Std. Pk. 50	List Price, $1.10 Std. Pk. 50	List Price, $1.10 Std. Pk. 50

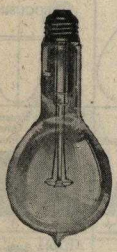
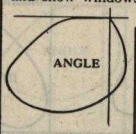
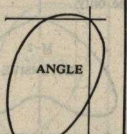
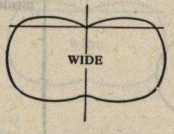
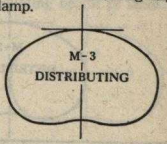
Charts patented, Mar. 21, 1916.

Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

HUBBELL REFLECTORS

SCHEDULE C

REFLECTORS FOR 100 WATT TYPE "C" LAMPS		ANGLE These Reflectors hang approximately at an angle of 30° distributing light as shown. Spacing distance is 1¼ times the distance the lamp hangs from the surface to be illuminated. Used for lighting billboards, interior side walls and show windows.		WIDE These flat dome porcelain enamel reflectors are for spreading light over great areas where it is neither desired nor essential to have even illumination.	DISTRIBUTING These shallow dome porcelain enamel reflectors are for general lighting. They do not allow light to pass upward or horizontally. Spacing distance should be three times the mounting height of lamp.
					
		Porcelain Enameled Green Outside White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Porcelain Enameled Green Outside—White Inside	Porcelain Enameled Green Outside—White Inside
H—Hubbell Screw Collar Holder. For all brass shell, medium base sockets having either beaded or threaded shells.		MN100H  List Price, $2.75 Std. Pk. 30	AN100H  List Price, $1.64 Std. Pk. 30	MW100H  List Price, $2.35 Std. Pk. 30	MD100H  List Price, $2.75 Std. Pk. 30
P—Brass Clamp Holder. For most any make of medium base porcelain socket		MN100P  List Price, $2.90 Std. Pk. 18	AN100P  List Price, $1.94 Std. Pk. 18	MW100P  List Price, $2.50 Std. Pk. 18	MD100P  List Price, $2.90 Std. Pk. 18
No. 3445—Hubbell Keyless Porcelain Socket with strap holder. For ⅜" pipe.		MN100 3445  List Price, $3.30 Std. Pk. 30	AN100—3445  List Price, $2.34 Std. Pk. 30	MW100—3445  List Price, $2.90 Std. Pk. 30	MD100—3445  List Price, $3.30 Std. Pk. 30
Nos. 3451, 3454, 3455, 3456—Hubbell Porcelain Sockets with strap holder and Japanned ventilated corrugated cover. For ½" pipe.		MN100—3454  List Price, $3.75 Std. Pk 30	AN100 3451  List Price, $2.74 Std. Pk. 30	MW100—3456  List Price, $3.40 Std. Pk. 30	MD100—3456  List Price, $3.80 Std. Pk. 30
L—Extension. For any standard 2¼" Holder.		MN100  List Price, $2.50 Std. Pk. 30	AN100  List Price, $1.54 Sta. Pk. 30	MW100  List Price, $2.10 Std. Pk. 30	MD100  List Price, $2.50 Std. Pk. 30

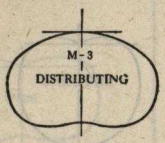
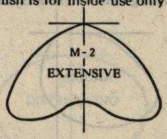
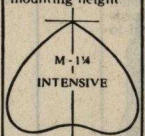
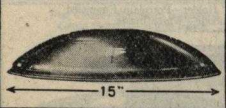
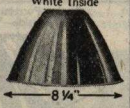
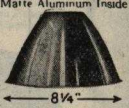
Charts patented, Mar. 21, 1916.

Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

HUBBELL REFLECTORS

SCHEDULE C

DISTRIBUTING		EXTENSIVE		INTENSIVE	FOCUSING
These reflectors are used for general lighting. They do not allow light to pass upward or horizontally. Spacing distance for general illumination is three times the mounting height of lamps. The shallow bowl reflector matte aluminum inside surface is used for the same purposes as the shallow dome, having white inside surface. 		These deep bowl reflectors are for interior and exterior lighting of industrial plants. The eyes are protected while the light is reflected. For even illumination, lamps should be spaced twice the distance of the mounting height. The white paint enamel interior finish is for inside use only 		These deep bowl reflectors are for interior lighting where high mounting heights are necessary Spacing distance 1¼ times the mounting height 	This type used for local lighting where a strong light is desired Spacing distance ¾ times mounting height for even illumination 
Paint Enameled Green Outside—White Inside 	Paint Enameled Green Outside Matte Aluminum Inside 	Porcelain Enameled Green Outside White Inside 	Paint Enameled Green Outside White Inside 	Paint Enameled Green Outside Matte Aluminum Inside 	Paint Enameled Green Outside Matte Aluminum Inside 
TD100H  List Price, $1.36 Std Pk 30	AD100H  List Price, $1.36 Std Pk 30	ME 100H  List Price, $1 75 Std Pk 30	TE 100H  List Price, $1.25 Std Pk 30	AI 100H  List Price $1 30 Std Pk 30	AF 100H  List Price, $1 50 Std Pk 30
TD100P  List Price, $1.66 Std Pk. 18	AD100P  List Price, $1.66 Std Pk 18	ME 100P  List Price, $1 9[illegible] Std. Pk. 18	TE 100P  List Price, $1 55 Std Pk. 18	AI 100P  List Price, $1 60 Std Pk 18	AF 100P  List Price, $1 80 Std. Pk. 18
TD100-3445  List Price, $2.06 Std. Pk. 30	AD100-3445  List Price, $2 06 Std. Pk. 30	ME100-3445  List Price, $2.30 Std Pk. 30	TE100-3445  List Price, $1 95 Std Pk. 30	AI100-3445  List Price, $2.00 Std Pk 30	AF100-3445  List Price, $2.20 Std. Pk. 30
TD100-3451  List Price, $2.46 Std. Pk. 30	AD100-3451  List Price, $2.46 Std. Pk. 30	ME100-3455  List Price, $2.76 Std. Pk. 30	TE100-3451  List Price, $2.35 Std Pk. 30	AI100-3451  List Price, $2.40 Std Pk. 30	AF100-3451  List Price, $2.60 Std. Pk. 30
TD100  List Price, $1.26 Std. Pk. 30	AD100  List Price, $1.26 Std. Pk. 30	ME100  List Price, $1.50 Std. Pk. 30	TE100  List Price, $1.15 Std. Pk. 30	AI100  List Price, $1.20 Std. Pk. 30	AF100  List Price, $1.40 Std. Pk. 30

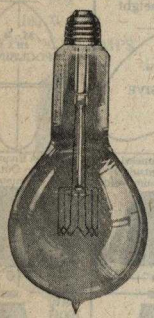
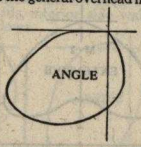
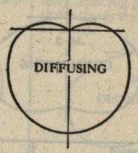
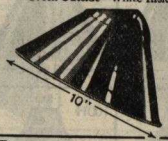
Charts patented, Mar. 21, 1916.

Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

HUBBELL REFLECTORS

SCHEDULE C

REFLECTORS FOR 200 WATT TYPE "C" LAMPS		ANGLE These porcelain enameled angle reflectors distribute light as shown. Spacing distance is 1¼ times the distance the lamp hangs from the surface to be illuminated. Recommended for billboards, building fronts and as side wall units in factories where cranes or other apparatus interfere with the general overhead lighting.	DIFFUSING These reflectors are recommended for general illumination. When fitted with opal globes they spread a soft, diffused light. May be used in addition to local lights
			
		Angle—Porcelain Enameled Green Outside—White Inside 	Flat Dome with 6" Holder—Porcelain Enameled Green Outside—White Inside 
P—Brass Clamp Holder. For most any make of porcelain socket.		MN200P  List Price, $3.00 Std. Pk. 18	MB200P  List Price, $3.28 Std. Pk. 18
No. 3445—Hubbell Keyless Porcelain Socket with strap holder. For ⅜" pipe.		MN200-3445  List Price, $3.40 Std. Pk. 30	MB200-3445  List Price, $3.68 Std. Pk. 30
Nos. 3451, 3455 3456 and 3459—Hubbell Porcelain Sockets with strap holder and Japanned ventilated corrugated cover. For ½" pipe.		MN200-3455  List Price, $3.86 Std. Pk. 30	MB200-3459  List Price, $4.33 Std. Pk. 30
L—Extension. For any standard 2¼" Holder.		MN200  List Price, $2.60 Std. Pk. 30	MB200  List Price, $2.88 Std. Pk. 30

Charts patented, Mar. 21, 1916.

Separate sockets for use with above reflectors are listed on one of the following pages.

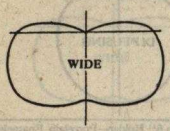
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Glassware is listed in another part of the catalogue.

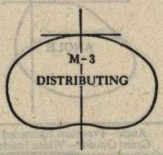
HUBBELL REFLECTORS

SCHEDULE C

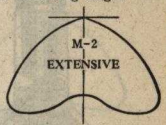
WIDE
These flat dome porcelain enamel reflectors are for spreading light over great areas where it is neither desired nor essential to have even illumination.

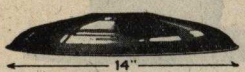
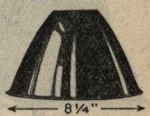
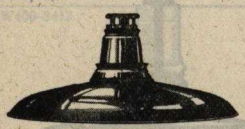
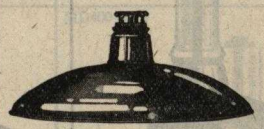
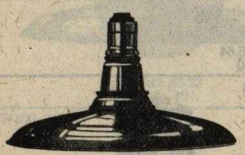
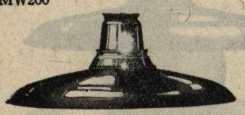


DISTRIBUTING
These shallow dome porcelain enamel reflectors are for general lighting. They prevent loss of light upward or horizontally. Spacing distance for general illumination three times the mounting height of lamp. Shallow bowl reflectors with matte aluminum inside surface serve the same purposes as the shallow dome with white inside surface.



EXTENSIVE
These deep bowl reflectors are for interior and exterior lighting of industrial plants. The eyes are protected while the light is reflected. For even illumination lamps should be spaced twice the distance of mounting height.



Flat Dome—Porcelain Enameled Green Outside—White Inside	Shallow Dome—Porcelain Enameled Green Outside—White Inside	Shallow Bowl—Paint Enameled Green Outside-Matte Aluminum Inside	Deep Bowl—Porcelain Enameled Green Outside—White Inside
			
MW200P  List Price, $2.88 Std. Pk. 18	MD100P  List Price, $2.90 Std. Pk. 18	AD200P  List Price, $1.80 Std. Pk. 18	ME200P  List Price, $2.05 Std. Pk. 18
MW200—3445  List Price, $3.28 Std. Pk. 30	MD100—3445  List Price, $3.30 Std. Pk. 30	AD200—3445  List Price, $2.20 Std. Pk. 30	ME200—3445  List Price, $2.45 Std. Pk. 30
MW200—3459  List Price, $3.93 Std. Pk. 30	MD100—3456  List Price, $3.80 Std. Pk. 30	AD200—3451  List Price, $2.60 Std. Pk. 30	ME200—3456  List Price, $2.95 Std. Pk. 30
MW200  List Price, $2.48 Std. Pk. 30	MD100  List Price, $2.50 Std. Pk. 30	AD 200  List Price, $1.40 Std. Pk. 30	ME200  List Price, $1.65 Std. Pk. 30

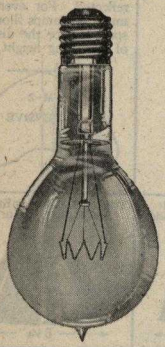
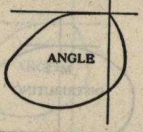
Charts patented, Mar. 21, 1916.

Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

HUBBELL REFLECTORS

SCHEDULE C

REFLECTORS FOR 300 AND 400 WATT TYPE "C" LAMPS		ANGLE These porcelain enameled angle reflectors distribute light as shown. Spacing distance is 1¼ times the distance the lamp hangs from the surface to be illuminated. Recommended for bill-boards, building fronts and as side wall units in factories where cranes or other apparatus interfere with the general overhead lighting.	DIFFUSING These reflectors are recommended for general illumination. When fitted with opal globes they spread a soft diffused light. May be used in addition to local lights.
			
		Angle—Porcelain Enameled Green Outside—White Inside 	Flat Dome with 6" Holder—Porcelain Enameled Green Outside—White Inside 
No. 3413 Hubbell Mogul Porcelain Socket with strap holder. For ½" pipe.		MN500-3413  List Price, $6.18 Std. Pk. 10	MB400-3413  List Price, $5.64 Std. Pk. 10
Nos. 3457 and 3458—Hubbell Mogul Porcelain Sockets with strap holder and Japanned ventilated corrugated cover. For ½" pipe.		MN500-3458  List Price, $6.88 Std. Pk. 10	MB400-3458  List Price, $6.34 Std. Pk. 10
L—Extension. Will fit any standard 3¼" Holder.		MN500  List Price, $4.38 Std. Pk. 10	MB400  List Price, $3.84 Std. Pk. 10

Charts patented, Mar. 21, 1916.

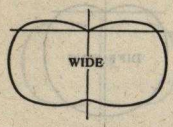
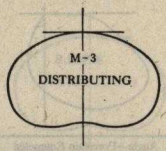
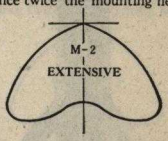
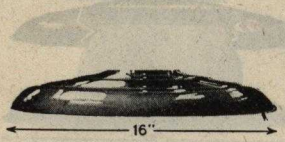
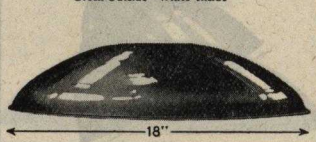
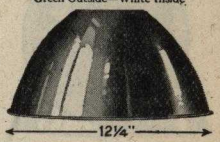
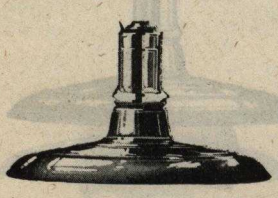
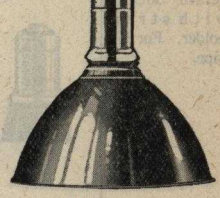
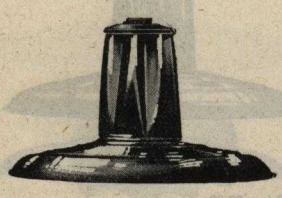
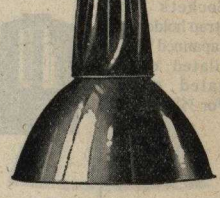
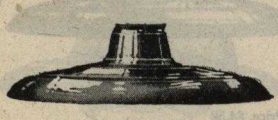
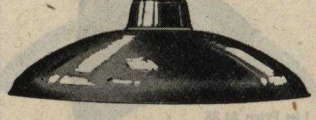
Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

Glassware is listed in another part of the catalogue.

HUBBELL REFLECTORS

SCHEDULE C

WIDE	DISTRIBUTING	EXTENSIVE
These flat dome porcelain enamel reflectors spread light over great areas where even illumination is neither desired nor essential. Especially suitable for warehouses, stock rooms and outside of buildings.	These shallow dome porcelain enamel reflectors are for general illumination the same as the flat dome type. They do not allow light to pass upward or horizontally. Spacing distance should be three times the mounting height of lamp.	These porcelain enamel deep bowl reflectors are for either interior or exterior illumination of industrial plants. Suitable for yards, wharfs, etc., requiring even illumination with high mounting heights. Spacing distance twice the mounting height
		
Flat Dome—Porcelain Enameled Green Outside—White Inside 	Shallow Dome—Porcelain Enameled Green Outside—White Inside 	Deep Bowl—Porcelain Enameled Green Outside—White Inside 
MW400-3413  List Price $5.23 Std. Pk. 10	MD400-3413  List Price, $5.90 Std. Pk. 10	ME500-3413  List Price, $4.40 Std. Pk. 10
MW400-3458  List Price $5.93 Std. Pk. 10	MD400-3458  List Price, $6.60 Std. Pk. 10	ME500-3457  List Price, $5.00 Std. Pk. 10
MW400  List Price $3.43 Std. Pk. 10	MD400  List Price, $4.10 Std. Pk. 10	ME500  List Price, $2.60 Std. Pk. 10

Charts patented, Mar. 21, 1916.

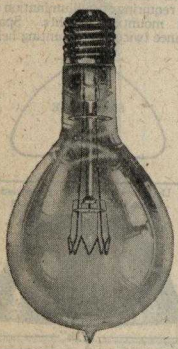
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HUBBELL REFLECTORS

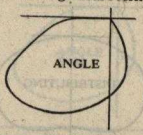
SCHEDULE C

REFLECTORS
FOR
500 WATT TYPE "C" LAMPS



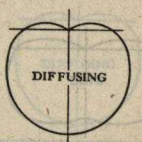
ANGLE

These porcelain enameled angle reflectors distribute light as shown. Spacing distance is 1¼ times the distance the lamp hangs from the surface to be illuminated. Recommended for bill-boards, building fronts and as side wall units in factories where cranes or other apparatus interfere with the general overhead lighting.



DIFFUSING

These reflectors are recommended for general illumination. When fitted with opal globes they spread a soft diffused light. May be used in addition to local lights.



Angle—Porcelain Enameled
Green Outside—White Inside



Flat Dome with 8" Holder—Porcelain Enameled
Green Outside—White Inside



No. 3413 Hubbell Mogul Porcelain Socket with strap holder. For ½" pipe.



MN500-3413



List Price, $6.18
Std. Pk. 10

MB500-3413



List Price, $6.32
Std. Pk. 10

Nos. 3457 and 3458—Hubbell Mogul Porcelain Sockets with strap holder and Japanned ventilated corrugated cover For ½" pipe.



MN500-3458



List Price, $6.88
Std. Pk. 10

MB500-3458



List Price, $7.02
Std. Pk. 10

L—Extension. Will fit any standard 3¼" Holder.



MN500



List Price, $4.38
Std. Pk. 10

MB500



List Price, $4.52
Std. Pk. 10

Charts patented, Mar. 21, 1916.

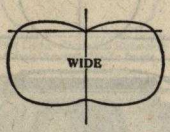
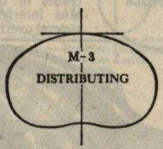
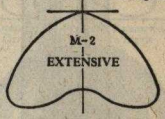
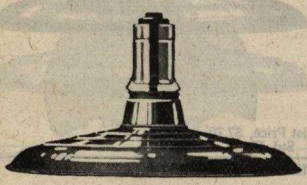
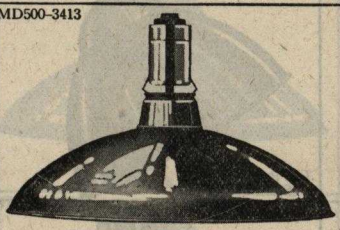
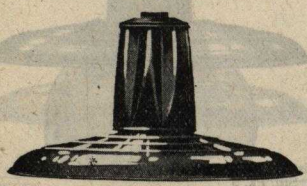
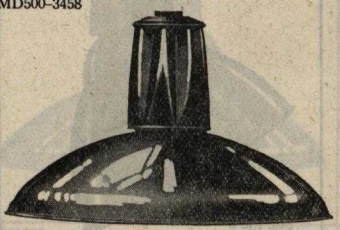
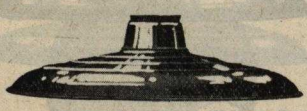
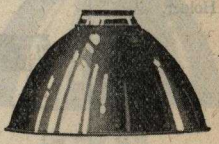
Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

Glassware is listed in another part of the catalogue.

HUBBELL REFLECTORS

SCHEDULE C

WIDE	DISTRIBUTING	EXTENSIVE
These flat dome porcelain enamel reflectors spread light over great areas where even illumination is neither desired nor essential. Especially suitable for warehouses, stock rooms and outside of buildings.	These shallow dome porcelain enamel reflectors are for general illumination the same as the flat dome type. They do not allow light to pass upward or horizontally. Spacing distance should be three times the mounting height of lamp.	These porcelain enamel deep bowl reflectors are for either interior or exterior illumination of industrial plants. Suitable for yards, wharfs, etc., requiring even illumination with high mounting heights. Spacing distance twice the mounting height.
		
Flat Dome—Porcelain Enameled Green Outside—White Inside 	Shallow Dome—Porcelain Enameled Green Outside—White Inside 	Deep Bowl—Porcelain Enameled Green Outside—White Inside 
MW500-3413  List Price $5.90 Std. Pk. 10	MD500-3413  List Price, $6.18 Std. Pk. 10	ME500-3413  List Price, $4.40 Std. Pk. 10
MW500-3458  List Price $6.60 Std. Pk. 10	MD500-3458  List Price, $6.88 Std. Pk. 10	ME500-3457  List Price, $5.00 Std. Pk. 10
MW500  List Price $4.10 Std. Pk. 10	MD500  List Price, $4.38 Std. Pk. 10	ME500  List Price, $2.60 Std. Pk. 10

Charts patented, Mar. 21, 1916.

Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

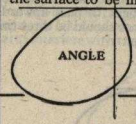
HUBBELL REFLECTORS

SCHEDULE C

REFLECTORS FOR 750 AND 1000 WATT TYPE "C" LAMPS

ANGLE

These porcelain enameled angle reflectors distribute light as shown. Spacing distance is 1¼ times the distance the lamp hangs from the surface to be illuminated. Recommended for bill-boards, building fronts and as side wall units in factories where cranes or other apparatus interfere with the general overhead lighting.

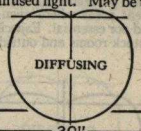


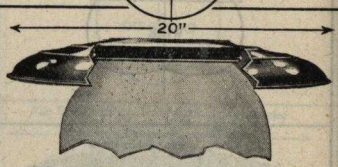


Angle—Porcelain Enameled Green Outside—White Inside

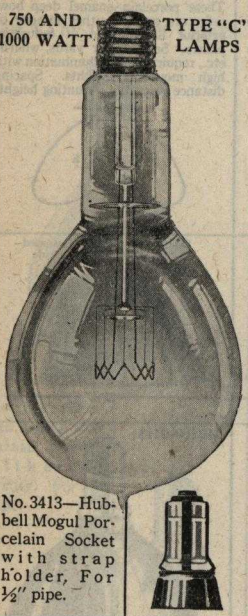
DIFFUSING

These reflectors are recommended for general illumination. When fitted with opal globes they spread a soft diffused light. May be used in addition to local lights.





Flat Dome with 8" Holder—Porcelain Enameled Green Outside—White Inside



No. 3413—Hubbell Mogul Porcelain Socket with strap holder, For ½" pipe.

MN1000–3413



List Price, $8.65
Std. Pk. 5

MB1000–3413

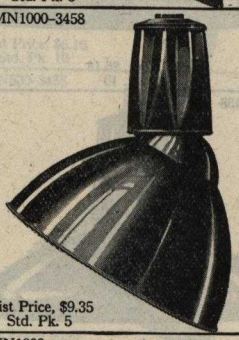


List Price, $7.70
Std. Pk. 5

Nos. 3458 and 3485—Hubbell Mogul Porcelain Sockets with strap holder and Japanned ventilated corrugated cover. For ½" pipe.



MN1000–3458



List Price, $9.35
Std. Pk. 5

MB1000–3458



List Price, $8.40
Std. Pk. 5

L—Extension. Will fit any standard 3¼" Holder.

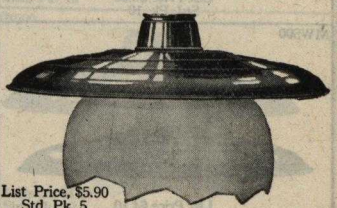


MN1000



List Price, $6.85
Std. Pk. 5

MB1000



List Price, $5.90
Std. Pk. 5

Charts patented, Mar. 21, 1916.

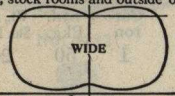
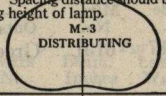
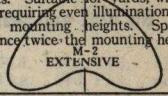
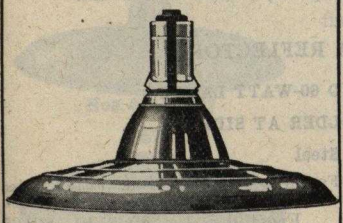
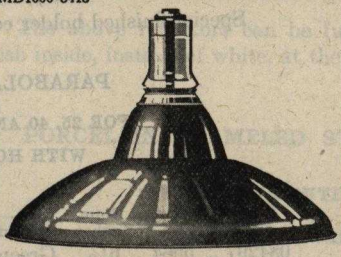
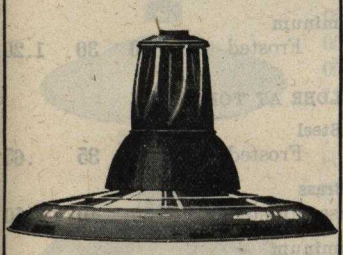
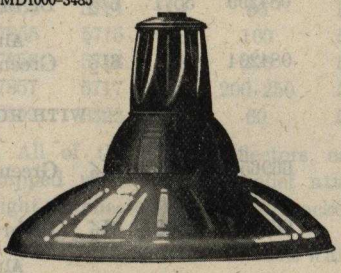
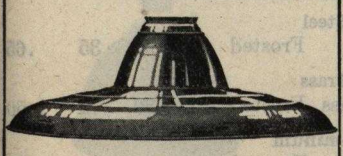
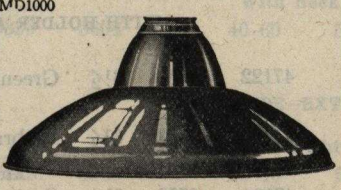
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HUBBELL REFLECTORS

SCHEDULE C

WIDE	DISTRIBUTING	EXTENSIVE
These flat dome porcelain enamel reflectors spread light over great areas where even illumination is neither desired nor essential. Especially suitable for warehouses, stock rooms and outside of buildings.	These shallow dome porcelain enamel reflectors are for general illumination the same as the flat dome type. They do not allow light to pass upward or horizontally. Spacing distance should be three times the mounting height of lamp.	These porcelain enamel deep bowl reflectors are for either interior or exterior illumination of industrial plants. Suitable for yards, wharfs, etc., requiring even illumination with high mounting heights. Spacing distance twice the mounting height.
		
Flat Dome—Porcelain Enameled Green Outside—White Inside	Shallow Dome—Porcelain Enameled Green Outside—White Inside	Deep Bowl—Porcelain Enameled Green Outside—White Inside
		
MW1000-3413	MD1000-3413	ME1000-3413
		
List Price $7.70 Std. Pk. 5	List Price, $7.97 Std. Pk. 5	List Price, $6.18 Std. Pk. 5
MW1000-3485	MD1000-3485	ME1000-3458
		
List Price $9.00 Std. Pk. 5	List Price, $9.25 Std. Pk. 5	List Price, $6.88 Std. Pk. 5
MW1000	MD1000	ME1000
		
List Price $5.90 Std. Pk. 5	List Price, $6.17 Std. Pk. 5	List Price, $4.38 Std. Pk. 5

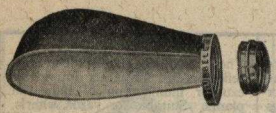
Charts patented, Mar. 21, 1916.

Separate sockets for use with above reflectors are listed on one of the following pages.

See previous pages for complete description and information regarding finishes and key to type numbers.

HUBBELL REFLECTORS

SCHEDULE C



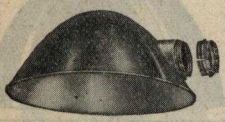
No. 6151 and 5429

HALF REFLECTORS

FOR 10 AND 15-WATT LAMPS

Steel

Trade No.	Mfrs. No.	Finish: Outside	Finish: Inside	Carton	Std. Pkg.	Wt., Lbs., Std. Pkg.	Price Each
89717	6151	Green	White	1	50	20	$0.45
Brass							
89718	6152	Old brass	Frosted alum.	1	50	20	.85



Nos. 5564, 5571 and 5461

For 25, 40 AND 60-WATT LAMPS

Steel

084284	5429	Green	White	1	50	20	.50
Brass							
084289	5532	Old Brass	Frosted alum.	1	50	20	.90

Special finished holder complete, 5 cents additional.

PARABOLA REFLECTORS

FOR 25, 40 AND 60-WATT LAMPS

WITH HOLDER AT SIDE



Nos. 6094 and 6548

Steel

Trade No.	Mfrs. No.	Diam. Inches	Finish: Outside	Finish: Inside	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
084297	5564	6½	Green	Frosted	1	50	40	$0.65
Brass								
084299	5571	6½	Br. brass	Frosted	1	50	40	1.50
Aluminum								
084294	5461	6½	Green	Frosted	1	50	30	1.20

WITH HOLDER AT TOP

Steel

66965	6094	6½	Green	Frosted	1	30	35	.65
Brass								
66956	6548	6½	Br. brass	Frosted	1	30	40	1.50
Aluminum								
039396	6549	6½	Green	Frosted	1	30	30	1.20

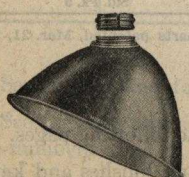


No. 6549

WITH HOLDER AT 30 DEGREE ANGLE

Steel

47122	6550	6½	Green	Frosted	1	30	35	.65
Brass								
47123	6551	6½	Br. brass	Frosted	1	30	40	1.50
Aluminum								
47124	6552	6½	Green	Frosted	1	30	30	1.20



Nos. 6550, 6551 and 6552

Brass reflectors can be had in any desired special finish. Prices on application.

White interior furnished without extra charge.

Aluminum reflectors cannot be furnished in a plated finish.

If reflectors are desired for weatherproof sockets, place the letter P after the Mfrs. No. and add 15 cents to list price.

Parabola reflectors with perforated top, 13 cents additional

HUBBELL REFLECTORS

SCHEDULE C

PAINT ENAMELED REFLECTORS



No. 5432



No. 5441



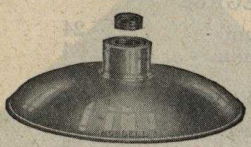
Nos. 5714-5717



No. 6322



No. 6107



No. 5604



No. 5860



No. 5710

Green Outside, White Inside

Flat

Trade No.	Mfrs No.	Diam. Inches	For Mazda Lamps Watts	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per 100
039368	5431	8	15–25	10	100	40	$37.50
039369	5432	10	25–40	10	100	56	49.00
039370	5433	12	40–60	10	100	80	70.00

Deep Cone

039386	5440	8	15–25	10	100	58	46.00
039387	5441	10	25–40	10	100	80	52.00
039388	5442	12	40–60	10	100	115	100.00

The above reflectors can be furnished frosted aluminum finish inside, instead of white, at the same price.

PORCELAIN ENAMELED STEEL REFLECTORS

WIDE DISTRIBUTING TYPE

Green Outside, White Inside

Trade No.	Mfrs. No.	Diam. Inches	For Mazda Lamps Watts	Carton	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
057854	5714	14	60	5	50	130	$2.35
057855	5715	16	100	5	30	75	2.75
057856	5716	18	200	5	30	95	3.00
057857	5717	20	200–250	5	30	150	3.65
120309	6322	14	60	5	50	120	1.80

All of the above reflectors, excepting the 14-inch size, equipped with a strain relief attachment, which prevents weight of reflector working the socket shell apart.

White Outside, White Inside

66966	6107	12	40–60	5	50	75	$1.35

With Neck

039399	5604	12	40–60	5	50	105	1.60

BOWL TYPE—EXTENSIVE

Green Outside, White Inside

091829	5860	6	25–40	5	30	60	1.50

No. 5860 not furnished with P holder.

DISTRIBUTING TYPE

Green Outside, White Inside

057847	5710	12	40–60	10	50	90	1.75

If reflectors are desired for weatherproof sockets place the letter P after the Mfrs. No. and add 15 cents to list price.

FARIES METAL SHADES

WITH NEW STYLE PATENTED COLLAR LOCK HOLDERS



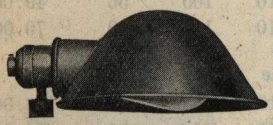
No. 36A

One quarter turn locks the shade. Will not pull off until released.

No. 36A—HALF SHADE

Fits any lamp from 8 c. p. to 60-watt Mazda. Swivels easily on the socket, permitting light to be thrown at any angle.

Trade No.	Mfrs. No.	Diameter Inches	Finish	Std. Pkg.	Price Each
129141	36A	..	Frosted steel	48	$0.30
129142	36B	..	Brush brass	48	.45
129143	36C	..	Oxid. copper	48	.50



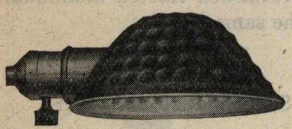
No. 027

No. 027—PARABOLA

Swivels easily on the socket, permitting light to be thrown in any direction.

7-inch for 25 to 75-watt lamps. 8-inch for 40 to 75-watt lamps

42973	027A	7	Frosted steel	36	.35
42974	027	7	Frosted alum.	48	.45
42975	027B	7	Pol. aluminum	48	.60
42976	027C	7	Brush brass	24	.50
42977	027D	7	Oxid. copper	24	.50
42991	027E	8	Frosted steel	24	.55
42978	027F	8	Frosted alum.	24	.65
42979	027G	8	Pol. aluminum	24	.80
89488	027H	8	Brush brass	24	.80



No. 094

No. 094—Dimpled

89762	094	7	Polished	24	.60
89763	094A	8	Polished	24	.80



No. 18C

No. 18C—45 DEGREE

89489	18H	7	Frosted steel	24	.40
89490	18C	7	Frosted alum.	24	.50
89491	18I	7	Pol. aluminum	24	.65

No. 19C—45 DEGREE

89492	19C	8	Frosted alum.	24	.70
89493	19F	8	Pol. aluminum	24	.85



No. 18B

No. 18B—30 DEGREE

89494	18F	7	Frosted steel	24	.40
89495	18B	7	Frosted alum.	24	.50
89496	18G	7	Pol. aluminum	24	.65

No. 19B—30 DEGREE

89497	19B	8	Frosted alum.	24	.70
89498	19E	8	Pol. aluminum	24	.85



No. 18A

No. 18A—15 DEGREE

89499	18D	7	Frosted steel	24	.40
89500	18A	7	Frosted alum.	24	.50
89759	18E	7	Pol. aluminum	24	.65

No. 19A—15 DEGREE

89760	19A	8	Frosted alum.	24	.70
89761	19D	8	Pol. aluminum	24	.85

Steel shades are green enameled outside and frosted inside. Aluminum shades are green enameled outside and frosted or polished inside. Brush brass and oxidized copper are frosted inside.

OAMCO REFLECTORS



Nos. 508-508E



Nos. 659-659E



Nos. 507A-507D



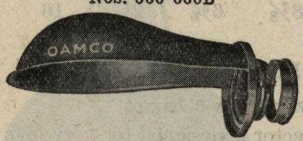
Nos. 661-661C



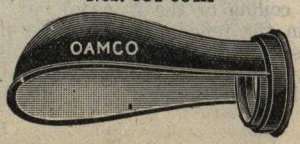
Nos. 547-547C



Nos. 660-660B



Nos. 584-584A



No. 514

PAINT ENAMELED TIN REFLECTORS

Green Outside with White Enameled Reflecting Surface

These reflectors are coated with a superior hard enamel that is very lasting. The reflecting qualities are efficient. The enamel can be easily cleaned with soap and water.

FLAT CONE TYPE, FOR WIDE LIGHT DISTRIBUTION

For use on railroad platforms, mills, machine shops and warehouses.

Nos. 508-508E

Made with collars for standard holder.

Trade No.	Mfrs. No.	Diam. In.	For Holder Inches	Lamp Size Watts	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
054606	508	8	2¼	20–25	100	27	$0.13
054607	508A	10	2¼	25–40	100	45	.16
054608	508B	12	2¼	40–60	100	68	.33
054609	508C	14	2¼	100	60	50	.39
054610	508D	16	3¼	150–200	60	66	.48
054611	508E	18	3¼	250	60	88	.60

Nos. 659-659E

Reflector has attached a spring grip and collar holder which fits standard medium brass shell sockets.

054638	659	8	...	20–25	100	26	.25
054639	659A	10	...	25–40	100	36	.30
054640	659B	12	...	40–60	100	68	.44
054641	659C	14	...	100	60	53	.59
054642	659D	16	...	150–200	60	70	.79
054643	659E	18	...	250	60	86	.98

SHALLOW CONE TYPE, FOR DISTRIBUTION BELOW THE HORIZONTAL

Nos. 507A-507D

Made with collars for standard holder.

054615	507A	8	2¼	20–25	100	30	.19
054616	507B	10	2¼	25–40	100	45	.22
054617	507C	12	2¼	40–60	100	70	.38
054618	507D	14	3¼	100	60	53	.45

Nos. 661-661C

Reflector has attached a spring grip and collar holder which fits standard medium brass shell sockets.

102390	661	8	..	20–25	100	26	.28
102391	661A	10	..	25–40	100	40	.34
102392	661B	12	..	40–60	100	50	.48
102393	661C	14	..	100	60	51	.73

DEEP CONE TYPE FOR EXTENSIVE DISTRIBUTION

For local light distribution over machines, work benches, tables, office use, etc.

Nos. 547A-547C

Made with collars for standard holders.

054619	547A	8	2¼	25	100	27	.16
054620	547B	10	2¼	25–40	100	45	.21
054621	547C	12	2¼	40–60	100	60	.40

Nos. 660-660B

Reflector has attached a spring grip and collar holder which fits standard medium brass shell sockets.

102395	660	8	...	25	100	32	.30
102396	660A	10	...	25–40	100	45	.33
102397	660B	12	...	40–60	100	67	.57

HALF REFLECTORS

No. 584 is made of steel finished green outside with matte aluminum reflecting surface. Made with attached spring grip and collar holder which fits standard medium brass shell sockets.

No. 584A is similar to No. 584, made of brass, brush brass finish outside, matte aluminum reflecting surface.

No. 514 is made of steel, finished green outside, white inside. With collar for regular standard 2¼-inch holder.

Trade No.	Mfrs. No.	Length Inches	Lamp Size Watts	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
054631	584	6	25–40	50	13	$0.30
29899	584A	6	25–40	50	13	.48
054630	514	..	25–40	100	21	.17

X-RAY SHOW WINDOW REFLECTORS



No. 600 Jove

No. 600 JOVE REFLECTORS

For 100-watt Mazda C Lamps

This powerful, scientifically correct, show window reflector, designed especially for the 100-watt Type C lamp, throws 1000 candle power on the merchandise. Jove reflectors should be installed in big show windows which are about as deep as they are high. The brilliant lamp filament is completely concealed and no light is wasted on the window ceiling or the sidewalk. Both Jove and Jupiter are as small as possible to secure proper results.

Trade No.	Mfrs. No.	Dimens., Inches Width	Depth	Height	Size of Holder, In.	Std. Pkg.	Price Each
67434	600	10	9 15/16	7 5/8	3 1/4	12	$4.00



No. 610 Jupiter

No. 610 JUPITER REFLECTORS

For 100-watt Mazda C Lamps

Jupiter gives the same intense white light as Jove—over 1000 candle power concentrated on the display. Jupiter is a more concentrating reflector than Jove, and should be used in show windows 10 to 15 feet high and one-half to two-thirds as deep. Jupiter should be used in all show windows which have a background, the upper part of which is of mirror or transparent glass, so that the bright lamp will be invisible from inside the store.

Jove and Jupiter are of the same general dimensions, and when used together, alternately, make a neat appearance in the window.

67435	610	10	10 1/8	7 5/8	3 1/4	12	4.00



No. 778 Scoop

No. 778 SCOOP REFLECTORS

For 75-watt Mazda C Lamps

The famous Scoop reflector, correctly designed for the 75-watt Type C lamp, should be used in show windows of smaller proportions, which are about as deep as they are high. This Scoop is smaller than the older type Scoop which was made for Type B lamps.

038843	778	7 7/16	6 7/8	6 5/16	2 1/4	24	2.50



No. 731 Hood

No. 731 HOOD REFLECTORS

For 75-watt Mazda C Lamps

Use the Hood in the same class of show windows as Jupiter, but those which are smaller. High shallow windows 8 to 10 feet high and 3 or 4 feet deep will be perfectly lighted with the Hood, which is designed along the same lines as the Jupiter reflector, but smaller, for a smaller lamp.

57618	731	8 7/8	8 7/8	6 3/16	2 1/4	16	3.00



No. 750 Poke Bonnet

No. 750 POKE BONNET REFLECTORS

For 60-watt Type B Lamps

The Poke Bonnet Reflector is designed for very low, deep windows, and is fitted with an adjustable holder which may be easily attached to the ceiling or the transom bar. The lamps are held in place in the reflector by a nickel-plated twin socket, and the largest lamp bulb which may be used is the 60-watt Mazda B type. A six-inch window valance, molding or sign will hide the Poke Bonnet.

Trade No.	Mfrs. No.	Size Inches	Std. Pkg.	Price Complete
038844	750	14x7x3 1/4	8	$6.50

X-RAY REFLECTORS



No. 535

The remarkable efficiency of all X-Ray Reflectors is due to the methods and processes used in their manufacture. Made of glass in one piece, they are easily cleaned and do not fall apart. A bright silvered surface is always presented for reflecting purposes.

Permanency of efficiency is one of the strong points of this product. The spiral and vertical corrugations eliminate streaks and shadows, and assist in the diffusion of the light.

X-Ray Reflectors are adapted for all classes of direct and store window lighting.

DISTRIBUTING REFLECTORS



No. 575

The X-Ray line of distributing reflectors, known as the Beehive type, are designed along the latest scientific lines. They give a wide spread of light and hide the lamp from view without sacrificing the efficiency. This line is especially well adapted for the illumination of factories, shops of all kinds, gymnasiums, armories, indoor ball and tennis courts, pressrooms, power houses and foundries, etc. The Beehive Reflectors are used with all Type B lamps 25 to 60 watts and 75 to 1000-watt Type C lamps.

Trade No.	Mfrs. No.	Dimens., Inches Diam.	Height	Size of Holder, In.	Size of Lamp Watts	Std. Pkg.	Price Each
038837	535*	6⅜	5⅛	2¼	75 Type C	24	$1.25
57621	570	7⅞	6⅞	3¼	100 Type C	16	1.75
57620	575	9⅜	8	3¼	200 Type C	8	2.40
57622	580	11⅞	9⅜	...	300, 400, 500 Type C	4	†6.00

*No. 535 may be used with 25, 40, 50 and 60-watt Type B lamps.
†Price includes special holder.

CONCENTRATING REFLECTORS



No. 696

The concentrating reflectors should be used whenever a very intense light is wanted over a small area, such as over desks, counters, special machinery, etc.

The No. 700 reflector, which is similar in design to the No. 696, as illustrated, is called a semi-concentrating reflector because it does not spread the light as far as the distributing reflectors, and yet does not confine the light into such a small area as do the concentrating reflectors.

Trade No.	Mfrs. No.	Dimens., Inches Diam.	Height	Size of Holder Inches	Size of Lamp Watts	Std. Pkg.	Price Each
038835	696	8	5	2¼	75 Type C	24	$1.25
038836	700	10	5½	2¼	100 Type C	18	1.50
57616	710	11½	6¾	3¼	200 Type C	6	2.50

JUMBO REFLECTORS



No. 580

The Jumbo is the largest one-piece glass reflector ever blown and is especially suitable for the efficient illumination of large interiors, such as coliseums, erecting shops, armories, etc. They can be used with 750 or 1000-watt Type C lamps.

The special holder can be supplied with an adjustable feature which makes it possible to obtain 2 or 3 degrees of spread to the light.

Trade No.	Mfrs. No.	Dimens., Inches Diam.	Height	Size of Lamp Watts	Std. Pkg.	Price, Each Reflector with Holder
57619	770	16½	13⅜	750, 1000	1	$25.00

Dimensions given are for reflector only.
The holder is special.

X-RAY REFLECTORS



Hoodette Reflector

HOODETTE REFLECTORS FOR WALL CASES, ETC.

Low shallow windows, outside display cases and wall cases, are efficiently lighted with this miniature hood reflector. The Hoodette conceals the lamp filament, and directs the greater portion of the light downwards, with sufficient directed towards the back and upper part of the display for proper lighting. The reflector is furnished complete with special combination socket and reflector holder. The same lamp is used as in the Scoopette.

Trade No.	Mfrs. No.	Dimensions, Inches: Width	Depth	Height	Size, of Holder, In.	Std. Pkg.	Price Each
67436	S-99	3 1/16	5 3/8	4 1/8	Special	10	$2.75



Scoopette Reflector

SCOOPETTE REFLECTORS FOR SHOW CASES

Complete equipments from switch box to lamp are furnished. The G-16½, 15-watt, candelabra base Mazda B lamp is used. The advantages of Scoopettes are: Least obstruction of view of interior of case; even and efficient illumination; complete concealment of lamp; low current consumption and maintenance; smallest possible amount of heating in case; absolute safety from fire.

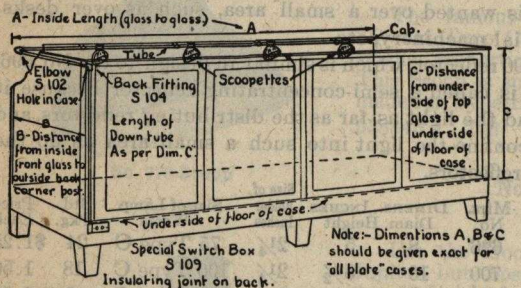
FOR WOOD FRAME CASE OR ALL GLASS CASES HAVING SQUARE ENDS

Prices for Complete Outfits

Length, Ft. of Cases	Number of Scoopettes per Case: 2	3	4	5	6	7	8	9	10
3 to 5	$14.00	$17.70	$21.40	.....	.....	.....	.....	.....	.....
5 to 7	14.75	18.20	21.90	$25.60	.....	.....	.....	.....	.....
7 to 9	.....	18.90	22.40	26.10	$29.80	$33.50	.....	.....	.....
9 to 11	.....	.....	23.10	26.60	30.30	34.00	$37.70	$41.40	$45.10
11 to 13	.....	.....	.....	27.30	30.80	34.50	38.20	41.90	45.60
13 to 15	.....	.....	.....	.....	31.60	35.00	38.70	42.40	46.10

The charge for bending tubing for a case with a single curved end is $1.50, and for a case with two curved ends is $2.00.

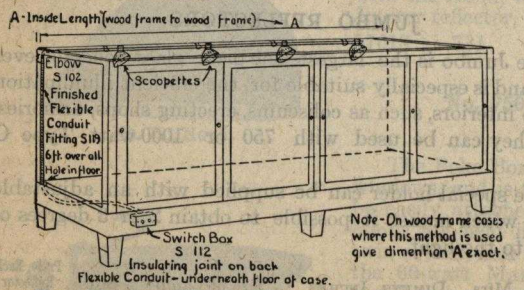
METHOD OF INSTALLING SCOOPETTE REFLECTORS



Back Entrance Method, for All-plate Cases

Feed wires are brought up one of the back posts; tubing extends across the case at the top at one end, being connected to the front tube with an elbow.

This is a most satisfactory method as it is not necessary to disturb the trim, move the case or tip it over.



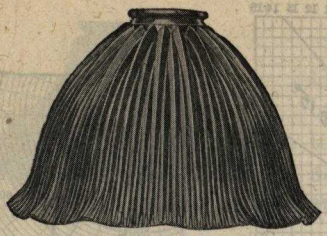
Floor Entrance Method, for Wood Frame Cases

The feed wires enter from underneath the floor of case, extending up through the flexible conduit, which is concealed back of one of the front corner posts.

Floor entrance outfits can be supplied for same prices as back entrance outfits.

If the show cases in which the Scoopette equipment is to be installed do not conform with the standard sizes given in the tables, send for the special dimension blank so as to give us the exact information. This is very necessary to insure that the equipment will exactly fit the case.

HOLOPHANE REFLECTORS



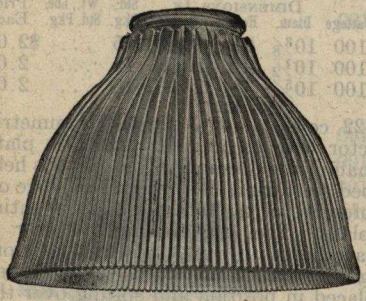
Extensive Type Xtraficiency



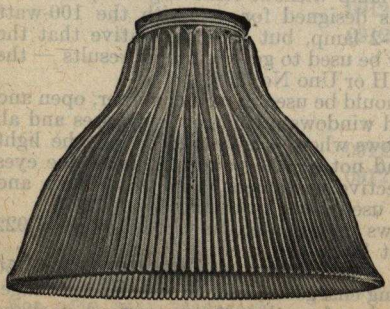
Focusing Type Xtraficiency



Intensive Type Xtraficiency



Extensive Type Superficiency



Intensive Type Superficiency

XTRAFICIENCY LINE REFLECTORS

For Type B Lamps

Extensive Type

Trade No.	Type	Wattage	Dimens., Inches Diam.	Height	Style Holder*	No. in Standard Package	†Net Packing Charge for Std. Pkg.	Price Each
027604	XE- 20	15 or 20	5 7/8	3 7/8	2 1/4 O	20	$0.48	$0.80
042485	XE- 25	25	6 1/2	4 1/8	2 1/4 O	20	.48	.90
042486	XE- 40	40	6 7/8	4 3/4	2 1/4 O	10	.38	1.05
042487	XE- 60	60	7 5/8	5	2 1/4 O	10	.38	1.05
042488	XE-100	100	8 3/4	5 3/4	2 1/4 H	10	.53	1.50
042489	XE-150	150	10	6 1/2	3 1/4 A	10	.60	2.75
084835	XE-200	200	9 7/8	7 3/8	3 1/4 A	10	.75	3.25
042490	XE-250	250	11 3/4	7 3/4	3 1/4 A	6	.73	4.10
042505	XE-500	400 or 500	14 1/8	8 5/8	3 1/4	4	.82	9.35

Focusing Type

027605	XF- 20	15 or 20	6 5/8	3 7/8	2 1/4 O	20	.48	.80
042491	XF- 25	25	7	4	2 1/4 O	20	.48	.90
042492	XF- 40	40	7 3/4	4 3/8	2 1/4 O	10	.38	1 05
042493	XF- 60	60	8 1/4	4 3/4	2 1/4 O	10	.53	1.15
042494	XF-100	100	9 3/8	5 1/8	2 1/4 H	10	.53	1.50
042495	XF-150	150	11 5/8	6 1/2	3 1/4 A	10	.60	2.75
042496	XF-250	250	13 1/4	7 3/8	3 1/4 A	6	.73	4.10

Intensive Type

027606	XI- 20	15 or 20	6	4	2 1/4 O	20	.48	.80
042497	XI- 25	25	6 3/4	4 1/8	2 1/4 O	20	.48	.90
042498	XI- 40	40	7 3/8	4 5/8	2 1/4 O	10	.38	1.05
042499	XI- 60	60	7 3/4	5	2 1/4 O	10	.38	1.15
042500	XI-100	100	8 3/4	5 3/4	2 1/4 H	10	.53	1.50
042501	XI-150	150	10 5/8	6 3/4	3 1/4 A	10	.60	2.75
027607	XI-200	200	10 3/8	7 1/2	3 1/4 A	10	.75	3.25
042502	XI-250	250	11 5/8	7 1/4	3 1/4 A	6	.73	4.10
042506	XI-500	400 or 500	14 3/4	8 1/2	3 1/4	4	.82	9.35

For velvet finish add 5 per cent to above prices, the minimum in no case being less than 2 cents net per reflector. To order velvet finish add V.F. to Mfrs. No.

SUPERFICIENCY REFLECTORS

For Type C Lamps

Extensive Type

084839	CSE- 75VF	75	7 1/2	5 7/8	2 1/4 O**	10	.52	1.40
084840	CSE-100VF	100	8 1/8	6	2 1/4 H‡	10	.57	1.75
084841	CSE-200VF	200	9 7/8	7 3/8	3 1/4 A	10	.75	3.40
084842	CSE-300VF	300	11 3/4	8 1/2	3 1/4 A	8	.88	6.25
084843	CSE-500VF	400-500	13 1/4	8 5/8	3 1/4	4	.82	9.85

Intensive Type

090758	CSI- 75VF	75	8	5 7/8	2 1/4 O**	10	.52	1.40
090759	CSI-100VF	100	8 5/8	6 1/8	2 1/4 H‡	10	.57	1.75
090760	CSI-200VF	200	10 1/4	7 3/8	3 1/4 A	10	.75	3.40
090761	CSI-300VF	300	12	8 1/2	3 1/4 A	8	.88	6.25
090762	CSI-500VF	400-500	14 1/8	8 1/2	3 1/4	4	.82	9.85

KEY: C, Type of Lamp; S, Superficiency Reflector; E, Extensive Type; I, Intensive Type; VF, Velvet Finish.

All Superficiency Reflectors are furnished with plain edge. Crimped edge will be furnished on special request only, without extra charge.

*It is imperative that proper holders be used with Holophane Glassware. Any deviation from the above specifications changes the relative position of light source and reflecting surface, with a consequent change in the light distribution, producing unsatisfactory results.

†Packing on orders for other than standard package quantities will be charged extra at cost.

**Also Uno 502. ‡Also Uno 504.

HOLOPHANE REFLECTORS



No. 983

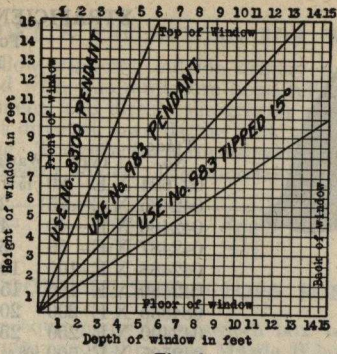


Fig. 1

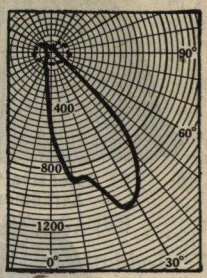
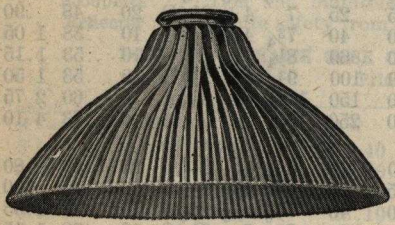


Fig. 2



No. 963



No. 922



No. 922

REFLECTORS FOR SHOW WINDOW LIGHTING

Display window lighting requires special treatment. With the reflectors shown on this page any show window can be lighted brilliantly and at low cost.

Nos. 983, 963 and 8300

Reflector No. 983 is used in most of the cases in connection with the high efficiency Type C 100-watt lamp.

Reflector No. 963 is for very shallow windows.

Reflector No. 8300 is the same as No. 963, except that the edge is crimped.

The chart Fig. 1 represents all windows of ordinary dimensions in sections from front to back. For location of reflectors, find in chart the horizontal line corresponding to the depth. The point where these two lines meet indicates the reflector which will give the most efficient service.

Trade No.	Type	Wattage	Dimensions, In. Diam.	Height	Holder	No. in Std. Pkg.	Approx. Ship. Wt., Lbs. Std. Pkg.	Price Each
027608	983	100	10⅜	6½	2¼H	15	...	$2.00
027609	963	100	10½	5¼	2¼H	15	...	2.00
027610	8300	100	10⅝	5⅜	2¼H	15	...	2.00

No. 922

The No. 922 consists of a special asymmetric prismatic reflector with an annular prismatic plate over the front half of the opening. This plate is held on by a U-shaped steel band that engages a flange on half the circumference of the reflector and the entire edge of the plate. The edge of the reflector is recessed so that the plate has a positive position. The assembling is extremely simple; the ring is fitted to the plate, placed in position and sprung over the flange of reflector. Sufficient room is provided for inserting the lamp without removing the plate.

No. 922 is designed for use with the 100-watt Type C or C-2 lamp, but it is imperative that the correct holder be used to get the proper results — the 2¼-in. Form H or Uno No. 504.

No. 922 should be used in island, corner, open and mirror backed windows, at narrow entrances and all exposed windows where it is desired to get the light on display and not on the pavement or in the eyes of the prospective customers. The same data and charts can be used as for installing No. 983.

Fig. 2 shows the distribution curve of the No. 922 with 100-watt Type C lamp.

017612 922 100 9 6½ 2¼H 10 65 3.50

Net packing charge is $0.75 for standard package. Packing on orders for other than standard package quantities will be charged extra, at cost.

ALBA REFLECTORS



Nos. 3417, 3427, 3430 and 3463

Alba Reflectors are made of a translucent glass, marble-like in appearance. They reflect very well, and, on account of the diffusive quality of the glass, transmit enough light to produce a uniform distribution of light. The shades are designed so that they may be easily cleaned, and are artistic. Made for use with all size tungsten and Mazda lamps.

FOR 25 AND 40-WATT LAMPS



Nos. 3419, 3424, 3429, 3446 and 3445

Trade No.	Mfrs. No.	Diameter Inches	Depth Inches	Size of Holder Inches	Std. Pkg.	Price per Doz.
091213	3417	6 5/16	3 3/4	2 1/4	12	$7.04
091195	3419	5 1/8	3 5/8	2 1/4	12	5.79
091196	3431	7 1/4	3 1/8	2 1/4	12	5.79
091197	3420	5 3/4	4 5/8	2 1/4	12	7.04
091198	3427	7 1/4	4 1/8	2 1/4	12	7.04
*091199	*3440	5 3/4	4 1/8	2 1/4	12	5.79
†091200	†3441	5 5/8	4 5/8	2 1/4	12	5.79

*No. 3440 is for use with 25-watt lamps only.

†No. 3441 is for use with 40-watt lamps only.

FOR 60-WATT LAMPS



Nos. 3431, 3432 and 3438

091201	3424	7 1/4	4 3/4	2 1/4	12	7.04
091202	3432	9	3 5/8	2 1/4	12	9.38
091203	3421	6 1/4	5 1/4	2 1/4	12	9.38
091204	3430	9	5 1/8	2 1/4	12	15.63
091205	3442	6	5 1/8	2 1/4	12	7.04

FOR 100-WATT LAMPS



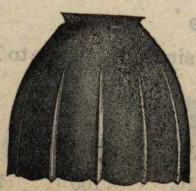
Nos. 3420, 3421 and 3428

091206	3429	8 1/4	6	2 1/4	8	15.63
091207	3438	11	4 3/8	2 1/4	12	15.63
091208	3428	6 5/8	5 3/4	2 1/4	12	9.38
091209	3443	6 3/4	5 3/4	2 1/4	12	9.38

FOR 150-WATT LAMPS

091210	3463	11	5 3/8	3 1/4	6	21.88
091214	3446	10 1/4	6 3/4	3 1/4	4	21.88
091215	3458	10 1/4	6 5/8	3 1/4	4	21.88

FOR 250-WATT LAMPS



Nos. 3440, 3441, 3442, 3443, 3458, 3465 and 3466

091211	3465	12	7 1/2	3 1/4	4	31.25
091216	3445	11	7	*2 1/2	4	21.88

FOR 400 AND 500-WATT LAMPS

091212	3466	14	9 1/4	**2 1/2	3	56.25

**Nos. 3445 and 3466 are used with M. E. G. Co Holder

REFLECTORS



Type TB—Pheno

PHENO REFLECTORS

Pheno is a pure white marble glass and produces a beautiful mellow white light with profuse illumination.

Type TB

Trade No.	Dimensions, Inches Width	Height	Size Holder Inches	Lamps Watts	Price per Doz.
016935	6	4⅝	2¼	40	$5.00
016936	7	5⅛	2¼	60	8.13
016937	8	6	2¼	100	9.13
016938	9½	7	3¼	150	16.25
016939	11	8¼	3¼	250	25.00
016940	13	9	4	500	52.50



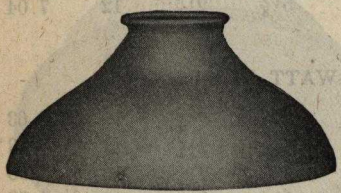
Type TF—Pheno

Type TF

016941	7	3⅜	2¼	40	6.00
016942	9	3⅞	2¼	60	11.50
016943	11	4⅝	2¼	100	16.50
016944	12½	5	3¼	150	25.00
016945	15	5¼	3¼	250	33.75

Type TS

42001	7	3	2¼	25	5.00
42002	9½	3⅞	2¼	60	8.00
42003	11¾	4⅝	2¼	100	13.75
42004	15	5¾	3¼	250	31.50
42005	20	6½	4	500	60.00



Type TS—Pheno

MARBO REFLECTORS

Marbo is a new glass of beautiful pearl-white appearance, and with polished surfaces.

Type 11017

Trade No.	Dimensions, Inches Width	Height	Size Holder Inches	Lamps Watts	Price per Doz.
42006	5¾	4⅜	2¼	40	$7.04
42007	6⅞	5¼	2¼	60	9.38
42008	8	5¾	2¼	100	15.63
42009	9¼	6¾	3¼	150	21.88
42010	11⅛	8	3¼	250	37.50



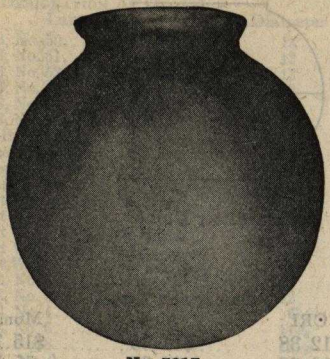
Type 11017—Marbo

Type 11169

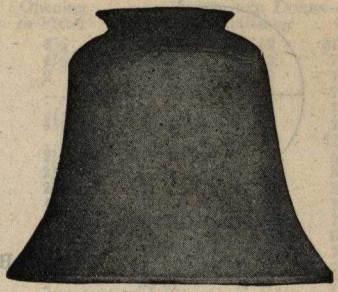
Type 11169 is a flat reflector, similar in shape to Type TS.

42011	6¾	3	2¼	25	5.80
42012	9	3⅞	2¼	60	9.38
42013	11¼	4⅜	2¼	100	15.63
42015	15	6	3¼	250	45.00

GLASS SHADES



No. 5817



No. 8983½

PLAIN BALL GLOBES

No. 5817 Plain

Trade No.	Diam. Inches	Holder Inches	Description	Price per Doz.
021585	6	3¼	Roughed inside	$4.73
021586	8	3¼	Roughed inside	8.33
021587	10	4	Roughed inside	17.33
021588	6	3¼	Straw opalescent	10.83
021589	8	3¼	Straw opalescent	14.10
021590	10	4	Straw opalescent	22.10



No. 10042½

CRYSTAL ROUGHED INSIDE SHADES

No. 8983½

Trade No.	Dimensions, Inches Diameter	Height	Holder Inches	Price per Doz.
079314	4	4¼	2¼	$3.00

No. 10042½

079316	3½	4¼	2¼	3.00

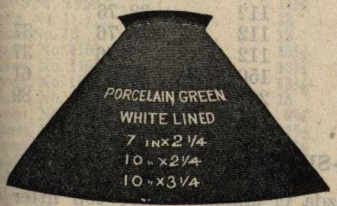


No. 255

FLAT OPAL SHADES

No. 255

021542	6	1¼	2¼	2.00
021543	8	1⅜	2¼	3.13
021544	10	1½	2¼	3.75
021545	12	2	2¼	5.38
021546	14	2⅛	3¼	7.00
021547	16	2¼	3¼	10.00
021548	18	2½	3¼	14.38
021549	20	2¾	3¼	22.50
021550	24	3	3¼	120.00



No. 258

DEEP CONE OPAL SHADES

No. 258, Plain

021554	7	4	2¼	5.00
021555	10	5	2¼	10.00

No. 258, Green-plated, White Inside

021557	7	4	2¼	10.00
021558	10	6	2¼	15.00



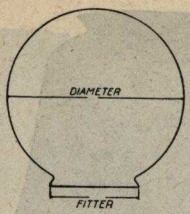
No. 11282

BEAR'S PAW HALF SHADES

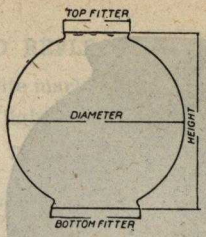
No. 11282

Trade No.	For 16 C. P. Lamps	Price per Doz.
021560	Opal-lined, green outside	$10.00

GLOBES FOR ORNAMENTAL STREET LIGHTING



Plain Ball Globe



Double Fitter Globe

PLAIN BALL GLOBES

Trade No.	Diam. Inches	Fitter Inches	Usual No. in Package	Approx. Wt., Lbs. per Pkg.	Price, per Dozen CRI	Alba	Monax
130489	10	4	12	80	$12.38	$14.35	$15.78
130490	10	5	12	80	12.38	14.35	15.78
130491	10	6	12	80	12.38	14.35	15.78
130492	12	4	12	100	19.87	23.63	25.99
130493	12	5	12	100	19.87	23.63	25.99
130494	12	6	12	100	19.87	23.63	25.99
130495	12	8	12	100	19.87	23.63	25.99
130496	14	6	8	112	29.92	33.76	37.14
130497	14	7	8	112	29.92	33.76	37.14
130498	14	8	8	112	29.92	33.76	37.14
130499	14	10	8	112	29.92	33.76	37.14
130500	16	6	8	150	50.06	55.69	61.26
130501	16	7	8	150	50.06	55.69	61.26
130502	16	8	8	150	50.06	55.69	61.26
130503	16	10	8	150	50.06	55.69	61.26
130504	18	6	8	205	75.00	81.00	89.10
130505	18	8	8	205	75.00	81.00	89.10
130506	18	10	8	205	75.00	81.00	89.10
130507	18	12	8	205	75.00	81.00	89.10
130508	20	8¼	1	70	230.63	243.00	267.30
130509	20	11	1	70	230.63	243.00	267.30

DOUBLE FITTER BALL GLOBES

Designed for use with Mazda C lamps, the top fitter which measures 6 inches being for the ventilator.

Usual package charges extra.

Trade No.	Diam. Inches	Fitter, Inches Bottom	Top	Height Inches	Usual No. in Pkg.	Approx. Wt., Lbs. per Pkg.	Price, per Dozen Alba	Monax
130510	12	6¼	5½	13⅜	12	100	$23.63	....
130511	14	6¼	5½	15½	8	112	33.76	....
130512	14	6	6	14	8	112	33.76	....
130513	14	8	6	13⅜	8	112	33.76	37.14
130514	14	6¼	5⅜	14⅝	8	112	33.76	37.14
130515	16	8	6	15⅝	8	150	55.69	61.26
130516	18	8	6	18⅝	8	205	81.00	89.10



Urn-shaped Globe and Ventilator

SPECIAL URN-SHAPED GLOBES

Designed for use with Mazda C lamps. Have top fitter to accommodate copper ventilator.

Trade No.	Diam. Inches	Fitter, Inches Bottom	Top	Usual No. in Pkg.	Approx. Wt., Lbs. per Pkg.	Price per Doz. Alba
109381	14	8	6	8	112	$39.49
109382	16	8	6	8	150	67.93

Waterproof Copper Ventilators

For use on Urn-shaped and Double Fitter Globes.

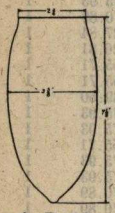
Trade No.	Size Inches	Price per Doz.
109383	6	$28.00

OUTER ARC LAMP GLOBES

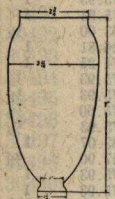
Designation of Globe Lamp Makers	Dimensions, Inches: Diameter	Depth	Top Opening or Fitter	Bottom Opening or Fitter	Price, per Dozen: Clear	Alabaster	Opal	Dozen in Std. Pkgs.
A-B, No. 50	13	11 7/8	8	4 7/8	$55.68	$83.52	$75.93	1
A-B, No. 51	12	11 5/8	8	4 7/8	55.68	83.52	75.93	1
A-B, No. 52	13	11 1/16	8	2	55.68	83.52	75.93	1
A-B, No. 57	13	12 1/16	8	...	55.68	83.52	75.93	1
A-B, No. 59	12	12	6	...	50.61	77.97	70.89	1
A-B, No. 64	8	7 5/16	4 1/8	4 1/8	18.60	27.84	27.84	1
*A-B, No. 66	12 13/16	12	13 1/4	...	98.19	139.47	126.81	1
Excello, No. 90	11	9 1/2	7	2 1/2	43.05	61.26	55.71	1
Excello, No. 175	11 1/8	9 3/4	8 3/16	2 7/8	43.05	61.26	55.71	1
Excello, No. 175-A	9 1/8	6 13/16	8	2 3/4	30.60	44.10	39.60	1
Fort Wayne, No. 3504	12	11 5/8	8	4 1/4	55.68	83.52	75.93	1
Fort Wayne, No. 5699	13	....	7 3/8	...	55.68	83.52	75.93	1
Fort Wayne, No. 5961	11	....	6 1/8	...	43.05	61.26	55.71	1
Fort Wayne, No. 6846	13	12 9/16	8 1/8	...	55.68	83.52	75.93	1
Fort Wayne, No. 11222	13	12 1/16	8	1 1/2	55.68	83.52	75.93	1
G-E, No.1	12	11 1/2	6	2	50.61	77.97	70.89	1
G-E, No. 3	12	12	5 7/8	2	50.61	77.97	70.89	1
G-E, No. 4	6 5/8	11 1/2	6 5/8	2 1/8	50.61	77.97	70.89	1/2
G-E, No. 5	11 1/16	11 9/16	6	...	50.61	77.97	70.89	1
G-E, No. 8	13 1/2	13	8	6 1/16	55.68	83.52	75.93	1
G-E., No. 9	13	13	6 1/16	...	55.68	83.52	75.93	1
G-E, No. 10	12 1/2	12 1/2	6	2	55.68	83.52	75.93	1
G-E, No. 11	13	12 1/2	8	...	55.68	83.52	75.93	1
G-E, No. 13	6 1/16	10 1/16	6 1/16	...	45.00	72.00	63.00	1/2
G-E, No. 14	12 13/16	12	13 1/4	3/8	98.19	139.47	126.81	1
G-E, No. 16	12 3/4	10 3/4	10 7/8	...	54.45	83.16	74 25	1
G-E, No. 21	12 3/8	6 3/8	10 3/4	1 7/16	55.68	83.52	75.93	1/3
G-E, No. 23	11 5/8	6 3/8	11	1 7/16	55.68	83.52	75.93	1/3
G-E, No. 24	11 7/16	5 5/8	12	...	54.00	83.16	75.60	1/2
G-E, No. 25	13 1/2	9 7/8	7 3/16	...	55.68	83.52	75.93	1/6
G-E, No. 26	11 1/8	13 1/4	8 1/8	1/2	62.76	91.38	83.07	1
G-E, No. 28	11 1/16	15 1/16	8 1/8	2 3/8	85.50	129.69	117.90	2/3
G-E, No. 29	12	10 13/16	7 7/8	3 1/8	55.68	83.52	75.93	1
G-E, No. 30	12	10 13/16	7 7/8	4 13/16	55.68	83.52	75.93	1
G-E, No. 31	12 1/2	12 1/2	7 3/4	4 13/16	55.68	83.52	75.93	1
G-E, No. 32	12	11 1/8	8 1/8	2 1/2	55.68	83.52	75.93	1
G-E, No. 33	12 1/8	11	9	4 1/16	55.68	83.52	75.93	1
G-E, No. 34	11 1/8	11	8 1/4	4	55.68	83.52	75.93	1
G-E, No. 37	16	14 13/16	9 1/4	9 7/16	.....	203.79	185.28	2/3
G-E, No. 39	13 1/4	12 7/16	8 1/4	8 7/16	.....	118.47	107.70	1
G-E, No. 40	14 1/8	14 7/8	13 1/4	9 7/16	112.98	146.52	133.20	2/3
G-E, No. 41	12 7/8	13 5/8	11 3/8	...	76.74	118.90	99.00	1
G-E, No. 42	12 7/8	13 5/8	11 3/8	...	76.74	188.90	99.00	1
G-E, No. 43	12	12	6	...	50.61	77.97	70.89	1
G-E, No. 44	13 1/2	13	6	8	55.68	83.52	75.93	1
G-E, No. 45	8	7 1/2	6 1/8	...	15.78	30.18	27.84	1
G-E, No. 47	11	9 1/2	7	2 1/2	43.05	61.26	55.71	1
G-E, No. 56	10 5/8	9 7/8	11 1/4	...	54.00	71.79	65.25	1
G-E, No. 58	11 13/16	6 3/8	11 13/16	6 1/4	57.60	83.16	75.60	1/2
G-E, No. 61	13 1/2	7 1/2	11 1/4	...	90.87	122.28	111.18	1
G-E, No. 81	11 1/2	8 3/4	7 3/4	2	54.00	71.79	65.25	1
G-E, No. 82	13 1/4	12 1/8	11 3/8	...	55.68	83.52	75.93	1
G-E, No. 83	9 3/4	11 1/16	7 3/4	2	54.00	71.79	65.25	1
G-E, No. 84	12 13/16	10 1/16	11	2	55.68	83.52	75.93	1
G-E, No. 85	13 13/16	16 1/16	13 3/8	...	114.54	157.50	143.19	2/3
G-E, No. 86	10	10	8 1/16	1 1/4	30.3¢	47.34	43.05	1
G-E, No. 87	12 1/2	11 5/8	9 3/16	...	54.00	83.16	75.60	1
Hamburger, Type N	11 1/2	10 7/8	8	2 1/16	50.61	77.97	70.89	1
Hamburger, Type S	11 3/4	10	7 1/4	1/16	50.61	77.97	70.89	1
Jandus, No. 1	13	13 1/4	4 3/8	...	55.68	83.52	75.93	1
Jandus, No. 16	12	12	6	...	50.61	77.97	70.89	1
Kiewert, No. 1101	13 1/4	11 1/2	8	6 1/8	55.68	83.52	75.93	1
Kiewert, No. 1102	13 1/4	11 5/8	7 7/8	5 13/16	55.68	83.52	75.93	1
Kiewert, No. 1103	13 1/8	15 1/8	8 1/8	4 11/16	57.60	83.16	75.60	2/3
Kiewert, No. 1104	15	17 1/2	7 3/4	4 3/4	114.54	157.50	143.19	2/3
Kiewert, No. 1106	9 3/4	11 5/8	....	2 3/8	50.61	77.97	70.89	1
Kiewert, No. 2202	11 5/8	9 3/4	7 1/16	2 3/8	50.61	77.97	70.89	1
Kiewert, No. 10351	9 3/8	5 1/4	8	...	30.60	44.10	39.60	1/2
Single T. H	12	12	8	4	50.61	77.97	70.89	1
Double Brush or T. H	12	12	8 1/2	5	50.61	77.97	70.89	1
W. E., Style K	14	....	7	...	78.48	111.42	101.28	2/3
W. E., Style S	12	12	7	...	50.61	77.97	70.89	1
§W. E., Aristo, Type T	7 3/4	9 5/8	7 3/4	...	64.80	.....	64.80	1
Hawthorne	9 1/2	7 3/4	10	2	37.38	.....	48.60	1
Wstghse, No. 27034	13 1/4	....	9 1/4	...	55.68	83.52	75.93	1
Wstghse, No. 37962	12 1/4	....	6	...	50.61	77.97	70.89	1
Wstghse, No. 38919	13 1/16	12 1/2	9 1/4	8 1/8	55.68	83.52	75.93	1
‡Wstghse, No. 133411	12 7/8	8	8 1/4	1/4	58.80	86.64	78.78	1
Wstghse, No. 66095	..	6 9/16	13 3/4	...	87.78	118.80	108.00	1/2
Wstghse, No. 162221	8 3/4	10 5/8	8 7/8	...	42.78	56.94	51.78	1
Wstghse, No. 162219	12 1/4	11 1/2	12 1/4	1/4	66.60	93.06	84.60	1
Wstghse, No. 185918	14	12 1/8	11 13/16	...	78.48	111.39	101.25	1
Wstghse, No. 185922	14 1/8	11 5/8	11 3/4	...	78.48	111.39	101.25	1
Wstghse No. 186320	14	12 5/8	11 13/16	...	76.74	108.90	99.00	1
Wstghse, No. 220258	12 1/2	11 3/8	9 1/2	...	54.45	81.66	75.25	1
Wstghse, No. 196345	16	14 3/4	11 1/8	11 1/8	.....	188.79	185.28	2/3
Wstghse, No. 118470	12 3/16	10	8 3/4	...	54.45	81.66	75.25	1
Wstghse, No. 202877	12 1/4	11 1/2	12 1/4	1/2	76.74	108.90	99.00	1

*No hole in bottom, No. 7529. ‡No. 7570, enameled top, $90.00 per dozen, list. §Salamander heat resisting glass.

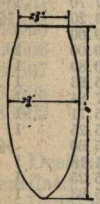
INNER ARC GLOBES



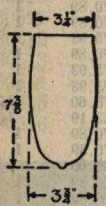
A. B. 14



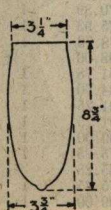
A. B. 15



A. B. 17



G. E. 36

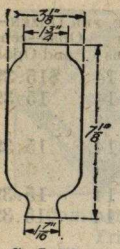


G. E. 39

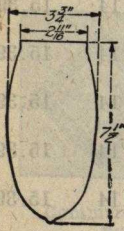
Style No.	Diam. Top	Diam. Bottom	Length	Cost of Packages 3 Doz.	6 Doz.	12 Doz.	Price, per Dozen Clear Globes	Opalescent and Opal
Adams-Bagnall Electric Co.								
13	2 1/2	...	6 1/2	$0.50	$0.60	$0.80	$16.14	$18.39
14	2 3/4	...	7 1/2	.60	.70	...	16.14	18.39
15	2 3/4	1 1/4	7	.60	.70	...	13.14	15.39
17	2 3/4	...	9	.60	.70	...	16.14	18.39
21	3 1/2	1 3/8	8	.70	...	...	18.75	21.00
23	3 1/8	3 1/8	8 5/8	.60	.70	...	18.75	21.00
24	3 3/32	3 3/32	8 7/16	.60	.70	...	18.75	21.00
*26	9	...	9 1/2	.90	...	...	45.00	.....
*28	9	...	7 15/16	.90	...	...	45.00	.....
American Arc Lamp								
696	3 1/8	...	7 1/4	.60	.70	...	16.14	18.39
703	3 1/8	...	8 3/8	.60	.70	...	16.14	18.39
...	2 11/16	...	7 27/32	.60	.70	.80	16.14	18.39
Belden-Larwin								
B191	3 3/8	...	7 5/8	.60	.70	...	16.14	18.39
B1-B191 1/2	3 3/8	...	7 3/8	.60	.70	...	16.14	18.39
Bergman								
1	2 3/8	1 3/8	5 3/4	.50	.60	.80	13.14	15.39
9	1 13/16	1 3/32	5 3/4	.50	.60	.80	13.14	15.39
11	1 13/16	1 13/32	6 3/8	.50	.60	.80	13.14	15.39
12	1 13/16	1 13/32	7	.50	.60	.80	13.14	15.39
Crouse Hinds Headlight								
Drg. 112	1 3/16	7/8	3 5/16	.50	.60	.80	13.14	15.39
Drg. 178	1 1/8	7/8	3 5/16	.50	.60	.80	13.14	15.39
Chicago Edison Co.								
2	1 13/16	1 13/32	6	.50	.60	.80	13.14	15.39
Diehl Manufacturing Co.								
A	1 7/8	1 7/8	6	.50	.60	.80	13.14	15.39
6	2	1 3/8	5 3/4	.50	.60	.80	13.14	15.39
Fort Wayne Electric Works								
B	1 7/8	1 3/16	6 1/2	.50	.60	.80	13.14	15.39
A	1 7/8	1 3/16	5 7/8	.50	.60	.80	13.14	15.39
85353	2 3/4	...	7 1/2	.60	.70	...	16.14	18.39
87905	3 7/16	...	8	.60	.70	...	16.14	18.39
General Electric Co.								
2	2	1 3/16	5 1/8	.50	.60	.80	13.14	15.39
3	2	1 3/16	6 1/2	.50	.60	.80	13.14	15.39
3-B	2	1 3/16	6 5/8	.50	.60	.80	13.14	15.39
4	2	1 3/16	4	.50	.60	.80	13.14	15.39
5	1 7/8	1 3/16	5 7/8	.50	.60	.80	13.14	15.39
7	2	1 3/16	7 1/2	.50	.60	.80	13.14	15.39
8	1 7/8	1 1/4	6 1/8	.50	.60	.80	13.14	15.39
3 1/2	2 13/16	1 3/16	6 1/2	.50	.60	.80	13.14	15.39
16	2 3/16	...	5 3/4	.50	.60	.80	16.14	18.39
23	2 3/8	1 3/16	6 1/2	.50	.60	.80	13.14	15.39
24	1	1	3 3/8	.50	.60	.80	13.14	15.39
25	2 3/8	1 3/16	5 7/8	.50	.60	.80	13.14	15.39
26	2 15/16	...	5 1/4	.50	.60	.80	16.14	18.39
36	3 1/8	...	7 7/16	.60	.70	...	16.14	18.39
39	3 3/8	...	8 13/16	.60	.70	...	16.14	18.39
46	2 3/4	...	7 1/2	.60	.70	...	16.14	18.39
49	2 3/4	...	8 7/8	.60	.70	...	16.14	18.39
*53	8 1/2	...	8	.90	...	...	45.00	.....
56	3 3/4	...	7 7/8	.60	.70	...	18.75	21.00
57 MP 342606	3 15/16	...	5 5/8	.80	...	...	22.50	24.39
*60	8 3/8	3 1/4	7 1/4	.90	...	...	45.00	.....
*64	8 3/8	3 1/8	7 5/8	.90	...	...	45.00	.....
67 MP 292132	3 7/8	...	6	.80	...	...	22.50	24.39
*73	8 1/4	...	11	1.00	...	...	48.75	.....
*75	8 3/8	...	8 3/4	.90	...	...	45.00	.....

*Made of heat resisting glass.

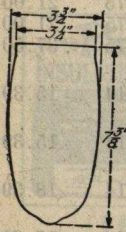
INNER ARC GLOBES



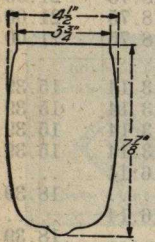
G. I. 16



G. I. 14



G. I. 15



G. I. 18

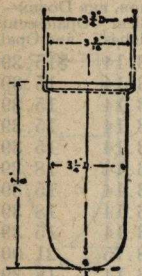


G. I. 19

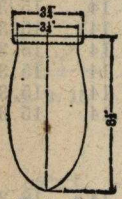
Style No.	Diam. Top	Diam. Bottom	Length	Cost of Packages 3 Doz.	6 Doz.	12 Doz.	Price, per Dozen Clear Globes	Opalescent and Opal
			General Incandescent Arc Light					
1	2⅜	1⅜	5¾	$0.50	$0.60	$0.80	$13.14	$15.39
3	1⅞	1¼	5½	.50	.60	.80	13.14	15.39
9	1 13/16	1 13/32	5¾	.50	.60	.80	13.14	15.39
11	1 13/16	1 13/32	6⅜	.50	.60	.80	13.14	15.39
12	1 13/16	1 13/32	7	.50	.60	.80	13.14	15.39
14	2¾	...	7½	.60	.70	...	16.14	18.39
2850	1 13/16	1 13/32	6	.50	.60	.80	13.14	15.39
15	3¼	...	7⅜	.60	.70	...	16.14	18.39
16	1 11/16	1 9/32	7⅛	.50	.70	.80	13.14	15.39
18	3 13/16	...	7⅞	.70	...	...	18.75	21.00
19	3 3/32	...	8⅛	.60	.70	...	16.14	18.39
17	2¾	...	4 11/16	.50	.60	.80	16.14	18.39
			Helios-Upton Co.					
2	2⅝	1⅛	5½	.50	.60	.80	13.14	15.39
3	2⅝	1⅛	6¾	.50	.60	.80	13.14	15.39
4	2⅝	1⅛	8	.60	.70	...	16.14	18.39
10	3⅛	...	8	.60	.70	...	16.14	18.39
M	1¾	1 5/16	5¾	.50	.60	.80	13.14	15.39
P	1¾	1¼	5 13/16	.50	.60	.80	13.14	15.39
P-2	1¾	1¼	5¾	.50	.60	.80	13.14	15.39
R	2½	1¼	7	.60	.70	...	13.14	15.39
T	1¾	1¼	7	.50	.60	.80	13.14	15.39
6½	2⅞	1¼	6½	.50	.60	.80	13.14	15.39
			Imperial					
8	3⅛	...	8⅛	.60	.70	...	16.14	18.39
A	2	1 3/16	5⅞	.50	.60	.80	13.14	15.39
B	2	1 3/16	6½	.50	.60	.80	13.14	15.39
			Jandus Electric Co.					
1	2⅜	1⅜	5¾	.50	.60	.80	13.14	15.39
6	2 13/16	1¼	6½	.50	.60	.80	13.14	15.39
8	1⅞	1¼	6⅛	.50	.60	.80	13.14	15.39
10	2⅞	1¼	6⅛	.50	.60	.80	13.14	15.39
11	3¼	...	7 9/16	.60	.70	...	16.14	18.39
12	2⅞	...	6	.60	.70	.80	16.14	18.39
13	3¼	...	8⅛	.60	.70	...	16.14	18.39
15	3⅝	...	7¼	.60	.70	...	16.14	18.39
17	3⅜	...	8¾	.60	.70	...	16.14	18.39
19	3⅜	...	7½	.60	.70	...	16.14	18.39
			Keystone Electric & Mfg. Co.					
4	3⅝	...	7½	.60	.70	...	16.14	18.39
			Kraushaar Lamp & Ref. Co.					
....	2	1⅛	5¼	.50	.60	.80	13.14	15.39
			Manhattan Electric Co.					
1	2⅜	1⅜	5¾	.50	.60	.80	13.14	15.39
2	2¾	...	7½	.60	.70	...	16.14	18.39
8	1⅞	1 16	6⅛	.50	.60	.80	13.14	15.39
9	1 13/16	1 13/32	5¾	.50	.60	.80	13.14	15.39
11	1 13/16	1 13/32	6⅜	.50	.60	.80	13.14	15.39
12 Old Type	2⅝	...	7½	.60	.70	...	16.14	18.39
12 New Type	2 11/16	...	7½	.60	.70	...	16.14	18.39
15	2⅝	1 16	6½	.50	.60	.80	13.14	15.39

* Made of heat resisting glass.

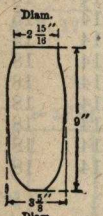
INNER ARC GLOBES



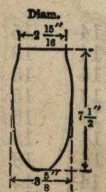
Style L



Style R



No. 35287



No. 35290

Style No.	Diam. Top	Diam. Bottom	Length	Cost of Packages 3 Doz.	6 Doz.	12 Doz.	Price, per Dozen— Clear Globes	Opalescent and Opal
....	$1\frac{1}{4}$	$1\frac{3}{16}$	$4\frac{1}{16}$	$0.50	$0.60	$0.80	$13.14	$15.39
....	$1\frac{1}{4}$	$1\frac{3}{16}$	$5\frac{1}{16}$	.50	.60	.80	13.14	15.39
Norwood								
....	$1\frac{7}{8}$	$1\frac{3}{16}$	$6\frac{1}{2}$	.50	.60	.80	13.14	15.39
Perkins								
110-volt	$2\frac{1}{4}$	$1\frac{7}{32}$	$5\frac{1}{2}$	.50	.60	.80	13.14	15.39
220-volt	$2\frac{1}{4}$	$1\frac{7}{32}$	$6\frac{1}{2}$	.50	.60	.80	13.14	15.39
Pioneer								
....	$1\frac{13}{16}$	$1\frac{13}{32}$	$5\frac{3}{4}$	.50	.60	.80	13.14	15.39
Pittsburgh Pioneer								
....	$1\frac{13}{16}$	$1\frac{13}{32}$	6	.50	.60	.80	13.14	15.39
Siemens-Haske								
5073	$1\frac{3}{4}$	$1\frac{11}{16}$	6	.50	.60	.80	13.14	15.39
St. Louis Headlight								
....	2	$1\frac{1}{8}$	$5\frac{1}{4}$	.50	.60	.80	13.14	15.39
Syracuse Arc Light Co.								
....	$1\frac{7}{8}$	$1\frac{1}{4}$	$6\frac{1}{8}$	.50	.60	.80	13.14	15.39
Sterling								
8	$1\frac{7}{8}$	$1\frac{1}{4}$	$6\frac{1}{8}$	.50	.60	.70	13.14	15.39
C. J. Toerring Co.								
1	$2\frac{5}{8}$	...	$6\frac{3}{4}$	.50	.60	.80	16.14	18.39
2	$2\frac{5}{8}$	...	8	.60	.70	...	16.14	18.39
3	$3\frac{1}{4}$	...	$8\frac{1}{8}$	.60	.70	...	18.75	21.00
4	$3\frac{1}{4}$	...	$8\frac{1}{2}$	.60	.70	...	18.75	21.00
Mogul	$7\frac{3}{4}$	...	10	.70	...	...	33.75	37.50
U. S. Headlight								
....	$1\frac{1}{4}$	$1\frac{1}{4}$	$4\frac{1}{8}$	.50	.60	.80	13.14	15.39
Wagenhals								
....	2	$1\frac{1}{8}$	$5\frac{1}{4}$	.50	.60	.80	13.14	15.39
Warner Arc Lamp								
5	$3\frac{3}{4}$	...	7	.60	.70	...	16.14	18.39
Western Electric Co.								
H	$1\frac{7}{8}$	$1\frac{3}{16}$	$6\frac{1}{8}$	.50	.60	.80	13.14	15.39
L	$3\frac{3}{4}$	...	$7\frac{7}{8}$	.60	.70	...	16.14	18.39
P	$3\frac{3}{4}$	...	$7\frac{3}{4}$	.70	...	...	18.75	21.00
Q	$3\frac{3}{4}$	...	$8\frac{3}{4}$	.80	...	...	18.75	21.00
R	$3\frac{3}{4}$	...	$8\frac{1}{8}$	.60	.70	...	18.75	21.00
Westinghouse								
6968	$1\frac{15}{16}$	$1\frac{3}{16}$	5	.50	.60	.80	13.14	15.39
7010	$1\frac{15}{16}$	$1\frac{1}{8}$	$7\frac{3}{8}$	.50	.60	.80	13.14	15.39
11368	$2\frac{3}{8}$	$1\frac{3}{16}$	6	.50	.60	.80	13.14	15.39
11457	$2\frac{3}{8}$	$1\frac{3}{16}$	$7\frac{3}{8}$	.50	.60	.80	13.14	15.39
27035	$2\frac{3}{4}$	...	$8\frac{1}{4}$	.60	.70	...	16.14	.....
30061	$2\frac{3}{4}$	...	$8\frac{1}{4}$	.60	.70	...	.....	18.39
35286	$2\frac{15}{16}$	...	9	.60	.70	...	16.14	.....
35287	$2\frac{15}{16}$	...	9	.60	.70	...	.....	18.39
35289	$2\frac{15}{16}$	...	$7\frac{1}{2}$	.60	.70	...	16.14	.....
35290	$2\frac{15}{16}$	...	$7\frac{1}{2}$	.60	.70	...	.....	18.39
109058	$1\frac{1}{4}$	$1\frac{3}{16}$	4	.50	.60	.80	13.14	15.39
110629	1	$1\frac{1}{8}$	4	.50	.60	.80	13.14	15.39
146279	$4\frac{5}{8}$	...	$8\frac{3}{8}$	.70	...	...	22.50	.....
146280	$4\frac{5}{8}$	...	$8\frac{3}{8}$	.70	...	...	.....	24.75
*185138-B	$8\frac{1}{16}$	...	$8\frac{1}{2}$	.90	...	...	45.00	.....
*187039	$6\frac{1}{4}$	...	$8\frac{13}{16}$	.60	...	...	45.00	.....
*190294-B	$8\frac{1}{16}$	...	$9\frac{1}{2}$	.90	...	...	45.00	.....
74645	$3\frac{5}{8}$	...	$7\frac{1}{2}$	.60	.70	...	16.14	.....
74646	$3\frac{5}{8}$	...	$7\frac{1}{2}$	.60	.70	...	.....	18.39
Zeco or Ziegler								
....	$1\frac{7}{8}$	$1\frac{1}{4}$	$6\frac{3}{4}$	.50	.60	.80	13.14	15.39

*Made of heat resisting glass.

INSULATING TAPES

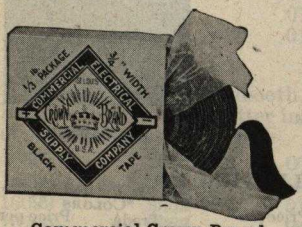


Commercial High Grade Friction Tape

COMMERCIAL HIGH GRADE FRICTION TAPE

High grade tape is made from the best quality of cloth fabric and is saturated with a preservative and adhesive compound.

Trade No.	Color	Width Inches	Pounds per Roll	Price per Lb.
100480	Black	¾	½	$0.80
100481	White	¾	½	.80



Commercial Crown Brand Friction Tape

COMMERCIAL CROWN BRAND FRICTION TAPE

Crown Brand tape is made from a good quality of cloth fabric and treated with a special adhesive compound. Where the demands call for a good tape at a low price Crown Brand is the tape to specify.

100482	.....	¾	⅓	.60

MANSON FRICTION TAPE

A high grade tape packed in tin boxes.

063047	Black	¾	½	1.20
063048	White	¾	½	1.20



P & B Waterproof Tape

P & B WATERPROOF TAPE

A tape especially adapted for line work. Will not vulcanize with heat or become defective by exposure or use, will not dry and crack or harden and is water, acid and alkali-proof. Packed in paper cartons.

063051	Black	¾	½	1.00

COMMERCIAL HIGH GRADE RUBBER TAPE

A rubber gum tape containing a large portion of pure rubber. It makes a perfect insulating compound which will not deteriorate. Packed in paper cartons.

100483	.....	¾	½	1.00



Commercial High Grade Rubber Tape

OKONITE RUBBER TAPE

A rubber tape of the highest class for making splices or joints which, when properly made, are impervious to moisture.

063052	Black	¾	½	1.00



Okonite Rubber Tape

ASBESTOS TAPE

A thin fireproof paper about .01 inch thick, made from specially selected asbestos fibers, used for wrapping both magnet and armature wire. Put up in coils about 6 inches in diameter and cut with smooth edges from ⅜ to 3 inches wide. Other widths up to 36 inches, specially to order.

100484	.....	....	....	.30

ARMATURE TAPE

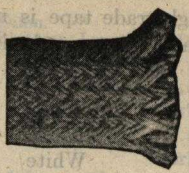
Friction on one side only. For winding armatures, field coils, repair work, etc.

Trade No.	Width Inches	Yards per Roll	Price per Lb.
100485	¾	72	$1.70

BELDEN COTTON SLEEVING AND TAPES



No. 040419



No. 040421



No. 040427

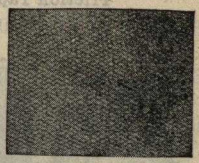
No. 040431



No. 040432



No. 040435



No. 040438

BRAIDED COTTON SLEEVING



No. 040441



No. 040443

Diam. Inches	Slips Over Size Wire	White Trade No.	White Price per Pound	*Colors Trade No.	*Colors Price per Pound
1/2	0000	040419	$1.35	094501	$1.75
7/16	000	040420	1.40	094502	1.80
3/8	00 and 0	040421	1.12	094503	1.52
5/16	1	040422	1.16	094504	1.56
9/32	2	040423	1.33	094505	1.73
1/4	3	040424	1.18	094506	1.58
7/32	4 and 5	040425	1.32	094507	1.72
3/16	6	040426	1.32	094508	1.72
5/32	7 and 8	040427	1.45	094509	1.85
1/8	9 to 11	040428	1.70	094510	2.10
3/32	12 to 15	040429	1.70	094511	2.10
1/16	16 to 20	040430	1.60	094512	2.00
1/32	21 and finer	040431	2.00	094513	2.40

*In ordering, specify color desired.

PLAIN LINEN TAPE



No. 040444

Trade No.	Width Inches	Thickness Inches	Price, per Gross Yds.
040432	1/2	.007	
040433	3/4	.007	
040434	1	.007	

EXTRA LINEN TAPE

040435	1/2	.007	
040436	3/4	.007	
040437	1	.007	

COMMON COTTON TAPE

040438	1/4	.011	
040439	1/2	.011	
040440	3/4	.011	

STAR TAPE

040441	3/4	.013	
040442	1	.013	

SILK TAPE

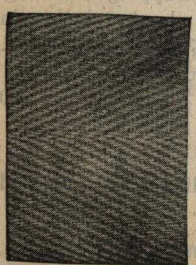
040443	7/16	.005	

STAY BINDING

040444	1 1/4	.011	
040445	1 1/2	.011	

NON-ELASTIC WEB

040446	1/2	.027	
040447	3/4	.027	
040448	1	.027	
040449	1 1/4	.027	



No. 040446

Prices Quoted upon Application

INSULATING AND FRICTION PAPER

RED ROPE PAPER

Red Rope Paper is manufactured from an all hemp stock, free from pinholes and is guaranteed to contain no wood pulp. The coloring pigment is carefully selected and is free from deleterious matter.

Trade No.	Mfrs. No.	Thickness Inches	Width of Roll, In.	Approx. Weight, Pounds Per Roll	Per 100 Sq. Yds.	Per Sheet	Price per Lb.
16690	2629	.005	36	100	27	....	$0.30
16691	2630	.010	36	100	47	....	.30
16692	2631	.015	36	100	69	....	.30

CEMENT ROPE PAPER

Cement Rope Paper is an uncolored, highly finished hemp rope stock paper, especially recommended for strength and freedom from pinholes.

16693	2635	.005	36	100	19	....	.30
16694	2637	.007	36	100	27	....	.30
16695	2638	.010	36	100	38	....	.30
16696	2640	.015	36	100	57	....	.30

FULLERBOARD OR PRESSBOARD

Fullerboard is a smooth, tough, dense, yellow insulating board, more pliable and not as hard as fiber, and a better insulator. It can be furnished in rolls in thicknesses up to .017, at slight increase in prices.

16697	2650	.008	....	....	....	.46	.25
16698	2651	.010	....	....	....	.58	.25
16699	2652	.012	....	....	....	.74	.25
16700	2653	.015	....	....	....	.83	.25
16701	2654	.017	....	....	....	.95	.25
16702	2655	.020	....	....	....	1.10	.25
16703	2656	.032	....	....	....	2.00	.25

Fullerboard is furnished in sheets approximately 32x36 inches.

FISH PAPER

Fish Paper is somewhat similar to hard fiber, but is a much better insulator and has greater flexibility. High temperatures do not affect it to the same extent as they do other insulating papers.

16704	2670	.005	46	25	28	....	.50
16705	2671	.007	46	25	38	....	.50
16706	2672	.010	46	25	53	....	.50
16707	2673	.015	46	25	88	....	.50
16708	2674	.020	....	....	....	1.42	.50
16709	2675	.025	....	....	....	1.90	.50
16710	2676	1/32	....	....	....	2.25	.50

Nos. 2674, 2675 and 2676 are furnished in sheets approximately 36x48 inches.

HORN FIBER

Horn Fiber is not chemically treated. It is more flexible than ordinary hard fiber; more ductile and better for slot insulation.

16711	2692	.005	42	150	21	....	.48
16712	2693	.010	42	150	50	....	.48
16713	2694	.015	42	150	60	....	.45
16714	2695	.020	42	150	100	....	.45
16715	2696	.025	42	150	112	....	.45

CROCUS CLOTH

Trade No.		Price per Ream
063207	In sheets 9x11 inches	$26.50

SAND PAPER

In Sheets 8¾x10½ Inches

Trade No.	Mfrs. No.	Price per Ream*
063183	00	$4.25
063184	0	4.25
063185	½	4.25
063186	1	4.75
063187	1½	4.75
063188	2	4.75
063189	2½	5.25
063190	3	5.25

*A ream is 480 sheets.

EMERY PAPER

In Sheets 9x11 Inches

Trade No.	Mfrs. No.	Price per Ream
063191	00	$10.25
063192	0	10.25
063193	½	10.25
063194	1	12.00
063195	1½	12.75
063196	2	13.50
063197	2½	15.50
063198	3	18.25

EMERY CLOTH

In Sheets 9x11 Inches

Trade No.	Mfrs. No.	Price per Ream
063199	00	$26.50
063200	0	26.50
063201	½	26.50
063202	1	28.50
063203	1½	29.75
063204	2	30.75
063205	2½	33.00
063206	3	35.25

INSULATING MATERIAL

VULCANIZED FIBER

Red, Black or Gray Sheets

Trade No.	Thickness Inches	Price per Lb.	Trade No.	Thickness Inches	Price per Lb.	Trade No.	Thickness Inches	Price per Lb.
42504	.005	$1.20	105185	.075	$0.70	5423	7/8	$0.98
5414	.010	1.00	105186	.100	.70	5424	1	1.12
5415	.015	.80	5418	1/8	.70	105188	1 1/8	1.40
42505	.020	.70	42491	3/16	.72	5425	1 1/4	1.70
105181	.025	.70	5419	1/4	.72	105189	1 3/8	2.10
5416	.030	.70	105187	5/16	.72	105190	1 1/2	2.60
105182	.035	.70	42492	3/8	.72	105191	1 5/8	3.20
105183	.040	.70	5420	1/2	.76	105192	1 3/4	4.20
105184	.045	.70	42494	5/8	.82	105193	1 7/8	6.20
5417	.060	.70	5422	3/4	.88	105194	2	8.20

Intermediate sizes at price of next thinner, except that on sizes from 1/8-inch and up a variation of .015 inch or less will not be considered intermediate, and will take the price of the nearest standard thickness. Extra charge for cutting.

Approximate Weight of Sheets

Thickness Inches	Weight Pounds	Thickness Inches	Weight Pounds	Thickness Inches	Weight Pounds	Thickness Inches	Weight Pounds	Thickness Inches	Weight Pounds
.005	.8	.035	5.6	1/8	20	5/8	100	1 3/8	215
.010	1.6	.040	6.4	3/16	30	3/4	120	1 1/2	235
.015	2.4	.045	7.2	1/4	40	7/8	138	1 5/8	250
.020	3.2	.060	9.6	5/16	50	1	155	1 3/4	275
.025	4.	.075	12.	3/8	60	1 1/8	175	1 7/8	290
.030	4.8	.100	16.	1/2	80	1 1/4	195	2	315

Approximate Size of Sheets

.005 to .120 inch thick, 48x80 inches; 1/8 to 3/4 inch thick, 44x70 inches; 13/16 to 2 inches thick, 46x76 inches.

We can also furnish fiber up to .025 inch thick, in rolls about 46 inches wide.

Red, Black or Gray Rod

Trade No.	Diameter Inches	Price per Ft.	Trade No.	Diameter Inches	Price per Ft.	Trade No.	Diameter Inches	Price per Ft.
42495	3/16	$0.30	06726	11/16	$1.00	42499	1 3/8	$10.00
06719	1/4	.30	06727	3/4	1.30	06731	1 1/2	16.00
06720	5/16	.32	42496	13/16	1.60	42500	1 5/8	20.00
06721	3/8	.36	06728	7/8	2.00	42501	1 3/4	30.00
06722	7/16	.44	42497	15/16	2.50	42502	1 7/8	50.00
06723	1/2	.56	06729	1	4.00	42503	2	70.00
06724	9/16	.70	42498	1 1/8	6.00	....	....	....
06725	5/8	.80	06730	1 1/4	8.00	....	....	....

Intermediate sizes take list of next larger.

Tube

Trade No.	Inside Diam., In.	Price, per Foot: 1/16-in. Wall	3/32-in. Wall	1/8-in. Wall	5/32-in. Wall	3/16-in. Wall	1/32-in. Wall	1/4-in. Wall
06733	1/4	$0.20	$0.28	$0.36	$0.44	$0.52	....	....
06734	3/8	.22	.32	.42	.52	.62	....	....
06735	1/2	.24	.36	.48	.60	.72	.84	.96
06736	5/8	.28	.42	.56	.70	.84	.98	1.12
06737	3/4	.32	.48	.64	.80	.96	1.12	1.28
06738	1	.40	.60	.80	1.00	1.20	1.40	1.60
06739	1 1/4	.48	.72	.96	1.20	1.44	1.68	1.92
06740	1 1/2	.56	.84	1.12	1.40	1.68	1.96	2.24

Prices for intermediate and larger sizes quoted on application.

ASBESTOS PAPER

Trade No.	Thickness Inches	Wt., Lbs. per 100 Ft.	Price per Lb.	Trade No.	Thickness Inches	Wt., Lbs. per 100 Ft.	Price per Lb.
063221	1/32	16	$0.12	063223	3/32	45	$0.12
063222	1/16	30	.12	063224	1/8	60	.12

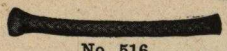
In rolls 36 inches wide, 100 pounds each.

ASBESTOS SHEET MILLBOARD

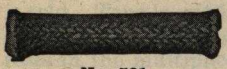
In Sheets 40x40 Inches

Trade No.	Thickness Inches	Wt., Lbs. per Sheet	Price per Lb.	Trade No.	Thickness Inches	Wt., Lbs. per Sheet	Price per Lb.
063225	1/32	2	$0.20	063230	3/16	12	$0.20
063226	3/64	3	.20	063231	1/4	14	.20
063227	1/16	4	.20	063232	3/8	23	.20
063228	3/32	6	.20	063233	1/2	27	.20
063229	1/8	8	.20	.....	....	....	....

ASBESTOS SPECIALTIES



No. 516



No. 521

J-M ASBESTOS BRAIDED TUBING

Pure and Commercially Pure

This tubing is largely used for insulating conductor wires of arc lamps and for covering electrical wires where superior fireproof protection is required. This material is extremely flexible, can easily be made impervious to moisture, and is permanently durable.

Trade No.	No. of Tubing	To Fix over Wire B. & S. Ga.	Approx. O. D. of Tubing Inches	Approx. No. of Lineal Ft. to Pound	Price per Lb.	Trade No.	No. of Tubing	To Fix over Wire B. & S. Ga.	Approx. O. D. of Tubing Inches	Approx. No. of Lineal Ft. to Pound	Price per Lb.
50525	514	17	1/8	80	....	045931	519	5	1/4	47	....
045928	516	17	1/8	85	....	045932	520	4	5/16	40	....
045929	517	10	5/32	75	....	045933	521	2	3/8	29½	....
045930	518	8	3/16	63	....	045934	522	0	1/2	18	....

J-M ASBESTOS YARN

J-M Asbestos Yarns can be furnished for all uses: Packing, flexible metallic tubing, braiding over wire, sewing twine, incandescent mantles, spark plugs and all other purposes where a heat-resisting or fireproof material is required.

Note that yardage given below is on single ply; the yarns are also furnished regularly in two, three and four plies.

Trade No.	Mfrs. No.	Approx. No. of Yds. per Lb. Single Ply	Purity	Price per Lb.	Trade No.	Mfrs. No.	Approx. No. of Yds. per Lb. Single Ply	Purity	Price per Lb.
50526	4	400	Pure	....	50537	516	1600	5%	....
50527	8	800	Pure	....	50538	524	2400	5%	....
50528	10	1000	Pure	....	50539	532	3200	5%	....
50529	12	1200	Pure	....	50540	1004	400	10%	....
50530	16	1600	Pure	....	50541	1008	800	10%	....
50531	20	2000	Pure	....	50542	1010	1000	10%	....
50532	504	400	5%	....	50543	1012	1200	10%	....
50533	508	800	5%	....	50544	1014	1400	10%	....
50534	510	1000	5%	....	50545	1016	1600	10%	....
50535	512	1200	5%	....	50546	1024	2400	10%	....
50536	514	1400	5%	....	50547	1032	3200	10%	....

J-M ASBESTOS LISTING OR WOVEN TAPE

Woven, selvage-edged tape furnished regularly either absolutely pure or commercially pure, in widths from ½ inch to 4 inches and upward, and in thicknesses of from .015 inch to 3/32 inch.

Fine listing, .015 inch to .025 inch thick, commercially pure, for winding armatures, wrapping small electrical wires or wherever a thin asbestos insulation is required.

Heavy listing, both commercially and absolutely pure, used for wrapping heavy cables in power plants to prevent spread of flames in case of short-circuiting.

Furnished in widths of ½, ⅝, ¾, ⅞, 1, 1¼, 1½, 1¾, 2, 2¼, 2½ and 3 inches.

No.	Quality	Thickness	No. Yards* Per Pound	No.	Quality	Thickness	No. Yards* Per Pound
91	Pure	1/16	12	573	5%	1/32	25
591	5%	1/16	13	1073	10%	1/32	25
1091	10%	1/16	14	64	Pure	.025	35
82	Pure	3/64	18	564	5%	.025	35
582	5%	3/64	19	1064	10%	.025	35
1082	10%	3/64	19	.020	5%	.020	40
73	Pure	1/32	24	.015	5%	.015	50

*Approximate number of yards per pound to 1 inch width.

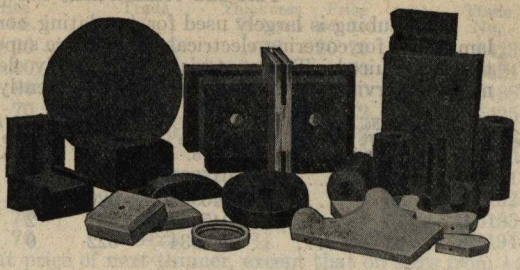
J-M FIBROID ASBESTOS PAPER TAPE

Fibroid asbestos ribbon or tape is a thin fireproof paper about .008 to .01 inch thick, made from specially selected asbestos fibers, and is used for wrapping both magnet and armature wires. A roll 1 inch wide weighs about 1 pound and contains 300 feet.

Trade No.	Mfrs. No.		Price per Lb.
50523	1531	.....	....

Prices Quoted on Application

J-M TRANSITE ASBESTOS WOOD



J-M Transite Asbestos Wood is the most adaptable material for panels and moldings, office partitions in all cases, especially where absolutely fireproof construction is necessary. It can also be made into fireproof receptacles for oily and other waste in factories, for filing cabinets, document boxes for the protection of valuable papers, etc. It can be used for cable ducts, pipe conduits, also as a lining for elevator and dumb-waiter shafts, fireplaces, etc. Can be made into many special molded shapes, such as sadiron rests, heat-proof handles for kitchen utensils, etc. Also valuable for smokestacks for chemical factories, laboratories and engine houses, hoods over cooking ranges, blacksmith forges, and for fire stops between floors, laying out heated materials, glassware, etc.

J-M Transite Asbestos Wood is capable of taking a high polish; and considering its fireproof qualities, its cost finished, compared with the cost of hard woods or wood veneered, is not excessive. It can be finished in any graining or color desired, by any painter or wood grainer. Its cost compares favorably with marble and slate, is easier and cheaper to apply, and there is less loss from breakage.

J-M Transite Asbestos Wood is adapted to general forms of construction where ordinary wood has been used and where absolutely fireproof structures are desired. It is particularly recommended for electric cars, roofing, sheathing, flooring, fireproof partitions, fire doors, window casings, wainscoting, baseboards, fireproof moldings, ceilings, portable houses and garages, fireproof cabinets, boxes and receptacles, acid and other tank linings.

It is as readily applied to metal as to wooden frame construction.

For electrical purposes where the material is intended to combine high electrical insulation and fireproof properties, we furnish it in a special black finish known as J-M Ebony Asbestos Wood. The use of this wood in the electrical field is particularly recommended for switchboards, panel boards, switch and fuse bases, insulating barriers, duct linings, car floor linings, electric heating insulation, etc.

Another distinctive advantage of J-M Ebony Asbestos Wood over slate, marble or fiber, is the fact that it can be machined almost as easily as ordinary wood. On the other hand, the shaping of slate, marble and fiber for electrical purposes is difficult, slow and expensive.

PLAIN

Standard Sheets, 36x48, 42x48 and 42x96 Inches

Trade No.	Mfrs. No.	Thickness Inches	Wt., Lbs. per Sq. Ft.	Price per Sq. Ft.
045935	16589	1/8	1.41	$0.15
045936	16590	3/16	2	.23
045937	16591	1/4	2.65	.30
045938	16592	5/16	3.28	.38
045939	16593	3/8	3.91	.45
045940	16594	7/16	4.41	.53
045941	16595	1/2	4.70	.60
045942	16596	9/16	6	.70
045943	16597	5/8	6.7	.75
045944	16598	3/4	7.6	.85
045945	16599	7/8	8.75	.90
045946	16600	1	9.93	1.00
045947	16601	1 1/4	12.8	1.10
045948	16602	1 1/2	14	1.20
045949	16603	1 3/4	16.8	1.40
045950	16604	2	19.7	1.50

EBONY

Standard Sheets, 36x48 and 42x96 Inches

Trade No.	Mfrs. No.	Thickness Inches	Wt., Lbs. per Sq. Ft.	Price per Sq. Ft.
045951	16605	1/8	1.5	$0.60
045952	16606	3/16	2.8	.80
045953	16607	1/4	2.75	.80
045954	16608	5/16	3.5	1.00
045955	16609	3/8	4.25	1.00
045956	16610	7/16	4.5	1.30
045957	16611	1/2	5.5	1.30
045958	16612	9/16	6.2	1.60
045959	16613	5/8	6.9	1.60
045960	16614	3/4	7.9	1.70
045961	16615	7/8	9	1.80
045962	16616	1	10.4	1.90
045963	16617	1 1/4	12.9	2.10
045964	16618	1 1/2	15	2.90
045965	16619	1 3/4	17.8	3.00
045966	16620	2	20.7	4.30

When ordering, specify size of sheet.

INSULATING MATERIAL

LINOTAPE—VARNISHED CAMBRIC

Linotape is the registered trade mark name under which Empire Oiled Cloth in tape form is sold. Tape is cut in any width from ⅜ inch and above, from all grades of Empire material.

Linotape is an insulating tape of the highest order. Its virtue, as with Empire material rests in the multiplication of oxidized oil films on its surfaces. It has come into general use as the insulating medium for cables of all descriptions, and is used extensively in coil winding, cable splicing, bus bars and all high tension work.

It is furnished in rolls guaranteed to contain 72 lineal yards, each roll coated on the edges with paraffin to exclude moisture, and both straight and bias are continuous in the roll.

LINOTAPE—BIAS CUT

Width Inches	No. 72—Thickness, .007 In. Trade No.	Mfrs. No.	Price per 144 Yds.	No. 10—Thickness, .010 In. Trade No.	Mfrs. No.	Price per 144 Yds.	No. 125—Thickness, .012 In. Trade No.	Mfrs. No.	Price per 144 Yds.
⅜	041565	1600	$1.25	041577	1630	$1.35	041585	1665	$1.65
½	041566	1601	1.45	041578	1631	1.55	041586	1666	1.85
⅝	041567	1602	1.75	041579	1632	1.85	041587	1667	2.20
¾	041568	1603	2.05	041580	1633	2.15	041588	1668	2.55
⅞	041569	1604	2.35	041581	1634	2.45	041589	1669	2.90
1	041570	1605	2.60	041582	1635	2.75	041590	1670	3.25
1¼	041571	1606	3.25	041583	1636	3.45	041563	1671	4.05
1½	041572	1607	3.90	041584	1637	4.15	041564	1672	4.90

LINOTAPE—LENGTHWISE CUT

	No. L—Thickness, .007 In.			No. B—Thickness, .010 In.			No. N—Thickness, .012 In.		
⅜	041362	2333	1.15	041354	2343	1.25	041575	2363	1.50
½	041363	2334	1.35	041355	2344	1.45	041576	2364	1.70
⅝	041364	2335	1.60	041356	2345	1.70	16658	2365	2.05
¾	041365	2336	1.85	041357	2346	1.95	16659	2366	2.35
⅞	041366	2337	2.10	041358	2347	2.25	16660	2367	2.70
1	041367	2338	2.35	041359	2348	2.50	16661	2368	3.00
1¼	041573	2339	2.95	041360	2349	3.15	16662	2369	3.75
1½	041574	2340	3.55	041361	2350	3.80	16663	2370	4.50

Prices of widths greater than 1½ inches are proportionate to price of 1 inch width. In addition to tapes listed above any width of any thickness of Empire Cloth will be cut to order, provided order amounts to multiple of 72 square yards.

EMPIRE OILED PAPER

The papers forming the bases all possess the greatest tensile strength consistent with their thickness and have been selected for their uniformity of thickness, and freedom from deleterious chemicals such as sulphite, etc. The oil films with which they are coated are of exactly the same nature as the films on Empire Cloths, Linen, etc.

Special attention is called to the condenser papers which, on account of their extreme thinness and high tensile strength, are giving great satisfaction to the manufacturers of induction coils, and other delicate work. The thicker papers have been selected for their great tensile strength, density and evenness of texture.

Furnished in rolls 36 inches wide, containing 25 or 50 yards, or in sheets 36x36 inches.

Trade No.	Mfrs. No.	Quality of Raw Fabric	Thickness Inches	Thickness MM.	Approx. Thickness Oil Films Inches	Approx. Dielectric Strength per .001 In.	Price per Yd
16664	101	Condenser	.0015	0.038	.0005	1740	$0.28
041338	102	Condenser	.002	0.051	.001	1700	.30
041339	103	Condenser	.003	0.076	.001¾	1460	.32
041340	104	Kraft	.004	0.102	.002	1350	.28
16665	135	Express	.0045	0.115	.0015	1150	.22
041341	105	Gray Rope	.005	0.127	.002	1240	.30
041342	106	Bond	.005½	0.14	.002½	1250	.40
041343	107	Red Rope	.007	0.178	.002	1150	.38
041344	109	Gray Rope	.009	0.228	.004	1070	.42
041345	110	Express	.010	0.254	.005	980	.45
041346	1111	Fullerboard	.011	0.279	.004	800	.47
041347	1113	Cement Rope	.013	0.330	.004	810	.52
16666	1114	Fullerboard	.014	0.355	.003	785	.68
16667	115	Red Rope	.015	0.381	010	1000	.70
16668	118	Cement	.018	0.457	.003	790	.65

INSULATING MATERIAL

EMPIRE OILED CLOTHS

The fabric base of Empire Oiled Cloth is specially finished and closely woven cambric made from long fibre cotton, special attention being paid to its tensile strength. The coating consists of two or more films of pure oxidized oil which is prepared under a special process. The number of each grade, as will be noticed, gives an indication of the thickness.

For Empire Cloth cut into tape, see under Linotape.

Trade No.	Mfrs. No.	Quality of Raw Fabric	Thickness Inches	Thickness MM.	Approx. Thickness Oil Films Inches	Approx. Dielectric Strength Before Baking per .001 Inch	Approx. Dielectric Strength After Baking 48 Hours per .001 Inch	Price per Yd.
041327	4	Cambric	.004	0.102	.001	1400	1470	$0.56
041328	5	Cambric	.005	0.127	.001	1080	1250	.55
041348	50	Cambric	.005	0.127	.001	900	1092	.48
041329	500	Cambric	.005	0.127	.001	980	1080	.44
041330	7	Cambric	.007	0.178	.003	1171	1470	.60
041349	70	Cambric	.007	0.178	.002	945	1030	.50
041335	700	Cambric	.007	0.178	.0025	1070	1080	.45
041331	8	Cambric	.008	0.203	.003	1030	1210	.58
041350	80	Cambric	.008	0.203	.003	970	1150	.52
041336	800	Cambric	.008	0.203	.0035	1000	1270	.48
041332	10	Cambric	.010	0.254	.0045	1100	1166	.62
041351	100	Cambric	.010	0.254	.005	1000	1130	.56
041337	1000	Cambric	.010	0.254	.0055	1080	1210	.52
041333	12	Cambric	.012	0.305	.0065	965	1230	.72
041352	120	Cambric	.012	0.305	.007	1020	1140	.67
16679	1200	Cambric	.012	0.305	.0075	1010	1060	.62
041334	15	Cambric	.015	0.381	.0095	1020	1240	.90
041353	150	Cambric	.015	0.381	.010	1060	1220	.85
16689	1500	Cambric	.015	0.381	.0105	1050	1080	.78

EMPIRE OILED CANVAS AND DUCK

Nos. 155 and 16 are made on fabric bases that have been specially finished to insure smooth and even coating of the oil. Nos. 200 and 300 duck have great resistance to mechanical wear and imperviousness to moisture, but do not have the same smooth surface as other cloths.

16680	155	Canvas	.015	0.381	.007	600	740	.80
16681	16	Canvas	.016	0.406	.005	765	730	.85
16682	200	Duck	.020	0.508	....	....	....	.85
16683	300	Duck	.030	0.762	....	....	....	1.20

EMPIRE OILED LINEN

For purposes of insulation linen has no special advantage over cotton, except that of resisting a slightly higher voltage for a given thickness. Only one grade is made, the base being an imported Irish linen coated with double films of special oxidized Empire Oil, and the fabric is thoroughly impregnated.

16684	6	Linen	.006	0.152	.002	1258	1373	1.40

EMPIRE OILED SILK

Empire Oiled Silk has for a base a closely woven fabric of pure silk. It is an excellent insulation where a material possessing very high insulating qualities combined with extreme thinness and great flexibility is demanded. Two grades in two thicknesses are manufactured.

16685	44	Silk	.004	0.102	.00175	1230	1330	1.20
16686	440	Silk	.004	0.102	.00175	1350	1450	1.60
16687	66	Silk	.006	0.152	.00375	1100	1200	1.35
16688	660	Silk	.006	0.152	.00375	1230	1330	1.70

Furnished in rolls of 25, 50 and 100 yards, or in any length desired. Any width cut to order, provided order amounts to multiples of 72 square yards.

INSULATING MATERIAL

Nos. 1 AND 11 INDIA MICANITE PLATE

For Molding

No. 1 India Micanite Plate is made of very thin films of India mica cemented together with pure shellac and carefully surfaced to a uniform thickness. When heated it becomes flexible, and in that condition can readily be formed into such shapes as conical and band rings for commutators, troughs for armature slots, spools for magnets, and the thinner sheets rolled into tubes. Upon cooling it regains its rigidity. It is also used for flat work where high temperature is not a factor, such as transformer insulation, etc.

It is not intended for insulation between the copper bars of commutators, and must not be used for that purpose.

No. 11 India Micanite Plate is made of the same quality of India mica films and shellac as that used in the No. 1 plate, but is not quite as exact to thickness. It becomes flexible when heated, is readily molded into form, and is suitable for all general purposes where a slight variation in thickness is permissible, except commutator segments. It is not intended for insulation between the copper bars of commutators.

Thickness Inches	Approx. Lbs. per Sheet	Aver. Punct. Voltage	No. 1 Trade No.	No. 1 Mfrs. No.	No. 1 Price per Lb.	No. 11 Trade No.	No. 11 Mfrs. No.	No. 11 Price per Lb.
.010	.503	9540	041466	1200	$2.50	041514	1218	$2.15
.015	.748	14310	041467	1201	2.50	041515	1219	2.15
.020	.946	19080	041468	1202	2.50	041516	1220	2.15
.025	1.21	23850	041469	1203	2.10	041517	1221	2.00
.030	1.53	28620	041470	1204	2.10	041518	1222	2.00
1/32	1.64	29765	041471	1205	2.10	041519	1223	2.00
.035	1.68	33390	041472	1206	2.10	041520	1224	2.00
.040	2.17	38160	041473	1207	2.10	041521	1225	2.00
.045	2.25	42930	041474	1208	2.10	041522	1226	2.00
3/64	2.42	44645	041475	1209	2.10	041523	1227	2.00
.050	2.64	47700	041476	1210	2.10	041524	1228	2.00
1/16	3.32	59625	041479	1213	2.10	041527	1231	2.00
3/32	4.92	89390	041482	1216	2.10	041530	1234	2.00
1/8	6.22	119250	041483	1217	2.10	041531	1235	2.00

No. 1 plate, in standard size 18x36-inch sheets, can be furnished of any special thickness at the following prices: .025 inch or over, $2.10 per pound; .024 inch or under, $2.50 per pound.

No. 11 plate, in standard size 18x36-inch sheets, can be furnished of any special thickness at following prices: .025 inch or over, $2.00 per pound; .024 inch or under, $2.15 per pound.

Sheets of special size or shape, at slight increase over above prices.

Nos. 2 AND 22 INDIA MICANITE PLATE

For Commutator Segment Insulation

No. 2 India Micanite Plate is made of very thin films of India mica cemented together with the smallest possible amount of pure shellac, and carefully surfaced to a uniform thickness. This plate is specially made to be cut into segments for insulating copper bars of commutators, and cannot be molded.

No. 22 India Micanite Plate is made of the same quality of India mica films and shellac as used in the No. 2 plate. This plate differs from No. 2 only in that the variation in thickness is not confined to such close limits. In practice it gives admirable service for commutator bar insulation, but cannot be molded.

			No. 2			No. 22		
.010	.567	9550	041484	1236	2.85	041532	1254	2.60
.015	.85	14325	041485	1237	2.85	041533	1255	2.60
.020	1.13	19100	041486	1238	2.85	041534	1256	2.60
.025	1.41	23875	041487	1239	2.35	041535	1257	2.15
.030	1.70	28650	041488	1240	2.35	041536	1258	2.15
1/32	1.76	29800	041489	1241	2.35	041537	1259	2.15
.035	1.98	33425	041490	1242	2.35	041538	1260	2.15
.040	2.27	38200	041491	1243	2.35	041539	1261	2.15
.045	2.55	42975	041492	1244	2.35	041540	1262	2.15
3/64	2.65	44695	041493	1245	2.35	041541	1263	2.15
050	2.83	47750	041494	1246	2.35	041542	1264	2.15
.060	3.4	57300	041496	1248	2.35	041544	1266	2.15
1/16	3.54	59685	041497	1249	2.35	041545	1267	2.15
3/32	5.3	89485	041500	1252	2.35	041548	1270	2.15
1/8	7.05	119375	041501	1253	2.35	041549	1271	2.15

No. 2 plate, in standard size 18x36-inch sheets, can be furnished of any special thickness at following prices: .025 inch or over, $2.35 per pound; .024 inch or under, $2.85 per pound.

No. 22 plate, in standard size 18x36-inch sheets, can be furnished of any thickness at following prices: .025 inch or over, $2.15 per pound; .024 inch or under, $2.60 per pound.

Sheets of special size or shape, at slight increase over above prices.

INSULATING MATERIAL

Nos. 3 AND 33 AMBER MICANITE PLATE

No. 3 Amber Micanite Plate is made of very thin films of Canadian amber mica cemented together with pure shellac and carefully surfaced to a uniform thickness. This plate is in every way identical with our No. 2 India plate, except in the mica. This being Canadian amber, the plate is softer and presents less liability of failure to wear down evenly with the copper. For commutators containing a larger number of bars, or where the insulation is thicker than $\frac{1}{32}$, or where copper bars and brushes are softer than those usually employed, we recommend the use of No. 3 plate instead of No. 2. This plate cannot be molded.

No. 33 Amber Micanite Plate is made of the same quality of Canadian amber mica films and shellac that is used in our No. 3 plate. This plate differs from No. 3 only in that the variation in thickness is not confined to such close limits. In practice it gives admirable service for commutator work. This plate cannot be molded.

Thickness Inches	Approx. Lbs. per Sheet	Aver. Punct. Voltage	No. 3 Trade No.	No. 3 Mfrs. No.	No. 3 Price per Lb.	No. 33 Trade No.	No. 33 Mfrs. No.	No. 33 Price per Lb.
.020	1.17	16600	041502	1272	$4.00	041551	1284	$3.35
.025	1.47	20750	041503	1273	3.40	041552	1285	3.05
.030	1.76	24900	041504	1274	3.40	041553	1286	3.05
$\frac{1}{32}$	1.83	25895	041505	1275	3.40	041554	1287	3.05
.035	2.05	29050	041506	1276	3.40	041555	1288	3.05
.040	2.35	33200	041507	1277	3.40	041556	1289	3.05
.045	2.64	37350	041508	1278	3.40	041557	1290	3.05
$\frac{3}{64}$	2.74	38845	041509	1279	3.40	041558	1291	3.05
.050	2.94	41500	041510	1280	3.40	041559	1292	3.05
.060	3.52	49800	041512	1282	3.40	041561	1294	3.05
$\frac{1}{16}$	3.67	51875	041513	1283	3.40	041562	1295	3.05

No. 3 plate, in standard size 18x36-inch sheets, can be furnished of any special thickness at following prices: .025 inch thick or over, $3.40 per pound; .024 inch thick or under, $4.00 per pound.

No. 33 plate, in standard size 18x36-inch sheets, can be furnished of any special thickness at following prices: .025 inch thick or over, $3.05 per pound; .024 inch thick or under, $3.35 per pound.

Sheets of special size or shape, at slight increase over above prices.

No. 4 INDIA MICANITE PLATE

No. 4 India Micanite Plate is made for flat work and for purposes where extreme accuracy of thickness is not important. It is suitable for all kinds of bases, round and square washers, and for all kinds of apparatus not subjected to high heat.

Its non-liability of fracture under extreme vibration is a valuable feature for marine work. It does not take a screw thread, but can be drilled and turned.

No. 4 plate is not furnished thinner than $\frac{1}{16}$ inch.

Trade No.	Mfrs. No.	Thickness Inches	Approx. Lbs. per Sheet	Aver. Punct. Voltage	Price per Lb.
041382	1296	$\frac{1}{16}$	2.95	50000	$1.35
041383	1297	$\frac{3}{32}$	4.3	75000	1.35
041384	1298	$\frac{1}{8}$	5.9	100000	1.35
041385	1299	$\frac{3}{16}$	9.85	150000	1.35
041386	1300	$\frac{1}{4}$	13.2	200000	1.35
041387	1301	$\frac{3}{8}$	19.1	300000	1.35
041388	1302	$\frac{1}{2}$	25.7	400000	1.35

No. 4 plate, in standard size 18x36-inch sheets, can be furnished of any special thickness at the following price: $\frac{1}{16}$ inch or over, $1.35 per pound.

Sheets of special size or shape, at slight increase over above prices.

No. 5 FLEXIBLE MICANITE PLATE

No. 5 Flexible Micanite is made of very thin films of India mica cemented together with a special insulating cement. Especially adapted for armature slots, armature, magnet, and commutator cores, transformers, field coils, etc.

041389	1303	.005	.575	2940	2.35
041390	1304	.010	.967	5880	2.00
041391	1305	.015	1.43	8820	1.75
041392	1306	.020	1.84	11760	1.75
041393	1307	.025	2.24	14700	1.75
041394	1308	.030	2.64	17640	1.75
041395	1309	$\frac{1}{32}$	3.04	18345	1.75
041399	1313	$\frac{1}{16}$	6.03	36755	1.75
041400	1314	$\frac{1}{8}$	12	73500	1.75

Standard size sheets, 36x36 inches, can be furnished of any special thickness at the following prices: .015 inch or over, $1.75 per pound; .010 inch to .014 inch, $2.00 per pounds; .009 inch or under, $2.35 per pound.

Sheets of special size or shape, at slight increase over above prices.

INSULATING MATERIAL

Nos. 20 AND 21 MICANITE CLOTH

No. 20 is made with 1, 2, or 3 layers of India mica films, carefully cemented together, one side of the sheet being faced with cotton cloth and the other with Japanese paper.

No. 21 is identical with No. 20, except that the material is made with a very thin rubber tissue as a binder between the layers of mica, cloth and paper.

Thickness Inches	Layers of Mica	No. 20 Trade No.	No. 20 Mfrs. No.	No. 20 Approx. Lbs. per Roll	No. 20 Price per Lb.	No. 21 Trade No.	No. 21 Mfrs. No.	No. 21 Approx. Lbs. per Roll	No. 21 Price per Lb.
.008	1	041401	1315	2.8	$2.30	041404	1318	2.1	$3.20
.011	2	041402	1316	4.2	2.15	041405	1319	3.5	2.95
.014	3	041403	1317	5.4	2.10	041406	1320	4.7	2.75

Nos. 24 AND 25 MICANITE PAPER

No. 24 paper is similar to No. 20 cloth, except that the material is faced on both sides with Japanese tissue paper instead of cotton cloth, making it more flexible than the cloth.

No. 25 paper is similar to No. 24 paper, except a very thin rubber tissue is used as a binder between the layers of mica, cloth and paper, instead of an oil varnish which is used in the No. 24 paper.

		No. 24				No. 25			
.005	1	041407	1321	2.1	2.50	041410	1324	1.8	3.45
.008	2	041408	1322	3.3	2.30	041411	1325	3	3.10
.011	3	041409	1323	4.4	2.30	041412	1326	4.1	2.85

No. 26 ROPE PAPER AND MICA

A composite insulation consisting of rope paper faced on one side with two layers of India mica films and tissue paper. This material has a wide range of utility in the field of moderate voltages and temperatures.

It is furnished in sheets 36x36 inches in the following stock thicknesses.

Trade No.	Mfrs. No.	Layers of Mica	Thickness of Raw Paper Inches	Approx. Finished Thickness Inches	Approx. Ounces per Sheet	Price per Lb.
16634	1327	2	.003	.007	7½	$2.35
16635	1328	2	.005	.010	12	1.75
16636	1329	2	.010	.015	15	1.40

No. 27 PRESSBOARD AND MICA

This material is composed of No. 1 pressboard faced on one side with two overlapping layers of India mica films and tissue paper.

Mechanically the sheet possesses greater rigidity than No. 26 rope paper and mica, otherwise the insulation is of the same order.

It is furnished in sheets 36x36 inches and the following thicknesses are kept in stock.

16637	1330	2	.007 to .008	.012	14½	1.60
16638	1331	2	.012	.017	18	1.30
16639	1332	2	.015	.020	21¼	1.20

No. 29 FISH PAPER AND MICA

This material consists of fish paper faced on one side with two overlapping layers of India mica films and tissue paper. The fish paper employed is also known as Fyberoid, Tarpon Paper, Peerless Paper, etc. This insulation is recommended when a material stronger than rope paper or pressboard is desired as a base for the mica films.

It is furnished in sheets 36x47 inches and the following thicknesses are kept in stock.

16640	1350	2	.005	.010	1.2	1.60
16641	1351	2	.007	.012	1.4	1.50
16642	1352	2	.010	.015	1.6	1.35
16643	1353	2	.015	.020	2	1.20

No. 32 MICANITE PAPER TAPE

This tape consists of a layer of India Mica Films faced on both sides with tissue paper.

It is extensively used for insulating armature coils and bars in conjunction with Linotape or the ordinary friction tape.

In thickness it runs from .005 to .007 and is put up in rolls containing 100 linear feet.

The following widths are kept in stock.

16646	1357	¾	.005 to .007	4½	3.30
16647	1358	1	.005 to .007	6	3.30

ELECTRICAL MICA

INDIA AND DOMESTIC CUT MICA

All larger sizes at special prices.
Sizes not listed charged at list of next larger size.

Trade No.	Size Inches	Price per Lb.	Trade No.	Size Inches	Price per Lb.	Trade No.	Size Inches	Price per Lb.	Trade No.	Size Inches	Price per Lb.
12970	1 x3	3.00	12973	2 x2	4.00	13799	2¾x6	12.25	13850	4 x5	12.50
13676	1 x4	4.50	13742	2 x3	6.00	13800	2¾x6½	12.75	13851	4 x5½	13.50
13677	1 x4½	6.50	13743	2 x3½	6.25	13801	2¾x7	13.50	13852	4 x6	15.00
13678	1 x5	8.00	13744	2 x4	6.75	13802	2¾x8	14.50	13853	4 x6½	15.50
13679	1 x5½	9.00	13745	2 x4½	8.75	13803	2¾x9	16.50	13854	4 x7	16.00
13680	1 x6	9.50	13746	2 x5	9.75	13804	2¾x10	19.00	13855	4 x8	17.00
13681	1 x6½	9.75	13747	2 x5½	10.50	13807	3 x3	9.00	13856	4 x9	19.00
13682	1 x7	10.00	13748	2 x6	11.75	13808	3 x3½	10.00	13857	4 x10	23.00
13684	1 x8	12.00	13749	2 x6½	12.50	13809	3 x4	10.75	13860	4½x4½	12.50
13686	1 x9	13.00	13750	2 x7	13.00	13810	3 x4½	11.00	13861	4½x5	13.50
13687	1 x10	15.00	13752	2 x8	13.50	13811	3 x5	12.00	13862	4½x5½	14.50
13692	1¼x4	5.50	13754	2 x9	15.50	13812	3 x5½	12.25	13863	4½x6	16.00
13693	1¼x4½	6.75	13755	2 x10	18.00	13813	3 x6	12.50	13864	4½x6½	16.50
13694	1¼x5	8.50	13760	2¼x3	6.50	13814	3 x6½	13.00	13865	4½x7	17.00
13695	1¼x5½	9.50	13761	2¼x3½	6.75	13815	3 x7	14.00	13866	4½x8	17.50
13696	1¼x6	10.00	13762	2¼x4	7.00	13816	3 x8	15.00	13867	4½x9	20.00
13697	1¼x6½	10.25	13763	2½x4½	9.00	13817	3 x9	17.00	13868	4½x10	24.00
13698	1¼x7	10.50	13764	2¼x5	10.00	13818	3 x10	20.00	13871	5 x5	15.00
13700	1¼x8	12.50	13765	2¼x5½	10.50	13821	3¼x3¼	9.75	13873	5 x6	16.00
13702	1¼x9	14.00	13766	2¼x6	12.00	13822	3¼x3½	10.25	13875	5 x7	17.00
13703	1¼x10	16.00	13767	2¼x6½	12.50	13823	3¼x4	11.00	13876	5 x8	18.00
12971	1½x2	3.00	13768	2¼x7	13.00	13824	3¼x4½	11.50	13877	5 x9	21.00
12972	1½x3	4.50	13770	2¼x8	13.75	13825	3¼x5	12.25	13878	5 x10	25.00
13710	1½x4	6.25	13772	2¼x9	15.75	13826	3¼x5½	12.50	13882	5½x6	16.50
13711	1½x4½	7.00	13773	2¼x10	18.25	13827	3¼x6	13.00	13884	5½x7	17.50
13712	1½x5	9.00	13777	2½x3	6.75	13828	3¼x6½	13.75	13885	5½x8	18.50
13713	1½x5½	10.00	13778	2½x3½	7.00	13829	3¼x7	14.50	13886	5½x9	22.00
13714	1½x6	10.50	13779	2½x4	7.50	13830	3¼x8	15.50	13887	5½x10	26.00
13715	1½x6½	10.75	13780	2½x4½	9.00	13831	3¼x9	17.50	13888	5½x11	27.00
13716	1½x7	11.00	13781	2½x5	10.25	13832	3¼x10	21.00	13889	5½x12	30.00
13718	1½x8	12.75	13782	2½x5½	11.00	13835	3½x3½	10.75	13890	6 x6	17.50
13720	1½x9	14.50	13783	2½x6	12.25	13836	3½x4	11.25	13892	6 x7	20.00
13721	1½x10	16.50	13784	2½x6½	12.75	13837	3½x4½	11.75	13893	6 x8	24.00
13726	1¾x4	6.50	13785	2½x7	13.25	13838	3½x5	12.25	13894	6 x9	25.00
13727	1¾x4½	7.50	13787	2½x8	14.00	13839	3½x5½	13.00	13895	6 x10	30.00
13728	1¾x5	9.50	13789	2½x9	16.00	13840	2½x6	14.00	13898	7 x7	25.00
13729	1¾x5½	10.25	13790	2½x10	18.75	13841	3½x6½	14.50	13899	7 x8	27.00
13730	1¾x6	10.75	13793	2¾x3	7.00	13842	3½x7	15.00	13900	7 x9	28.00
13731	1¾x6½	11.00	13794	2¾x3½	7.50	13843	3½x8	16.00	13901	7 x10	32.00
13732	1¾x7	11.50	13795	2¾x4	9.00	13844	3½x9	18.00	13904	8 x8	32.00
13734	1¾x8	13.00	13796	2¾x4½	9.75	13845	3½x10	22.00	13905	8 x9	33.00
13736	1¾x9	15.00	13797	2¾x5	10.50	13848	4 x4	11.50	13906	8 x10	35.00
13737	1¾x10	17.00	13798	2¾x5½	11.50	13849	4 x4½	12.00	.....	.....	.....

UNCUT SHEET MICA

Uncut mica is carefully selected as to quality and sizes it will cut. The different grades will cut assorted sizes as shown in table.

All grades are very closely trimmed and the wastage from them when cut will be slight.

Grade No.	India Trade No.	India Mfrs. No.	India Width Inches	India Length Inches	India Price per Lb.	Amber Trade No.	Amber Mfrs. No.	Amber Width Inches	Amber Length Inches	Amber Price per Lb.
A1	041413	1499	4 to 6	7 to 9	6.00	041419	1510	4 to 5	7 to 9	3.50
1	041414	1501	3 to 5	5 to 7	5.00	041420	1511	3 to 6	5 to 7	2.50
2	041415	1502	1½ to 3½	4½ to 6	4.00	041421	1512	1½ to 3½	4½ to 6	1.75
3	041416	1503	1½ to 3	3 to 4½	3.00	041422	1513	1½ to 3	3 to 4	1.50
4	041417	1504	1½ to 2½	2½ to 3	1.80	041423	1514	1½ to 2½	2½ to 3	1.00
5	041418	1505	1 to 2	2 to 2½	1.00	041424	1515	1 to 2	2 to 2½	.50

P & B COMPOUNDS AND VARNISHES



P & B ELECTRICAL COMPOUNDS

Recognized as standard by electricians generally, on account of its insulating qualities and durability.

No. 1 compound is used where an almost immediate dryer and greatest amount of penetration possible, is desired. It leaves less surface coating than No. 2 compound.

No. 2 compound is used for all general purposes.

Trade No.	Size Package	Price per Gal.	Trade No.	Size Package	Price per Gal.
		No. 1			
076918	1-barrel	$1.50	076922	1-gallon	$1.75
076919	½-barrel	1.55	076923	½-gallon	1.85
076920	5-gallon	1.60	076924	1-quart	2.25
076921	2½-gallon	1.65	076925	1-pint	2.50
		No. 2			
076926	1-barrel	1.25	076930	1-gallon	1.50
076927	½-barrel	1.35	076931	½-gallon	1.60
076928	5-gallon	1.40	076932	1-quart	2.00
076929	2½-gallon	1.45	076933	1-pint	2.25

P & B SPECIAL PAINT

P & B Special Paint is used for protecting iron and wood from the action of acids, etc.; coating and preserving all kinds of iron work; painting brick or wooden walls exposed to moisture; for preserving iron or wood work submerged or underground; for smelter work, cyanide tanks and hundreds of other purposes.

No. 1 is a light body paint, an almost immediate dryer. No. 2 is the standard or medium grade for all general work; dries very quickly.

		No. 1			
143505	1-barrel	1.20	143511	1-gallon	1.40
143506	½-barrel	1.25	143512	½-gallon	1.50
143507	5-gallon	1.30	143513	1-quart	1.60
		No. 2			
143508	1-barrel	1.10	143514	1-gallon	1.30
143509	½-barrel	1.15	143515	½-gallon	1.40
143510	5-gallon	1.20	143516	1-quart	1.50

P & B BLACK AIR-DRYING VARNISH

This varnish is a high grade insulator capable of withstanding 1000 volts per mil, but not absolutely oil-proof. Should be recommended in shops where baking facilities are not available, also for general work, including switchboards, connections, junction boxes and wherever an insulator is required. Air-dries in 30 minutes.

076934	1-barrel	$0.85	076943	1-gallon	1.10
076935	½-barrel	.90	076944	½-gallon	1.15
076937	5-gallon	1.00	076945	1-quart	1.40
076942	2½-gallon	1.05	.....	.....	....

S. P. C. ARMATURE AND FIELD COIL VARNISH

The toughest and highest grade finishing varnish on the market. It dries in a few minutes to a hard glossy coat. Thin with grain or wood alcohol.

076938	1-barrel	$5.00	076946	1-gallon	$5.25
076939	½-barrel	5.00	076947	½-gallon	5.35
076940	5-gallon	5.20	076948	1-quart	5.50
076941	2½-gallon	5.25	.....	.....	....

S. P. C. METER BOARD PAINT

A high grade paint especially adapted for meter boards, switchboards, etc. Quick drying, acid-proof and moisture-proof. Put up in pint cans, very convenient for electricians' tool bag kits.

Trade No.		Price, per Pint Can
076949	.....	$0.50

P & B COMPOUNDS AND VARNISHES

P & B FINISHING VARNISHES

Black and Clear

After armature coils are baked and assembled, the finished armature should be coated with P & B Finishing Varnish (oil-proof). It is recommended where a high grade oil-proof varnish is required. This varnish is considered equal in efficiency to S. P. C. Armature and Field Coil Varnish, excepting that it does not dry to quite as hard a coat. Air-dries in 30 minutes.

When ordering, specify whether black or clear is desired.

Size Package	Black Trade No.	Black Price per Gal.	Clear Trade No.	Clear Price per Gal.
1-barrel	076950	$2.60	076958	$2.20
½-barrel	076951	2.65	076959	2.25
5-gallon	076953	2.85	076961	2.44
2½-gallon	076954	2.90	076962	2.50
1-gallon	076955	2.95	076963	2.55
½-gallon	076956	3.10	076964	2.70
1-quart	076957	3.30	076965	2.90

P & B BAKING VARNISHES

Black and Clear

For insulating armature coils, field coils and transformer coils, they are equally efficient Use one or the other, depending upon the choice of the consumer. They are extensively used in street railroad repair shops; are pliable and oil-proof. Clear will air-dry in about 24 hours. Black should be baked 8 to 12 hours at 180 degrees Fahr.

When ordering, specify whether black or clear is desired.

Size Package	Black Trade No.	Black Price per Gal.	Clear Trade No.	Clear Price per Gal.
1-barrel	076966	$1.40	076974	$1.60
½-barrel	076967	1.45	076975	1.65
5-gallon	076969	1.55	076977	1.75
2½-gallon	076970	1.60	076978	1.80
1-gallon	076971	1.65	076979	1.85
½-gallon	076972	1.70	076980	1.90
1-quart	076973	1.90	076981	2.10

P & B CORE PLATE VARNISH

Air-Drying

For separating and insulating metal discs in building cores of air-cooled transformers and armatures of dynamos and motors. Air-dries in 10 minutes.

Trade No.	Size Package	Price per Gal.	Trade No.	Size Package	Price per Gal.
076982	1-barrel	$0.85	076987	1-gallon	$1.10
076983	½-barrel	.90	076988	½-gallon	1.15
076985	5-gallon	1.00	076989	1-quart	1.45
076986	2½-gallon	1.05	.....	.....	....

P & B CORE PLATE VARNISH

Baking

For insulating the metal discs of oil immersion transformers and the armatures of high voltage electrical machines; oil-proof. Should be baked at about 250 degrees Fahr. for 2 hours.

Trade No.	Size Package	Price per Gal.	Trade No.	Size Package	Price per Gal.
076990	1-barrel	$1.35	076995	1-gallon	$1.60
076991	½-barrel	1.40	076996	½-gallon	1.65
076993	5-gallon	1.50	076997	1-quart	1.85
076994	2½-gallon	1.55	.....	.....	....

DIELECTRIC INSULATING VARNISHES



DIELECTROL

Dielectrol is a black, paraffine impregnating compound. Specific gravity, .850 at 70 degrees F. Designed to fill up the interstices between the turns of coils. It meets perfectly the fundamental requirements of any coil impregnating compound because it is chemically inert under all conditions. Average puncture test, when baked on three-mil paper, one side, is 800 volts per mil.

Trade No.	Size of Package	Price per Gal.	Trade No.	Size of Package	Price per Gal.
140001	Bbls. or drums	$0.96	140003	5-gal. cans	$1.10
140002	10-gal. cans	1.06	140004	1-gal. cans	1.20



JAPAN X

Japan X is a black, semi-oilproof, air-drying enamel and finishing paint. Specific gravity, .850 at 70 degrees F. Thin with gasoline or naphtha. Especially suitable for painting armature and fields, transformer cases, street railway motor cases, etc. Dries quickly in the air at ordinary temperature. Average puncture test, when air dried on three-mil paper, one side, is 500 volts per mil.

140005	Bbls. or drums	.96	140007	5-gal. cans	1.10
140006	10-gal. cans	1.06	140008	1-gal. cans	1.20

JAPAN XX

Japan XX is a black, oilproof, baking enamel. Specific gravity, .860 at 70 degrees F. Thin with gasoline or naphtha. Dries with a tough, elastic, and oilproof skin, and has very high dielectric strength. Average puncture test, when baked on three-mil paper, one side, is 900 volts per mil.

140009	Bbls. or drums	.96	140011	5-gal. cans	1.10
140010	10-gal. cans	1.06	140012	1-gal. cans	1.20



DIELAC BLACK

Dielac Black is a spirit insulating and finishing varnish. Specific gravity, .910 at 70 degrees F. Thin with Dielac thinner or alcohol. This varnish has a beautiful shiny, black luster. Dries in a few minutes. Absolutely oilproof when dry. Average puncture test, when air dried on three-mil paper, one side, is 500 volts per mil.

140013	Bbls. or drums	2.50	140015	5-gal. cans	2.65
140014	10-gal. cans	2.60	140016	1-gal. cans	2.75

DIELECTRIC VARNISH

Yellow, oilproof, baking varnish. Specific gravity, .860 at 70 degrees F. Thin with gasoline or naphtha. Dries with a tough, elastic and oilproof skin, and possesess very high dielectric strength. Effectually seals the pores of cotton, paper, and all similar substances which in their natural condition retain moisture. Dries in a few hours when spread out thin on paper. For best results, baking at a temperature of about 200 degrees F. is recommended. Average puncture test, when baked on three-mil paper, one side, is 1000 volts per mil.

140017	Bbls. or drums	1.20	140019	5-gal. cans	1.35
140018	10-gal. cans	1.30	140020	1-gal. cans	1.45



W. D. PAINT

Black, elastic insulating paint. Specific gravity, .850 at 70 degrees F. Thin with gasoline or naphtha. This paint is both waterproofing and rustproofing. Especially suitable for construction work on account of its freedom from rank odor, its glossy black color, its great flexibility. Average puncture test, when air dried on three-mil paper, one side, is 600 volts per mil.

140021	Bbls. or drums	.96	140023	5-gal. cans	1.10
140022	10-gal. cans	1.06	140024	1-gal. cans	1.20

PETRITE

Petrite is a water and oilproof, coil-filling compound. Thin with Petrite thinner. Designed for applying to commutator ends, coils, or to any part of an electrical machine where a hard, oilproof filling cement is required, which does not soften by heating. Average puncture test when placed between the turns of coils, is 1000 volts per mil.

140025	Bbls. or drums	2.50	140027	5-gal. cans	2.65
140026	10-gal. cans	2.60	140028	1-gal. cans	2.75

DIELECTRIC INSULATING VARNISHES



DIELECTRIC COREPLATE VARNISH

Black, quick-drying, insulating varnish for iron laminations. Specific gravity, .870 at 70 degrees F. Thin with gasoline. Not only dries in a few minutes, but is free from tackiness. Coreplates will not stick together after varnish has dried. Average puncture test when air dried on three-mil paper, one side, is 600 volts per mil.

Trade No.	Size of Package	Price per Gal.	Trade No.	Size of Package	Price per Gal.
140040	Bbls. or drums	$0.72	140042	5-gal. cans	$0.87
140041	10-gal. cans	.82	140043	1-gal. cans	.97



DIELAC BROWN

Dielac Brown is a spirit insulating and sticking varnish. Specific gravity, .910 at 70 degrees F. Thin with Dielac thinner or alcohol. Dries in the air in a few minutes like shellac. May be used for sticking in slot insulations, for sticking mica, for painting on the outside of coils so that they will retain their form while being taped up, for sticking the ends of tape, for sticking varnished muslin and rope paper together, for painting laminations where an oilproof coreplate varnish is required. Average puncture test, when baked on three-mil paper, one side, is 600 volts per mil.

140044	Bbls. or drums	2.50	140046	5-gal. cans	2.65
140045	10-gal. cans	2.60	140047	1-gal. cans	2.75

MACHINERY FINISHES

Used for painting machinery, fixtures, instruments and apparatus of wood or metal. Furnished in either glossy, dull or eggshell finish. In ordering, specify color and finish.

140048	Bbls. or drums	1.90	140050	5-gal. cans	2.05
140049	10-gal. cans	2.00	140051	1-gal. cans	2.10

MACHINERY FILLER

For applying to rough surfaces before painting.

Trade No.	Size of Package	Price per Pound
140052	5-pound cans	$0.10



CABLE AND POT HEAD COMPOUNDS

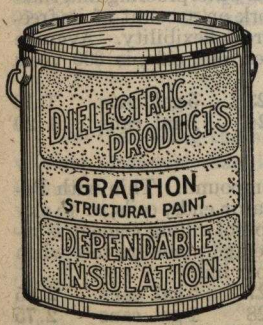
These compounds are used for filling the lead sleeves of cable joints, end bells and cable joint boxes for telephone construction work, etc. Have an average puncture test of 38000 volts per $\frac{1}{8}$-inch. 180-degree compound is best suited for general work. 275-degree compound is for use in very hot places where ordinary compound would melt and drip.

	180-degree			275-degree	
Trade No.	Size of Package	Price per Gal.	Trade No.	Size of Package	Price per Gal.
140053	Barrels	$0.30	140054	Barrels	$0.30

SEALING COMPOUNDS

Trade No.	Description	Price per Lb.
140055	Chatterton—Imported—$\frac{1}{4}$-pound sticks	$2.00
140056	Chatterton—Domestic—$\frac{1}{4}$-pound sticks	.60
140057	Refractit—water and oilproof filling compound, puncture test of 45000 volts across $\frac{1}{8}$-inch, in barrel lots	.17
140058	Red sealing cement, in barrel lots	.05
140059	Black sealing cement, in barrel lots	.02
140060	Gray sealing cement, in barrel lots	.12

Sealing cements can be furnished to match any shade.



GRAPHON

A protective paint for all metal surfaces. Furnished in black, steel gray and dark brown colors.

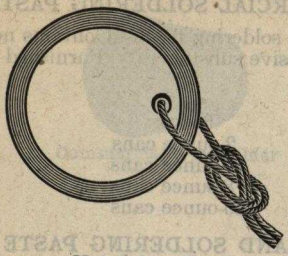
Trade No.	Size of Package	Price per Gal.	Trade No.	Size of Package	Price per Gal.
140061	Bbls. or drums	$1.15	140063	5-gal. cans	$1.30
140062	10-gal. cans	1.25	140064	1-gal. cans	1.40

WOODMANS BLACK

A black spirit insulating varnish for general purposes.

140065	Bbls. or drums	1.60	140067	5-gal. cans	1.75
140066	10-gal. cans	1.70	140068	1-gal. cans	1.80

TELEPHONE CABLE SUPPLIES



Metal Rim Tag

CABLE PASTERS

Used to limit the length of wiped joints.

Trade No.	Description	Price per 1000
42378	2 inches wide, 1 foot long	$3.00

METAL RIM TAGS

For numbering ends of conductors in cables.

42379	Metal rim tags, 1-inch diameter	3.50



Plumbers' Candle

PLUMBERS' CANDLES

Trade No.	Mfrs. No.	Length Inches	Diameter Inches	Price per Lb.
42380	3	7½	1¼	$0.30
42381	5	5½	1¼	.30

REFINED PARAFFINE

Trade No.	Description	Price per Lb.
42382	In 1-pound cakes.....	$0.30
42383	In slabs (approximately 20 lbs.)	.20



Marlin

A-1 BEESWAX

Especially adapted for electrical work.

42384	In 1-pound cakes.....	.64

MARLIN

	2-ply	
42385	In 1-pound balls.....	.40
42386	In 5-pound balls.....	.40
	3-ply	
42387	In 1-pound balls.....	.40
42388	In 5-pound balls.....	.40



Paper Sleeves

WAXED LACING TWINE

Made of pure flax. Saturated in beeswax ready for use.

42389	In 1-pound balls.....	3.00

PAPER SLEEVES

For splicing paper insulated telephone cables.

Trade No.	Dimensions Inches	Wt., Lbs. per 1000	Std. Pkg.	Price per 1000
42390	1/8 x 3	1	150	$1.50
42391	3/16 x 3	1	110	1.50
42392	3/16 x 18	6	...	7.50



Ozite Compound

LEAD SLEEVES

Sleeve should measure about 2 inches larger in diameter than the cable.

Trade No.		Price per Lb.
42393	State diameter and length when ordering.....	$0.20

OZITE COMPOUND

For Potheads

Trade No.	Description	Price per Gal.
42395	1-gallon cans.....	$4.50
42396	2-gallon cans.....	4.00

SOLDERING MATERIAL



No. 100518



No. 059286



No. 039538



No. 039539



No. 40215



No. 100523



No. 078547



No. 039534



No. 059294

COMMERCIAL SOLDERING PASTE

A perfect soldering flux. Contains no acid or other corrosive substances. Furnished in tin cans.

Trade No.	Size of Package	Price Each
100518	2-ounce cans	$0.30
100519	4-ounce cans	.50
100520	8-ounce cans	.90
100521	16-ounce cans	1.40

HIGHLAND SOLDERING PASTE

A soldering paste of the highest quality.

059285	2-ounce cans	.50
059286	1-pound cans	2.00
059287	5-pound cans	7.50

ALLEN SOLDERING PASTE

Will not corrode or injure in any way surfaces to which it is applied. Solder dipped into this paste is self-fluxing. A form of the Allen Stick.

039537	*2-oz. tubes	.21
039538	2-oz. cans	.17
039565	4-oz. cans	.30
039539	½-lb. cans	.51
039540	1-lb. cans	.84
039541	5-lb. cans	3.90
089013	50-lb. pails	35.75

*Removable aluminum nozzles to fit tubes, 5 cents.

BURNLEY SOLDERING PASTE

40215	2-oz. cans	.30
40216	4-oz. cans	.50
40217	½-lb. cans	.90
40218	1-lb. cans	1.40
78705	5-lb. cans	6.50

COMMERCIAL SOLDERING SALTS

A pure salts for soldering purposes.

100522	½-pound bottles	.30
100523	1-pound bottles	.50

COMMERCIAL SOLDERING STICK

A soldering stick equal if not superior to any on the market. Guaranteed absolutely non-corrosive, easy-fluxing.

100517	.....	.24

HIGHLAND SOLDERING STICK

A soldering stick of the highest quality.

059290	.....	.50

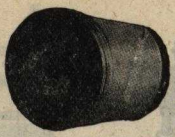
ALLEN SOLDERING STICK

Trade No.	Style	Size of Pkg. Inches	Price Each
039534	Allen	1 x5½	$0.50
039535	Sun	1⅛x5½	.50
039536	Samson	1 x5	.50

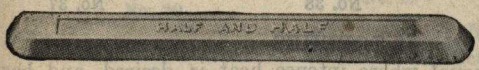
GALES COMMUTATOR COMPOUND

Trade No.	Size of Package Inches	Price Each
059294	4x1	$1.00

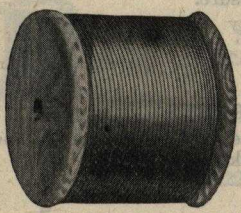
SOLDERING SPECIALTIES



Commercial Wire Solder



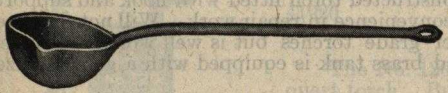
Commercial Bar Solder



Commercial Resin Core Solder



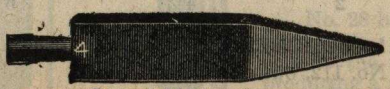
Melting Pot



Pouring Ladle



Standard Soldering Copper



Pony Soldering Copper

COMMERCIAL WIRE SOLDER

This solder is absolutely uniform in composition. It is perfectly smooth throughout its entire length.

Trade No.	Description	Approx. Wt., Lbs. Spool	Reel	Coil	Price per Lb.
100514	No. 10 gauge wire solder.....	50	100	25	$1.00

COMMERCIAL BAR SOLDER

Half and Half

This is strictly a trade or commercial half and half, but the fact that it can be used with an iron by experienced workmen shows the generous quantity of tin used. It is sufficiently fine to stand a large percentage of lead being added to it to reduce it. This most cable splicers prefer to do, but some use it for wiping just as it is.

Trade No.	Approx. Wt., Lbs. per Bar	Price per Lb.
100515	2	$1.00

COMMERCIAL RESIN CORE SOLDER

A high grade solder for light work. Has a resin core, therefore requires no acid or soldering paste.

Trade No.	Description	Price per Lb.
019241	1-pound spools.....	$1.00
019242	5-pound spools.....	1.00

CAST IRON MELTING POTS

Trade No.	Size Inches	Price Each
019245	5	$1.00
019246	6	1.30
019247	8	2.00

DOUBLE LIP POURING LADLES

Trade No.	Size Inches	Price Each
019248	2½	$0.60
019249	3	.70

STANDARD SOLDERING COPPERS

Trade No.	Weight Pounds	Price per Lb.
019255	½	$0.70
019256	¾	.70
019257	1	.70
019258	1½	.70
019259	2	.70
019260	2½	.70
019261	3	.70
019262	4	.70

PONY SOLDERING COPPERS

Trade No.	Length Inches	Price Each
019263	12	$1.20
019264	11½	1.00
019265	10½	.80
019266	8	.60
019267	8½	.50

Fitted with black lacquered handle.

C & L TORCHES

FOR GASOLINE



No. 32



No. 31



No. 38



No. 37

No. 32 TORCHES

The No. 32 has no equal where intense heat is desired, and has integral hook and support for holding soldering copper. Burner is made of special generator metal which retains the heat longer, producing an intensely hot blue flame that burns perfectly in hard wind or extreme cold. Patented automatic brass pump in tank, with automatic double spring check, supplies required air pressure.

Trade No.	Mfrs. No.	Capacity Pints	Shipping Wt., Lbs.	Price Each
043910	32	2	4¼	$8.00



No. 108

No. 31 TORCHES

The No. 31 is exactly like No. 32, except without hook and support. The best plain quart torch on the market.

043908	31	2	4¼	7.60



No. 107

No. 38 TORCHES

The No. 38 has improved burner, of special generator metal, which produces a perfect blue flame of intense heat, indoors or out. Hook and support for holding soldering copper is a great convenience. Heavy gauge seamless drawn brass tank is fitted with patented automatic brass pump with automatic check valve, insuring ample air pressure.

043907	38	1	2¾	7.20

No. 37 TORCHES

The No. 37 is exactly like No. 38, but without hook and support. The best pint torch made.

043906	37	1	2¾	6.80



No. 112

No. 108 TORCHES

The No. 108 is a well constructed torch fitted with hook and support to hold soldering copper, a convenience in repair work. Will not produce as much heat as the better grade torches but is well worth the price. Pump is in the handle and brass tank is equipped with a good bronze burner.

86912	108	2	4	6.80

No. 107 TORCHES

The No. 107 is just like No. 108, except without hook and support. A high quality, low priced torch.

86913	107	2	4	6.40



No. 114

No. 112 TORCHES

The No. 112 is a cheap competitive torch, made as effective as the price permits. Bronze burner mounted on brass tank and detachable soldering iron holder included.

86914	112	2	4¼	6.40

No. 114 TORCHES

The No. 114 is exactly like No. 112, but one size smaller.

86915	114	1	3	6.00

C & L TORCHES

FOR GASOLINE AND ALCOHOL



No. 30



No. 29



No. 104



No. 103

No. 30 GASOLINE TORCHES

No. 30 has heavy gauge brass tank and patented automatic brass pump in handle, insuring ample air pressure. Improved burner of special generator metal, produces an intensely hot flame.

Trade No.	Mfrs. No.	Capacity Pints	Shipping Wt., Lbs.	Price Each
41913	30	2	4	$7.60



No. 19

No. 29 GASOLINE TORCHES

No. 29 is exactly like No. 30, without hook and support.

41922	29	2	4	7.20

No. 104 GASOLINE TORCHES

The No. 104 has a powerful generator metal burner fitted with hook and support for holding a soldering copper. Burner produces a hot blue flame.

86922	104	2	4⅛	7.20

No. 103 GASOLINE TORCHES

The No. 103 is exactly like No. 104, but is without hook and support for holding soldering copper.

86923	103	2	3½	6.80



No. 48

No. 19 GASOLINE TORCHES

No. 19 is equipped with patented automatic brass air pump in handle and the special generator metal burner, fitted with hook and support, produces an intensely hot blue flame.

41912	19	1	3	6.40

No. 48 GASOLINE TORCHES

No. 48 is oblong and strongly made of heavy gauge brass. Hinged supports at base prevent tipping over.

41911	48	1	3¾	9.20



No. 120

No. 47 GASOLINE TORCHES

No. 47 is exactly like No. 48, except without hook and support.

41920	47	1	3¾	8.80

No. 120 GASOLINE TORCHES

The No. 120 is recommended to fill occasional calls for a cheap quart torch. Burner is mounted on a seamless drawn brass tank and produces a hot flame. Automatic brass air pump, with spring check, forms handle. Detachable soldering iron holder included.

55687	120	2	4	6.00

No. 122 GASOLINE TORCHES

The No. 122 is exactly like the No. 120, except that it is smaller.

55688	122	1	3	5.60



No. 14



No. 28

No. 14 ALCOHOL TORCHES

No. 14 burns alcohol or gasoline. Air blast through fuel chamber makes hotter flame than other methods.

55674	14	¼	1	4.00

No. 28 ALCOHOL TORCHES

No. 28 burns alcohol, which is fed to the burner by a good sized wick. The rubber tube connecting a small brass blowpipe enables the user to blow an air blast into the burning alcohol, producing a fine pointed flame of intense heat.

86926	28	¼	1	2.00

TORCHES



Nos. 2 and 3



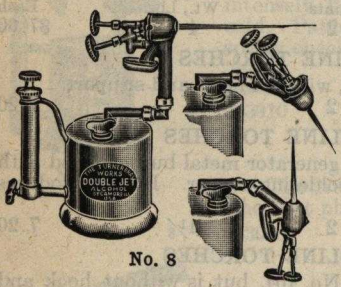
No. 4



No. 100

PHOENIX PUMPLESS GASOLINE TORCHES

The Phoenix Torches are made and operated entirely without a pump of any kind, thus eliminating one of the greatest objections and annoyances connected with gasoline torches. These torches are seamless and without a soldered or brazed joint of any kind. They have no loose parts to get out of order; no washers or gaskets to be renewed.



No. 8

No. 2

No. 2 is a handy size torch, and for efficiency on light or heavy work can always be depended upon. Will burn 1¼ hours and gives 2500 degrees of heat.

Trade No.	Mfrs. No.	Cap. Pints	Size, Inches Height	Diam.	Weight, Pounds Net	Ship.	Price Each
148530	2	¾	6½	3	...	2	$4.50

No. 3

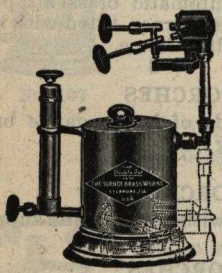
No. 3 is a popular size and suitable for all branches of the mechanical trade. Will burn 1¾ hours and gives 2500 degrees of heat.

148531	3	1½	7¾	4	...	3	5.00

No. 4, Flat Auto

Although No. 4 was designed for the automobile trade, it has become very popular with all classes of mechanics. The container being flat makes it very convenient for tool cases. Will burn 1¼ hours and gives 2500 degrees of heat.

Trade No.	Mfrs. No.	Cap. Pints	Size, Inches Height	Width	Thick.	Weight, Pounds Net	Ship.	Price Each
148532	4	1	7	4½	2	...	2	4.75



No. 93

TURNER HOT BLAST ALCOHOL TORCHES

No. 100 double jet alcohol blowpipe burns wood alcohol and produces a needle pointed flame of remarkably high temperature.

Trade No.	Mfrs. No.	Cap. Pints	Size, Inches Height	Diam.	Weight, Pounds Net	Ship.	Price Each
052824	100	¾	9	2½	1¼	2	9.35

The No. 8 alcohol blowpipe is fitted with a double jet burner, designed for burning wood alcohol. An indispensable tool for opticians, jewelers, dentists and electricians. Adapted for lead burning on storage batteries, brazing and fine soldering.

052825	8	1	9	3½	2	2¾	14.00

TURNER HOT BLAST GASOLINE TORCHES

No. 93 torch has double jet burner, which generates the maximum heat from gasoline, or about double that of any ordinary blowtorch. All parts of this torch are made of heavy brass. The pump is contained in the handle of the torch, and air valve is located at the base of the pump barrel. The filler plug is placed in the bottom of the tank.

41732	93	2	10¾	4	3	5	10.25

No. 97 double jet torch is an ideal tool for linemen's use. The general construction is the same as other Turner Double Jet Torches, but the burner is designed for extra heavy work and produces a much larger volume of flame than the other styles.

052830	97	2	11¼	4	4½	6¾	13.80



No. 97

C & L TORCHES AND FIRE POTS

FOR KEROSENE



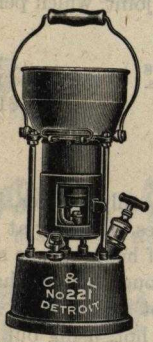
No. 96

No. 96 TORCHES

The burner of the No. 96 torch produces an intensely hot, clear blue flame about 6 inches in length, generating sufficient heat to melt quickly a quarter-inch copper rod, and will be found excellent for brazing, or for outside use, under severe conditions of wind and weather.

All parts are easily accessible for cleaning.

Trade No.	Mfrs. No.	Capacity Pints	Shipping Wt., Lbs.	Price Each
096329	96	2	3¼	$8.80



No. 221

No. 95 TORCHES

The No. 95 torch is exactly the same in style and construction as No. 96, but smaller in size.

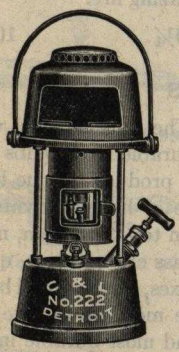
096330	95	1	2⅞	7.20

No. 221 FIRE POTS

The No. 221 fire pot uses little fuel and is remarkable in heat producing qualities.

The tank is made of heavy gauge seamless drawn steel, with bottom and all fittings welded in, not soldered, making it extra strong and serviceable. A large, automatic brass pump quickly and easily supplies all needed air pressure. The burner is made with a powerful generator that superheats the kerosene gas before it is burned, producing perfect combustion, and the maximum degree of heat, enabling the operator to secure a clear, blue flame, free from smoke and odor.

096331	221	8	12	15.20



No. 222

No. 222 FIRE POTS

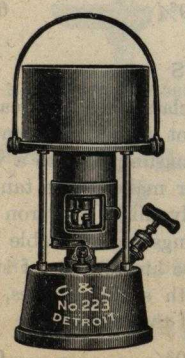
The No. 222 fire pot is similar to No. 221 except that it is equipped with a removable hood made of heavy gauge sheet steel that will admit of two large size soldering coppers.

Especially designed for use by tinners and roofers in heating irons or melting metal, babbitt or solder, or for bending pipe.

The tank is made of seamless drawn steel, heavy gauge and all fittings are welded in, not soldered.

The burner is of improved construction producing perfect combustion and the maximum degree of heat, without smoke or odor.

096332	222	8	13	16.00



No. 223

No. 223 FIRE POTS

Designed especially for telephone and electric construction and cable work, and can be used for melting insulating materials, paraffine, rosin, lead, solder, etc.

The burner is made with a powerful generator that superheats the kerosene gas before it is burned, securing perfect combustion of the fuel.

All parts are easily accessible for cleaning. The tank is made of heavy gauge steel with bottom and fittings welded in.

096333	223	8	13	17.60

C & L FIRE POTS

FOR GASOLINE



No. 1

No. 1 FIRE POTS

The No. 1 fire pot is 9¾ inches in diameter at base, 6¾ inches in diameter at top and the tank holds 7 pints. It is adapted to a greater variety of uses than any other make of fire pot on the market to-day. The tank is made of heavy gauge seamless steel with bottom and fittings welded in and soldered. Filler is large and funnel shaped, making the tank easy to fill. The burner represents the highest development in generating power and heat efficiency, quickly producing an ideal blue flame, easily regulated, giving satisfaction in windy or zero weather. The burner is attached to a swivel joint, which permits moving the flame up or down.

Trade No.	Mfrs. No.	Capacity Pints	Shipping Wt., Lbs.	Price Each
041369	1	7	11	$13.60



No. 5

No. 5 FIRE POTS

The No. 5 is an exact duplicate of the No. 1, only smaller, being about two thirds its size. Height over all, 12 inches, diameter at base, 8½ inches, and at top, 6 inches. Tank is made of heavy gauge seamless steel and holds 5 pints. Top section is large enough to easily handle a pair of 8-pound coppers and a 5-inch metal pot at the same time. The burner produces a pure blue flame, intensely hot, using but little gasoline (less than half required by some makes). By removing the top section, the base may be used as a torch or brazing fire.

041368	5	5	10¼	10.40



No. 20

No. 20 COIL FIRE POTS

The No. 20 has great generating power. The tank is fitted with our automatic brass air pump, which is more durable than bulbs and enables the user to obtain pressure quickly. It produces a blue blast flame that is intensely hot. The tank is made of heavy galvanized iron, with a stay rod on the inside extending from top to bottom, making it strong and rigid. It is equipped with brass ells and tees, quick opening valves that are equipped with stuffing boxes, steel coil and burner and top plate. The No. 20 fire pot is the most up-to-date coil fire pot on the market to-day and is the best and most durable in the world.

041371	20	8	9¾	6.80



No. 10

No. 10 COIL FIRE POTS

For over twenty years the No. 10 has (in its class) been the greatest selling and most extensively used coil fire pot made. Generating power, intensity of heat and economy in fuel consumption, to a very marked degree, distinguish this from any other make. The tank is made of heavy galvanized iron, fitted with galvanized cast iron top plate and bottom ring. All small or light castings are malleable iron or brass. The coil is made of extra heavy pipe and burner of steel. The needle point valves, which are fitted with stuffing boxes, are always tight, and give the user perfect control of the fire.

041370	10	8	9¾	6.00

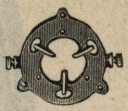
C. & L. FIRE POT AND TORCH REPAIR PARTS


No. 59801


No. 59802


No. 59803


No. 59804


No. 59805


No. 59806


No. 59807


No. 59808


No. 59809


No. 59810


No. 59811


No. 59812


No. 59814


No. 59816


No. 59817


No. 59818


No. 59819


No. 59820

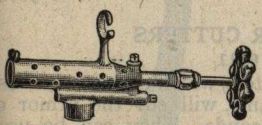
No. 59821

No. 59822

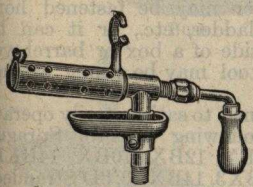

No. 59823

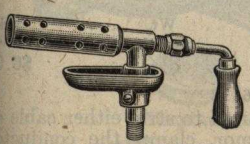

No. 59824


No. 59825


Nos. 59826 and 59827


Nos. 59828 and 59829


Nos. 59830 and 59831


Nos. 59832 and 59833


Nos. 59844 and 59845

Repairs for C. & L. Coil Fire Pots, Nos. 10, 20, 31, 41

Trade No.	Description	Price Each	Trade No.	Description	Price Each
59801	Reservoir....	$2.40	59812	Ell, malleable	$0.10
59802	No. 1 large or No. 2 small shield...	.70	59813	Ell, brass....	.14
			59814	Tee, malleable...	.10
59803	No. 3 shield.	1.60	59815	Tee, brass...	.20
59804	Coil cup	.40	59816	Plug.....	.08
59805	Top plate ...	.30	59817	Nuts Nos. 1 or 2..	.04
59806	Handle	.40	59818	Bulb.....	.48
59807	Valve	.60	59819	Upright.....	.12
59808	Air valve....	.40	59820	Connecting pipe...	.12
59809	Handle ear..	.12	59821	Wire for coil	.08
59810	Filler plug ..	.40	59822	Burner.....	.14
59811	Coil	.60	.....	.....	...

Repairs for Nos. 1 and 5 C. & L. Fire Pots

59823	Swivel.....	1.00	59825	Burner and swivel	4.00
59824	Filler.....	.55	.....	.....	....

Repairs for C. & L. Torches and Fire Pots

Trade No.	Description	Price Each
59826	Burner body and needle for No. 32 torch.....	$2.80
59827	Burner body and needle for No. 38 torch.....	2.80
59828	Burner body and needle for No. 31 torch.....	2.64
59829	Burner body and needle for No. 37 torch.....	2.64
59830	Burner for No. 19 torch, complete with dip tube	3.76
59831	Burner for No. 17 torch, complete with dip tube	3.76
59832	Burner for No. 18 torch, complete with dip tube	3.60
59833	Burner for No. 16 torch, complete with dip tube	3.60

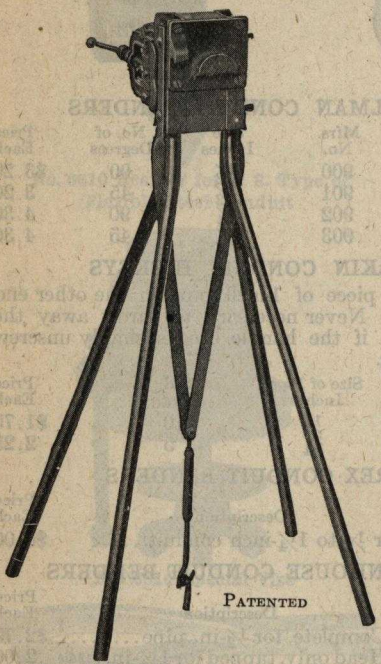
Repairs for C. & L. Automatic Pumps

59834	Cup leathers only.....	.08
59835	Hexagon nuts, any size.....	.02
59836	Pump caps.....	.10
59837	Plunger knobs.....	.10
59838	Cork washers.....	.02
59839	Springs.....	.03
59840	Cork holders.....	.10
59841	Check valve end plate.....	.08
59842	Plunger rod.....	.20
59843	Plunger rod complete with knob, cap, slide..	.50
59844	Pump complete.....	1.28
59845	Pump collar.....	.15

PIPE VISES

HENDERSON PORTABLE CONDUIT BENCHES

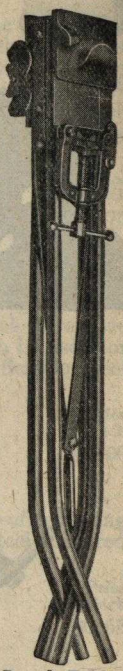
For Cutting, Threading and Bending Conduit



Bench Installed Ready for Use

A compact pipe vise and bending stand which meets a need among electricians and other mechanics who cut, thread and bend pipe, for a bench that is light enough to be readily carried by one man and yet strong enough for continuous and efficient service in working 1½-inch and smaller pipe and conduit. By reversing the legs it becomes readily portable. To set it up, reverse the legs, fasten the turnbuckle to the floor with a screw hook and the bench becomes as solid as a rock. There are no clumsy, widespreading legs to stumble over, no overhead braces to get loose and fall down. For heavy bending the back legs may be shifted away from the stand for greater rigidity. For threading nipples the front legs may be placed straight up and down allowing entire freedom to the handles of the stocks.

Every outfit is supplied with a conduit bender rigidly mounted opposite the vise. The bender is designed to bend the pipe largely by the weight of the workman a the pipe is fed into the bender about waist high, and by easy stages, which also prevents the pipe from kinking or flattening.



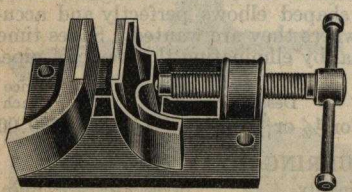
Bench Folded With Legs Reversed

The side outlet on the bender is important as the pipe can be taken out easily at any time to check up measurements or when the bend is finished. The side outlet together with the carefully designed bending bosses will make the most complicated bends such as double elbow offsets in a length of conduit, right angle or more than right angle double offsets, etc.

Trade No.	Style No.	For Conduit Size Inches	Height Inches	Floor Space Required, In.	Wt. Lbs.	Price Each
18874	0	½ and smaller	45	22x22	28	$28.00
18873	1	¾ and smaller	45	23x23	40	30.00
18875	2	1½ and smaller	45	26x26	120	120.00

Style No. 2 has separate detachable bending blocks for each size conduit, a complete set of which is furnished with each bench.

ECONOMY PIPE VISE AND BENDER



No. 020284

This device will enable a workman to handle one-third more pipe in a day than he could ordinarily. Will bend pipe faster than is possible with a hickey, and every bend is perfect.

Clean the threads, ream and bend before removing pipe from the vise.

It is impossible to kink the pipe with this machine.

Trade No.	Description	Price Each
020284	Pipe vise and bender	$7.50

PIPE VISES AND CUTTERS



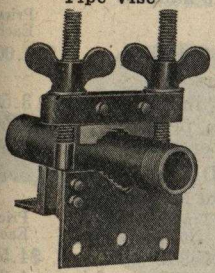
Vulcan Chain Pipe Vise

VULCAN CHAIN PIPE VISES

Trade No.	Mfrs. No.	Holds Pipe Size, Inches	Price Each
25052	1	⅛ to 2	$3.50
25053	2	¼ to 4	7.50
063767	4	⅜ to 8	18.00

Extra Parts for Vulcan Chain Pipe Vises

	For No. 1 Trade No.	For No. 1 Price Each	For No. 2 Trade No.	For No. 2 Price Each	For No. 4 Trade No.	For No. 4 Price Each
Jaws, per pair...	063768	$1.50	063900	$3.50	063905	$9.00
Chain with screw	063769	1.25	063901	2.40	063906	6.00
Handle and nut.	063770	1.10	063902	2.10	063907	3.50
Screw.....	063771	.40	063903	.70	063908	1.25
Nut.....	063774	.70	063899	1.35	063880	2.00



Nye Pocket Vise

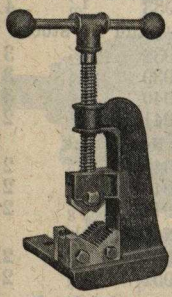
NYE POCKET VISES

Trade No.	Mfrs. No.	Holds Pipe Size, Inches	Wt. Lbs.	Price Each
25036	1	⅛ to 1¼	1½	$2.50
25037	2	⅛ to 2	2½	3.50

NYE PIPE VISES

The body is one solid piece, having no hinge. The lower jaw is a heavy double jaw screwed on the main casting in such a way that every piece can be removed and replaced at any time.

Trade No.	Description	Price Each
063764	For ⅛ to 2-inch pipe	$4.00



Nye Pipe Vise



Crane Pipe Vise

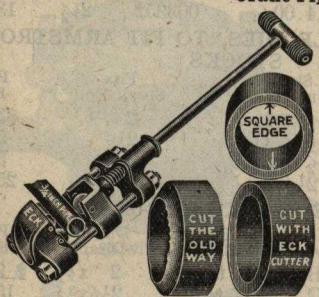
CRANE MALLEABLE IRON PIPE VISES

The malleable iron pipe vise is preferable to cast iron vise in every respect. Has interchangeable cut steel jaws, and is constructed to do the heaviest work.

Trade No.	Mfrs. No.	Holds Pipe Size, Inches	Wt. Lbs.	Price Each
063765	1	⅛ to 2	16	$10.00
063766	2	⅛ to 3	30	14.00

ECK PIPE CUTTERS

Trade No.	Cuts Pipe Size, Inches	Price Each	Extra Cutter Wheels
063897	⅛ to 1	$3.00	$0.40
063898	½ to 2	5.00	.50



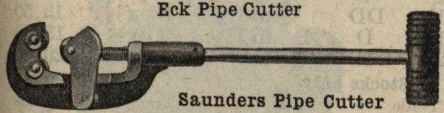
Eck Pipe Cutter

SAUNDERS PIPE CUTTERS

Trade No.	Mfrs. No.	Cuts Pipe Size, Inches	Price Each
063881	1	⅛ to 1	$3.00
063882	2	1 to 2	4.50
063883	3	2 to 3	11.00
063884	4	2½ to 4	18.00

Extra Wheels

Trade No.	For Mfrs. No.	Price, Each
063889	1	$0.24
063890	2	.32
063891	3	.60
063892	4	.60



Saunders Pipe Cutter

BARNES THREE-WHEEL PIPE CUTTERS

Trade No.	Mfrs. No.	Cuts Pipe Size, Inches	Price Each
063885	1	⅛ to 1	$4.50
063886	2	½ to 2	6.00
063887	3	1½ to 3	10.00
063888	4	2½ to 4	20.00

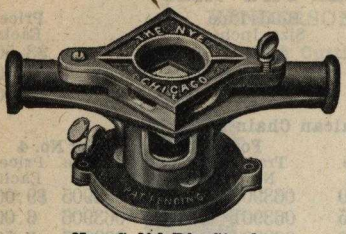
Extra Wheels

Trade No.	For Mfrs. No.	Price Each
063893	1	$0.25
063894	2	.30
063895	3	.40
063896	4	.50

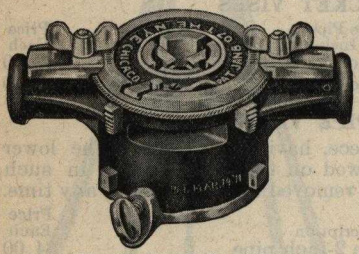


Barnes Pipe Cutter

STOCKS AND DIES



Nye Solid Die Stock



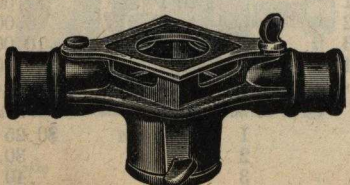
No. 25 Nye Adjustable Die Stock



Nye Solid Die



Nye Adjustable Die



Crane Die Stock

NYE SOLID DIE STOCKS

Nye Solid Stocks are made from high grade malleable castings and have adjustable bushings in front of the stock.

Trade No.	Mfrs. No.	Cuts Pipe Inches	Price Each
063926	1	⅛ to 1	$4.00
063927	2	½ to 2	6.00

Size of block, 2½ inches square by ¾ inch for No. 1, and 3⅞ inches square by ⅞ inch for No. 2.

Prices do not include dies.

No. 25 NYE ADJUSTABLE DIE STOCKS

The tool is light—weighing only 6¾ pounds. It is 33 inches from tip to tip of the handles.

Trade No.	Description	Price Each
25057	Equipped with one set of chasers....	$16.00
	Extra Chasers	
25059	Cutting ¼, ⅜, ½ and ¾ inch, per set	3.50
86999	Cutting ½, ¾ and 1 inch, per set.....	3.50
25060	Cutting ⅛ and 1 inch, per set.....	3.50

NYE SOLID DIES

Trade No.	Size Inches	Price Each	Trade No.	Size Inches	Price Each
Size of Block, 4x4x⅞, for No. 2 Stock					
063928	2	$5.00	063931	1	$4.50
063929	1½	5.00	063932	¾	4.00
063930	1¼	4.50	063933	½	4.00
Size of Block, 3x3x¾, for Nos. 1½ and 1¾ Stock					
063934	1½	4.50	063938	½	3.50
063935	1¼	4.00	063939	⅜	3.00
063936	1	4.00	063940	¼	3.00
063937	¾	3.50	063941	⅛	2.50
Size of Block, 2½x2½x¾, for No. 1 Stock					
063942	1	3.50	063945	⅜	2.50
063943	¾	3.00	063946	¼	2.50
063944	½	3.00	063947	⅛	2.00
Size of Block, 2x2x½, for No. 0 Stock					
063948	½	3.00	063950	¼	2.50
063949	⅜	2.50	063951	⅛	2.00
Size of Block, 5x5x1¼, for Nos. 3 and 4 Stock					
063953	3	14.00	063952	2½	13.00

NYE ADJUSTABLE DIES, TO FIT ARMSTRONG STOCKS

Trade No.	Size Inches	Fits Stock No.	Price Each
063954	⅛ to 1	2	$3.50
063955	½ to 1¼	2½	5.00
063956	½ to 2	3	5.00
063957	*2½x3	6	25.00

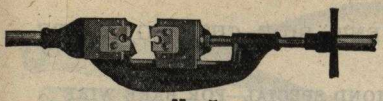
CRANE STOCKS AND DIES

Trade No.	Mfrs. No.	Style	Dies Furnished with Each Stock	Dimen. of Dies, In.	Price Each
063958	0	B	⅛ to ½	2 x½	$ 9.50
063959	1	C	¼ to 1	2½x¾	15.00
063960	1½	DD	¾ to 1¼	3 x¾	13.50
063961	1¾	D	1 to 1½	3 x¾	13.50
063962	2	E	1¼ to 2	4 x⅞	20.00

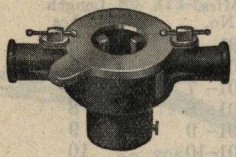
	Stocks only		Extra Dies	
Style	Trade No.	Price Each	Trade No.	Price Each
B	25061	$3.50	063963	$1.50
C	25062	5.00	063964	2.00
DD	25063	6.00	063965	2.50
D	25064	6.00	063966	2.50
E	25065	9.50	063967	3.50

*Double end.

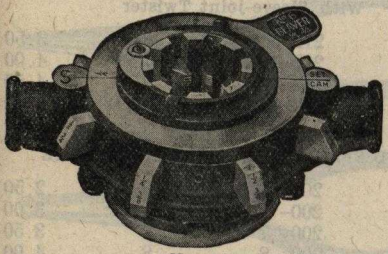
BEAVER PIPE CUTTERS AND DIE STOCKS



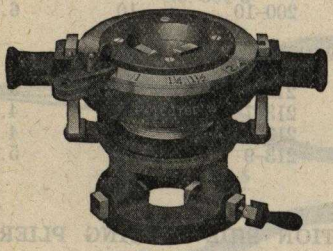
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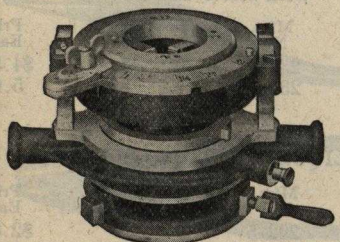
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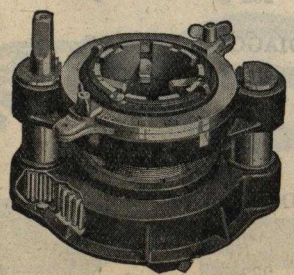
No. 6



No. 25



No. 26 with Ratchet



Nos. 41 and 61

BEAVER SQUARE-END PIPE CUTTERS

Leave no burr to ream out or file off, and gives a square pipe end on which threading dies start easier, last longer and run straight. Will not split the pipe. Excellent for cutting conduit.

Trade No.	Mfrs. No.	Cuts Pipe Size, Inches	Wt. Lbs.	Price Each
65623	1	⅛ to 1	8	$18.00
65624	5	½ to 2	13	20.00
65625	10	2½ to 4	53	90.00

Extra knives for No. 1, per set $1.20; No. 5, per set, $1.50; No. 10, per set, $2.50.

WARREN DIE STOCKS

The Warren Stocks have wide non-receding chaser dies and thread two sizes of pipe without changing dies; are adjustable and have bushings for each size pipe. Ideal tool for electrical contractors.

Trade No.	Mfrs. No.	Cutting Range Inches	Net Wt., Lbs.	Price, Each Complete Stock	Price, Each Extra Dies
66621	120	¼, ⅜	3¼	$6.50	$1.50
66622	121	½, ¾	5¾	7.00	1.60
66623	122	1, 1¼	12	8.00	2.00
66624	123	1½, 2	15	10.00	2.50

No. 6 BEAVERETTE DIE STOCKS

The Beaverette is the only stock threading four sizes of two different thread pitches, without changing dies.

Trade No.	Mfrs. No.	Size of Pipe Inches	Style of Dies	Net Wt., Lbs.	Price Each
66620	6	¼ to ¾	R. or L.	8	$15.00

Extra set of dies, right or left, ⅛ or ¼ and ⅜ or ½ and ¾-inch, $3.00.

BEAVER ADJUSTABLE DIE STOCKS

Beaver Die Stocks thread all sizes of pipe without changing dies; are adjustable, and are built on the easy working receding die principle, which enables one man to thread any size of pipe up to 12 inches.

Narrow receding dies have only half as many teeth as common dies, which reduces the friction accordingly. They automatically back away from each other as they advance on the pipe to form the tapered thread, which means less metal to remove with each succeeding turn. Each turn grows easier.

By means of hardened cam, made slow enough to prevent slipping, the one set of dies is moved in or out for any size pipe or any variation from standard, so that perfect adjustment is obtained.

Nos. 25 and 26—1 to 2-inch

Nos. 25 and 26 have universal chuck and detachable barrel. One set of dies cuts four sizes.

Trade No.	Mfrs. No.	Size of Pipe Inches	Style of Dies	Net Wt., Lbs.	Price Each
66616	25	1 to 2	R. H.	22	$30.00
66617	26	1 to 2	R. H.	24	35.00

Extra set of dies cuts all sizes, $3.50.

No. 41—2½ to 4-inch

The No. 41 is a strictly one-man device. One set of dies, threads sizes 2½, 3, 3½ and 4-inch.

66618	41	2½ to 4	R. H.	75	110.00

Extra set of dies, $9.00.

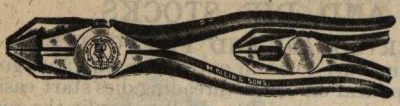
No. 61—2½ to 6-inch

Same as No. 41, except larger, has two sets of dies; one set cuts 2½, 3, 3½-inch, the other cuts 4, 4½, 5 and 6-inch, and they are inserted without removing any parts.

66619	61	2½ to 6	R. H.	130	220.00

Extra dies, each set, $14.00.

PLIERS

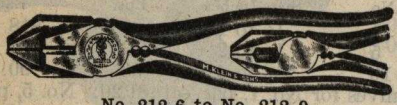


No. 201-5 to No. 201-10

LINEMEN'S SIDE CUTTING PLIERS

DIAMOND SPECIAL—FOR BARE WIRE

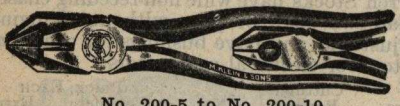
Trade No.	Mfrs. No.	Length Inches	Price Each
044901	201– 5	5	$2.50
044902	201– 6	6	3.00
044903	201– 7	7	3.50
044904	201– 8	8	4.00
044905	201– 9	9	5.00
044906	201–10	10	6.00



No. 212-6 to No. 212-9

With Sleeve-joint Twister

121625	212–6	6	3.50
044913	212–7	7	4.00
044914	212–8	8	4.50
044915	212–9	9	5.50



No. 200-5 to No. 200-10

WORLD SPECIAL—FOR INSULATED WIRE

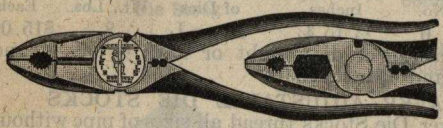
044907	200– 5	5	2.50
044908	200– 6	6	3.00
044909	200– 7	7	3.50
044910	200– 8	8	4.00
044911	200– 9	9	5.00
044912	200–10	10	6.00



No. 213-6 to No. 213-9

With Sleeve-joint Twister

121626	213–6	6	3.50
044916	213–7	7	4.00
044917	213–8	8	4.50
044918	213–9	9	5.50

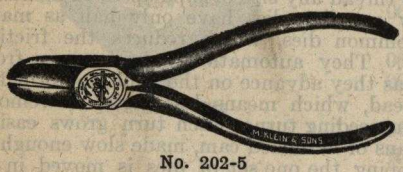


No. 233-7

COMBINATION SIDE CUTTING PLIERS

With Sleeve Twister

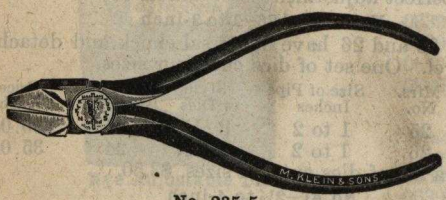
Trade No.	Mfrs. No.	Length Inches	Price Each
121618	233–7	7	$4.50
121619	233–8	8	5.00



No. 202-5

OBLIQUE CUTTING PLIERS

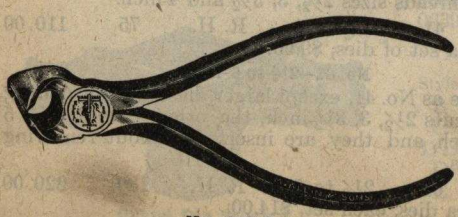
Trade No.	Mfrs. No.	Length Inches	Price Each
045120	202–5	5	$2.50
121624	202–5½	5½	2.60
045121	202–6	6	2.70



No. 235-5

DIAGONAL PLIERS

Trade No.	Mfrs. No.	Length Inches	Price Each
121621	235–5	5	$2.50
121622	235–5½	5½	2.70



No. 232-5

END CUTTING PLIERS

Trade No.	Mfrs. No.	Length Inches	Price Each
121601	232–5	5	$2.50
121602	232–5½	5½	2.70

PLIERS



No. 313-5

HEAT COIL PLIERS

Trade No.	Mfrs No.	Length Inches	Price Each
107930	313–5	5	$2.50



No. 305-5

LONG FLAT NOSE PLIERS

Trade No.	Mfrs. No.	Length Inches	Price Each
056977	305–5	5	$2.00
044727	305–6	6	2.30
044728	305–7	7	2.50



No. 206-5

LONG FLAT NOSE SIDE CUTTING PLIERS

Trade No.	Mfrs. No.	Length Inches	Price Each
057907	206–5	5	$2.30
044729	206–6	6	2.50
044730	206–7	7	2.80



No. 304-5

LONG DUCKBILL PLIERS

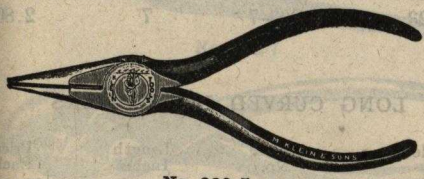
Trade No.	Mfrs. No.	Length Inches	Price Each
056978	304–5	5	$2.00
044731	304–6	6	2.30
044732	304–7	7	2.50



No. 205-5

LONG DUCKBILL, SIDE CUTTING PLIERS

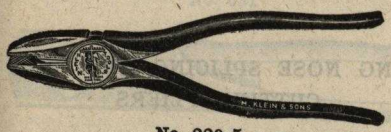
Trade No.	Mfrs. No.	Length Inches	Price Each
057908	205–5	5	$2.30
044733	205–6	6	2.50
044734	205–7	7	2.80



No. 230-5

OVAL NOSE MILLINERY PLIERS

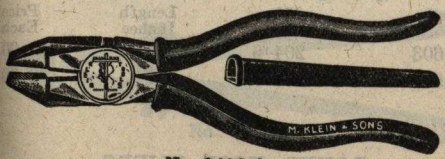
Trade No.	Mfrs. No.	Length Inches	Price Each
107925	230–5	5	$2.50



No. 229-5

BLUNT NOSE MILLINERY PLIERS

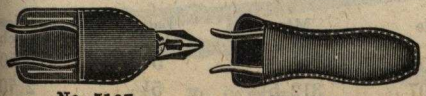
Trade No.	Mfrs. No.	Length Inches	Price Each
107926	229–5	5	$2.50



No. 2400-6

RUBBER INSULATING SLEEVES

Trade No.	Mfrs. No.	For Pliers Size, In.	Price, per Pair
045146	2400–6	6	$1.00
045147	2400–7	7	1.10
045148	2400–8	8	1.20



No. 5107 No. 5112

LEATHER PLIER POCKETS

Trade No.	Mfrs. No.	Description	Price Each
045149	5107	To slip on tool belt	$1.30
045150	5112		1.30

PLIERS



No. 311-5½

FLAT NOSE SPRING-ADJUSTING PLIERS

Trade No.	Mfrs. No.	Length Inches	Price Each
121608	311–5½	5½	$2.30



No. 301-5

LONG NOSE PLIERS, WITHOUT CUTTERS

Trade No.	Mfrs. No.	Length Inches	Price Each
056975	301–5	5	$2.00
044720	301–6	6	2.30
044721	301–7	7	2.50



No. 303-5

LONG NEEDLE NOSE PLIERS

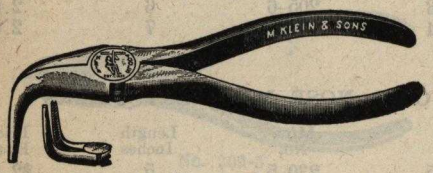
Trade No.	Mfrs. No.	Length Inches	Price Each
107927	303–5	5	$2.00
107928	303–6	6	2.30
107929	303–7	7	2.50



No. 203-5

LONG NOSE SIDE CUTTING PLIERS

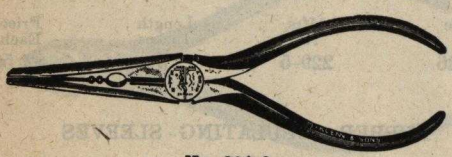
Trade No.	Mfrs. No.	Length Inches	Price Each
056976	203–5	5	$2.30
044722	203–6	6	2.50
044723	203–7	7	2.80



No. 302-6

LONG CURVED NOSE PLIERS

Trade No.	Mfrs. No.	Length Inches	Price Each
044726	302–6	6	$2.60

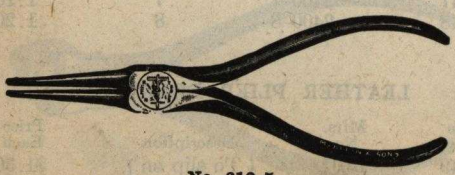


No. 204-6

LONG NOSE SPLICING AND SIDE CUTTING PLIERS

For splicing No. 14 B. & S. copper wire.

Trade No.	Mfrs. No.	Length Inches	Price Each
121603	204–6	6	$3.00
121604	204–7	7	3.50



No. 312-5

ROUND NOSE PLIERS

Trade No.	Mfrs. No.	Length Inches	Price Each
121606	312–5	5	$2.50
121607	312–5½	5½	2.70

PLIERS AND WIRE CUTTERS



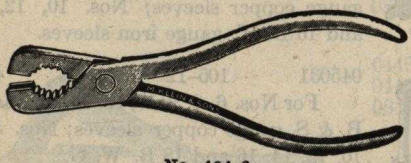
No. 50-4



No. 3006



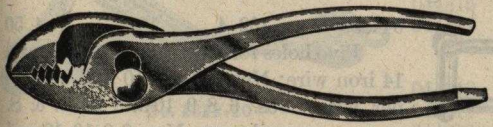
Goodridge Pliers



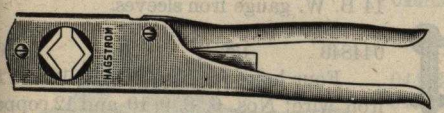
No. 404-6



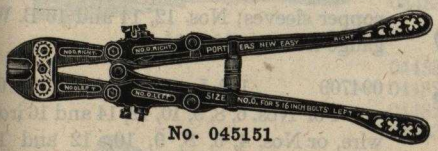
No. 401-7



No. 631



No. 636



No. 045151



No. 063619

UTICA PLIERS

Trade No.	Mfrs. No.	Length Inches	Price Each
044919	50–4	4	$1.10
044920	50–5	5	1.20
044921	50–6	6	1.30
044922	50–7	7	1.60
044923	50–8	8	1.80

MICA INSULATED HANDLE PLIERS

044933	3006	6	4.00
044934	3007	7	5.00
044935	3008	8	6.00

Insulating covering will not flake off. Tested to insulate against 2500 volts.

GOODRIDGE WIRE SKINNING PLIERS

This tool combines a pair of side cutting pliers and a tool for stripping the insulation from No. 14 B. & S. single and duplex wire and all sizes of lamp cord.

42651	227–8	8	6.00

SWEDISH OBLIQUE CUTTING PLIERS

045122	3167B	4	1.70
045123	3167C	4½	1.80
045124	3167	5	2.00
045125	3167A	5½	2.20
045126	3168	6	2.50

BURNER PLIERS

121594	404–6	6	1.50

GAS PLIERS

Trade No.	Mfrs. No.	Length Inches	Finish	Price Each
121593	401– 7	7	Plain	$1.80
045137	401– 8	8	Plain	2.00
045138	401–10	10	Plain	2.40
045139	401–12	12	Plain	2.70

COMBINATION GAS PLIERS

045140	631	6	Plain	.80
045141	632	6	Nickeled	.90
045142	633A	8	Plain	1.00
045143	633	8	Nickeled	1.10
045144	634A	10	Plain	1.10
045145	634	10	Nickeled	1.30

TUBE AND CARBON CUTTERS

The adjustable porcelain tube cutter is adapted for severing all the different sizes of porcelain tubes commonly used in ordinary construction work. Weight, 14 ounces.

Adjustable

018840	636	....	Nickel-plated	5.00

Non-adjustable

The non-adjustable porcelain tube cutter is the same as the above, with the exception that it will cut only one size porcelain tubes. In ordering, specify size of tube. Can be made to cut 5/16, 3/8, 1/2 or 5/8-inch tube.

018841	636A	....	Nickel-plated	3.00

"NEW EASY" WIRE CUTTERS

Trade No.	Mfrs. No.	Length Inches	Cuts Inches	Price Each
045151	1	24½	3/8	$5.00
045152	2	30	1/2	7.00
045153	3	36	5/8	9.00

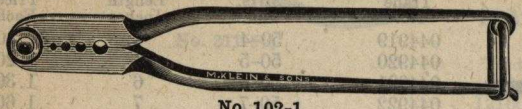
BOSTON WIRE CUTTERS

With Insulated Handles

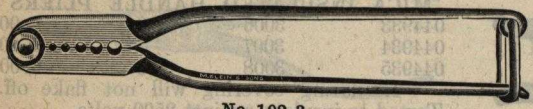
044924	0	18½	5/16	5.50
063619	1	24½	3/4	6.50
063620	2	30½	1 1/8	9.00
063621	3	36¼	1 1/4	12.00

SPLICING CLAMPS

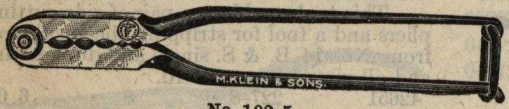
Polished Heads and Black Handles



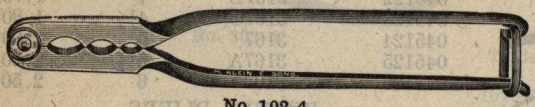
No. 102-1



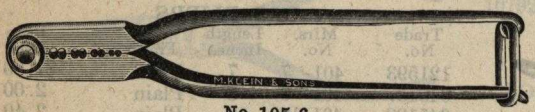
No. 102-3



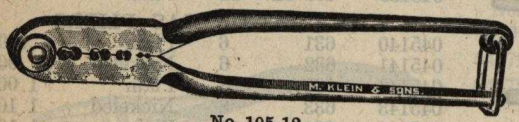
No. 102-5



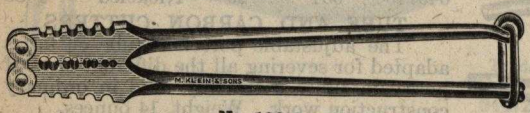
No. 102-4



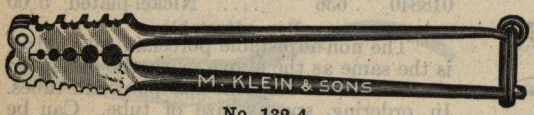
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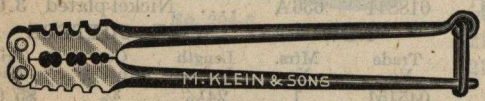
No. 105-12



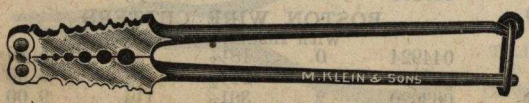
No. 132-3



No. 132-4



No. 132-2



No. 132-5

Trade No.	Mfrs. No.	Length Inches	Price Each
045028	102–1	7	$3.00

Baby pattern. For Nos. 10, 12, 14 and 16 copper wire; Nos. 12, 14, 16 and 18 iron wire.

045029	102–3	10½	4.00

For Nos. 6, 8, 9, 10, 12 and 14 iron wire; Nos. 4, 6, 8, 9, 10 and 12 copper wire.

045030	102–5	10½	4.00

For Nos. 2, 4, 6, 8, 9, 10 and 12 copper wire; Nos. 4, 6, 8, 9, 10, 12 and 14 iron wire.

045033	102–4	10¾	4.00

For Nos. 0, 2 and 4 copper wire; Nos. 2, 4 and 6 iron wire.

045035	105–6	10½	4.00

For Nos. 8, 9, 10, 12 and 14 B. & S. gauge copper sleeves; Nos. 10, 12, 14 and 16 B. W. gauge iron sleeves.

045031	105–12	10½	4.00

For Nos. 6, 8, 9, 10, 12, 14, 16 and 17 B. & S. gauge copper sleeves; Nos. 8, 9, 10, 12, 14, 16 and 18 B. W. G.

044838	132–3	10¾	4.50

Five holes for Nos. 6, 8, 9, 10, 12 and 14 iron wire; Nos. 4, 6, 8, 9, 10 and 12 copper wire; Nos. 8, 9, 10, 12 and 14 B. & S. gauge copper sleeves; Nos. 10, 12, 14 and 16 B. W. gauge iron sleeves.

044839	132–4	10¾	4.50

Five holes for Nos. 6, 8, 9, 10, 12 and 14 iron wire; Nos. 4, 6, 8, 9, 10 and 12 copper wire; Nos. 6, 8, 9, 10 and 12 B. & S. gauge copper sleeves; Nos. 8, 9, 10, 12 and 14 B. W. gauge iron sleeves.

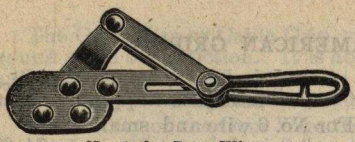
044840	132–2	9	4.00

Four holes for Nos. 8, 9, 10, 12 and 14 iron wire; Nos. 6, 8, 9, 10 and 12 copper wire; Nos. 10, 12 and 14 B. & S. gauge copper sleeves; Nos. 12, 14 and 16 B. W. gauge iron sleeves.

094709	132–5	11¼	5.00

For Nos. 6, 8, 9, 10, 12, 14 and 16 iron wire, or Nos. 4, 6, 8, 9, 10, 12 and 14 copper wire; five double holes for twisting sleeve joints; Nos. 6, 8, 9, 10, 12 and 14 B. & S. gauge copper sleeves, or Nos. 8, 9, 10, 12, 14 and 16 B. W. gauge iron sleeves.

LINEMEN'S GRIPS



No. 1, for Bare Wire



Linemen's Tool

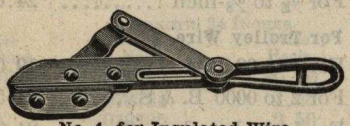
BUFFALO GRIPS, FOR BARE WIRE

Trade No.	Mfrs. No.	Extreme Opening, In.	For Use with	Price Each
044801	1	.22	No. 6 wire and smaller	$5.00
044802	2	.35	No. 0 wire and smaller	7.50
044803	3	.48	No. 0000 and smaller	11.00
			With Pulleys	
044804	1	.22	No. 6 wire and smaller	6.60
044805	2	.35	No. 0 wire and smaller	8.50
044806	3	.48	No. 0000 and smaller	12.00

Pulleys are for 3/8, 7/16 and 5/8-inch rope, respectively.



No. 1, with Pulley

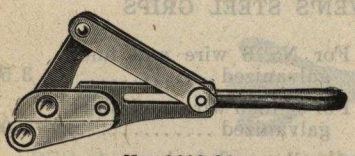


No. 4, for Insulated Wire

BUFFALO GRIPS, FOR INSULATED WIRE

044807	4	.52	No. 6 to No. 1, incl.	7.50
044809	5	.68	No. 4 to No. 0000, incl.	9.00
084857	6	.27	No. 14 to No. 8, incl.	4.70
			With Pulleys	
044808	4	.52	No. 6 to No. 1, incl.	8.50
044810	5	.68	No. 4 to No. 0000, incl.	9.50
084858	6	.27	No. 14 to No. 8, incl.	6.20

Pulleys are for 7/16, 5/8 and 3/8-inch rope, respectively.



No. 1613-20

Linemen's Tools, Single Purchase

044811	1	.22	No. 6 wire and smaller	12.50
044812	2	.35	No. 0 wire and smaller	13.70
044813	4	.52	For insulated wire	11.00

CHICAGO GRIPS, FOR BARE WIRE



No. 1612-20

044814	1613–20	No. 10 wire and smaller	4.70
044815	1613–30	No. 6 wire and smaller	5.20
044816	1613–40	No. 0 wire and smaller	7.50
044817	1613–50	No. 0000 wire and smaller	11.00
		With Pulleys	
044818	1612–20	No. 10 wire and smaller	6.20
044819	1612–30	No. 6 wire and smaller	6.60
044820	1612–40	No. 0 wire and smaller	8.50
044821	1612–50	No. 0000 wire and smaller	12.00



No. 1611-10

CHICAGO GRIPS, FOR INSULATED WIRE

044834	1611–10	No. 10 wire and smaller	5.90
044822	1611–20	No. 4 wire and smaller	6.60
044824	1611–30	No. 00 wire and smaller	8.30
044836	1611–40	No. 0000 wire and smaller	12.50
		With Pulleys	
044835	1610–10	No. 10 wire and smaller	6.60
044823	1610–20	No. 4 wire and smaller	7.40
044825	1610–30	No. 00 wire and smaller	9.20
044837	1610–40	No. 0000 wire and smaller	13.20



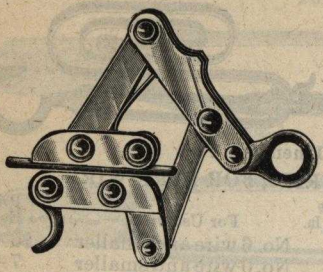
No. 1610-10

CHICAGO LINEMEN'S TACKLE

Single Purchase

044826	1700–20	No. 10 wire and smaller	11.00
044827	1700–30	No. 6 wire and smaller	12.50
044828	1700–40	No. 0 wire and smaller	13.70

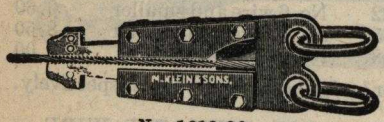
LINEMEN'S TOOLS



No. 1602-10

AMERICAN GRIPS

Trade No.	Mfrs. No.	Description	Price Each
045001	1602–10	For No. 6 wire and smaller, galvanized	$4.00
045002	1602–20	For No. 0 wire and smaller, galvanized	7.00



No. 1618-30

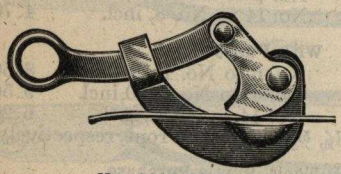
SAMSON WEDGE GRIPS

For Messenger Wire

050276	1618–20	For 3/16 to 3/8-inch	19.00
050277	1618–30	For 1/4 to 1/2-inch	21.50
050278	1618–40	For 5/16 to 5/8-inch	24.00

For Trolley Wire

050279	1619–20	For 6 to 00 B. & S.	19.00
050280	1619–30	For 2 to 0000 B. & S.	21.50
045007	1619–40	For 5/8-inch and smaller	24.00

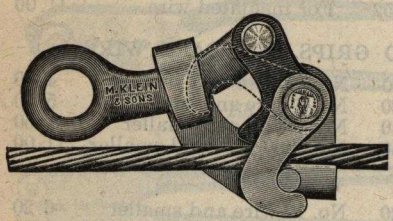


No. 1604-10

HAVEN'S STEEL GRIPS

045005	1604–10	For No. 8 wire and finer, galvanized	3.50
045006	1604–20	For 1/2-inch wire and finer, galvanized	5.00

Very efficient for all-round work.



No. 1625-20

IMPROVED HAVEN'S GRIPS

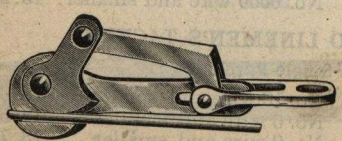
045008	1625–20	For plain or stranded wire from No. 6 to 3/4-in. diam.	11.00



No. 1609-20

COME-ALONG ECCENTRIC GRIPS

045010	1609–20	For No. 8 wire and finer, galvanized	1.20
045011	1609–30	For No. 6 wire and finer, galvanized	1.50
045012	1609–40	For No. 0 wire and finer, galvanized	2.00



No. 1605-10

STYLE A CLAMPS

044832	1605–10	For No. 8 wire and finer, polished brass	4.80

Body and draw parts are bronze. Dog is tool steel, hardened.

044833	1605–20	For 1/2-in. wire and finer; galvanized steel	6.00

Body and draw parts are forged steel. Dog is tool steel, hardened. Galvanized finish.

GEM WIRE AND CABLE GRIPS

The Gem Wire or Cable Grip, as illustrated, is the result of long experience in underground cable construction. It is absolutely indispensable as a gripping device preparatory to pulling in cable. The flaring ends form a funnel shaped entrance for the cable end, which renders its application instantaneous. It can be slipped on in one second.

The ability of the Gem Wire Grip is not limited to a single wire, or to lead covered cable alone. It can be used to pull in a three-wire feeder, or a number of wires, such as would be required on a signal system. Not a single inch of wire or lead covered cable is destroyed in the pulling operation, due to the application of the grip.

SINGLE-EYE GRIPS



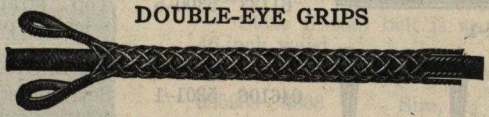
The single-eye type is used for underground purposes, where a simple pulling operation is to be done, and for aerial wires or cables that cross pole tops.

In using the single-eye grips where there are extra long pulls, the 36 and 48-inch grips are recommended.

Size Inches	Length, 24 Inches Trade No.	Price Each	Length, 36 Inches Trade No.	Price Each	Length, 48 Inches Trade No.	Price Each
*½	078783	$0.60	.....	....	.....	....
1	078784	1.80	078787	2.40	078790	3.00
2	078785	2.50	078788	3.50	078791	4.50
3	078786	3.00	078789	4.20	078792	5.40

*Not made longer than 24 inches, as it is used for pulling 10-pair lead covered cable, 14 duplex and bell wires bunched together. Leather collars, 65 cents additional.

DOUBLE-EYE GRIPS

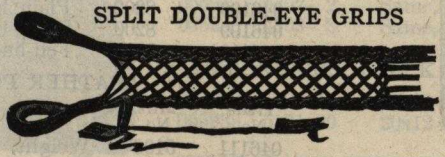


With this type a hold can be taken at any point when slipped on from the end, and releasing the grip by pulling the end opposite the eye or funnel shaped end, it can be slid along to the next desired point of purchase, or hold.

It is especially used for pulling out cable already installed and tailing in.

Trade No.	Size Inches	Length Inches	Price Each
078793	1	24	$3.40
078794	2	24	5.00
078795	3	24	5.50

SPLIT DOUBLE-EYE GRIPS



Grip Open



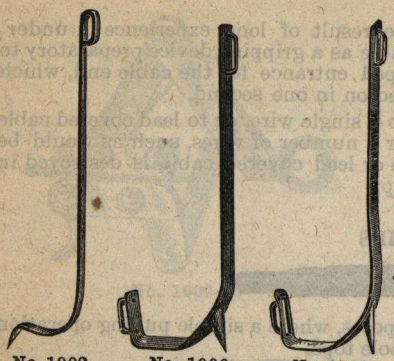
Grip Applied

This type can be laced on at any point desired, and is designed for use where the grip cannot be applied at the end and a hold is desired at a point intermediate.

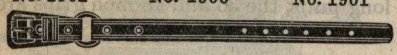
Trade No.	Size Inches	Length Inches	Price Each
078796	1	24	$5.25
078797	2	24	5.60
078798	3	24	6.20

For extra heavy weight grips, add 20 per cent to list prices given above.

CLIMBERS AND BELTS



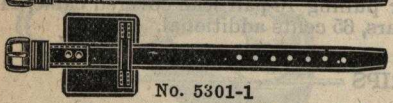
No. 1902 No. 1900 No. 1901





No. 5300-1





No. 5301-1



No. 8200



No. 5106



No. 5111



No. 5204



No. 5205

WESTERN CLIMBERS

Trade No.	Mfrs. No.	Description	Price per Pair
046097	1902	Without straps	$4.00

Made in lengths from 15 to 18 inches by 1-inch variations.

EASTERN CLIMBERS

Without Straps

046099	1900	Riveted loop	5.50
046101	1903	Riveted loop, light weight	5.50
046102	1904	Riveted loop, Stevens' pattern	5.50
046103	1901	Punched loop	5.00

Nos. 1900, 1904 and 1901 made in lengths from 15 to 18 inches by ½-inch variations. Larger sizes furnished on special order.

No. 1903 made in lengths from 15 to 16½ inches by ½-inch variations.

No. 1904 is a little different from the No. 1900 type. The foot-rest is slightly more rounded.

STRAPS FOR WESTERN CLIMBERS

Trade No.	Mfrs. No.	Description	Price per Set
046105	5300–1	Set consists of two upper and two lower straps	$6.00
046104	5300–4	Plain upper strap	3.00
61133	5300–5	Top strap with plain leather pad	3.00

STRAPS FOR EASTERN CLIMBERS

046106	5301–1	Set consists of two upper straps, with 4x4 plain leather pads and two lower straps	6.00
046107	5301–2	With sheep-lined pads	7.50
046108	5301–3	With felt-lined pads	7.50
61134	5301–4	Straight strap without pad	3.00
61135	5301–5	Strap with plain pad	4.50

PADS FOR EASTERN CLIMBERS

Trade No.	Mfrs. No.	Description	Price per Pair
046100	8202	Plain leather, 4x4 in.	$1.50
046109	8200	Sheep-lined, 4x4 in.	2.25
046110	8201	Felt-lined, 4x4 in.	2.25

LEATHER POUCHES

Trade No.	Mfrs. No.	Description	Price Each
046111	5106	Weight, 6 ounces	$2.25

Has loops for belt.

State for what size belt pouch is wanted.

HIP POCKET TOOL CASES

Trade No.	Mfrs. No.	Size Inches	Price Each
046115	5111	5x7	$2.25

SAFETY TOOL BELTS

With Rings

Trade No.	Mfrs. No.	Description	Price Each
046113	5202	2¼ inches, single	$ 7.50
046116	5204	3½ inches, single	10.50
046117	5205	2¼ inches, double	10.50

When ordering belts, state if wanted for 38, 40, 42, 44 or 46-inch waist. Larger sizes furnished at additional prices.

LINEMEN'S TOOL BELTS AND BAGS



No. 5308



No. 5250



No. 5252



No. 5303-1



No. 5101-15



No. 5108-20



No. 5102-12



No. 5206-1A

BELT AND SAFETY STRAPS

The safety strap is 1¾ inches wide, 6 feet long, and provided with strong snap at each end. Strap may be shortened or lengthened by adjusting buckle.

Trade No.	Mfrs. No.	Description	Price Each
055935	5206–1A	Belt and safety strap...	$15.00

State if tool belt is wanted for 38, 40, 42, 44 or 46-inch waist.

COMBINED SAFETY AND JACK STRAPS

055933	5308	Size, 1¾ inches.....	9.00

SAFETY STRAPS

055936	5250	1¾ in. x 6 ft., imperial snaps....	8.25
055931	5251	1¾ in. x 6 ft., roller snaps	9.75
055932	5253	2 in. x 6 ft., roller snaps.....	11.25
055934	5252	1¾ in. x 6 ft., swivel roller snaps.	10.50

JACK OR VISE STRAPS

055930	5303–1	Size 1¼ in. x5½ ft.....	4.50
055947	5302–2	Same, with snaps.....	5.25
055948	5303–3	Same, with clevis.....	5.25

INSPECTORS' BLACK LEATHER TOOL BAGS

055937	5101–15	15x12 inches.....	15.00
055938	5101–20	20x12 inches.....	19.50

INSPECTORS' HARNESS LEATHER TOOL BAGS

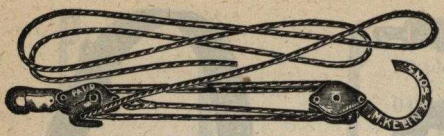
Made entirely of black harness leather, steel studded shoulder straps combined with pad and hand strap.

055941	5108–20	Size, 8x20 inches.....	22.05

LINEMEN'S CANVAS TOOL BAGS, LEATHER BOTTOM

Trade No.	Mfrs. No.	Size Inches	Price Each
055942	5102–12	12	$8.40
055949	5102–14	14	9.45
055943	5102–16	16	9.90
055944	5102–18	18	10.50
055945	5102–20	20	10.95
055950	5102–22	22	12.00
055946	5102–24	24	12.75

LINEMEN'S TACKLE



No. 1801-30



No. 1802-30



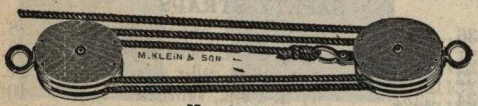
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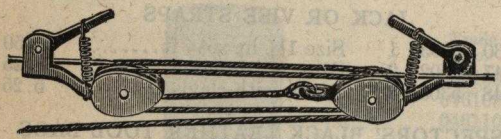
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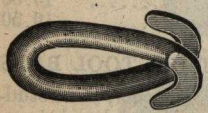
No. 1702-20



No. 4900-3



No. 4902-2¼



No. 71



No. 045059

LINEMEN'S SELF-LOCKING SLACK TACKLE

Has steel blocks with anchor hook at one end and spring snap hook for attaching grip on the other end with locking device.

Trade No.	Mfrs. No.	Description	Weight Pounds	Price per Set
045295	1801–30	Galvanized	2½	$5.50

Furnished with 25 feet ⅜-inch rope.

TROUBLEMEN'S SELF-LOCKING BLOCKS

This set is similar to above, but has a snap hook at each end for attaching grips.

063618	1802–30	Galvanized	2½	5.50

Furnished with 25 feet ⅜-inch rope.

LINEMEN'S SELF-LOCKING EYE BLOCKS

This set is similar to above, but has an eye at each end for attaching grips.

063617	1803–30	Galvanized	2	5.00

Furnished with 25 feet ⅜-inch rope.

LINEMEN'S BLOCKS, WITH STRAPS

045287	4904–12	With 12-ft. strap	2¾	8.00

HOWES' WIRE TOOLS

The swivel hook is steel, with an opening large enough to go over an insulator pin or other convenient object to which to anchor. The forward end has a locking device to hold the load at any distance.

It is arranged so that either a vise or grip can be attached.

045018	1702–20	Sgle. purchase	2	6.00
045019	1702–30	Dble. purchase	2½	7.00

WOOD BLOCKS, WITH EYES FOR GRIPS

Trade No.	Mfrs. No.	Size of Blocks, In.	Size of Rope, In.	Price per Pair
045288	4900–3	3	7/16	$4.50
045289	4900–4	4	½	5.00
045290	4900–5	5	⅝	7.50

PULLEY BLOCKS, WITH ECCENTRIC GRIPS

Malleable Iron, Galvanized

For pulling No. 12 bare wire and smaller.

Trade No.	Mfrs. No.	Size of Blocks, In.	Wt., Lbs. per Pair	Price Each
045292	4902–2¼	2¼	2	$6.00

REPAIR LINKS

Trade No.	Mfrs. No.	Size Inches	Price Each
045285	71	5/16 x 2 x 1½	$0.10
045286	72	⅜ x 2½ x 1½	.10

MALLEABLE IRON PULLEY BLOCKS

For ⅜-inch Rope, 2¼-inch Shell

With Eyes			With Hook		
Trade No.	Description	Price Each	Trade No.	Description	Price Each
045051	Single, one eye	$0.44	045069	Single, one hook	$0.86
045052	Single, two eyes	.44	045070	Single, hook and eye	.86
045053	Double, one eye	.62	045071	Double, one hook	1.02
045054	Double, two eyes	.62	045072	Double, hook and eye	1.02
	For ½-inch Rope, 3-inch Shell				
045057	Single, one eye	1.04	045075	Single, one hook	1.72
045058	Single, two eyes	1.04	045076	Single, hook and eye	1.72
045059	Double, one eye	1.20	045077	Double, one hook	1.80
045060	Double, two eyes	1.20	045078	Double, hook and eye	1.80

GLOVES AND BELLOWS

PERFECTION LINEMEN'S GLOVES

Perfection Linemen's Gloves are seamless in construction, of maroon color and are heavily re-enforced at the points where hard usage occurs. Being seamless, there is no opportunity for leakage through seams, which is a drawback to the handmade glove and they may be reversed, as there is no lining, thus insuring a dry glove at all times. Two pairs of these should outwear three pairs of handmade ones, on account of the reversible features. All gloves are guaranteed to withstand the voltage for which they are marked.

The re-enforced gloves permit free use of hands, yet last longer than the plain style.

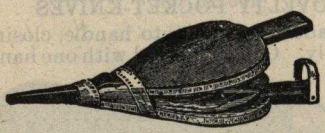
Furnished in sizes 9, 9½, 10, 10½ and 11.



Linemen's Gloves

Trade No.	Mfrs. No.	Description	Length Inches	Price per Doz. Pairs
		5000 Volts—Maroon		
68763	512	Plain	12	$31.50
68764	514	Plain	14	36.00
		7000 Volts—Maroon		
68765	712	Plain	12	36.00
68766	714	Plain	14	40.50
68767	712R	Re-enforced palm	12	45.00
68768	714R	Re-enforced palm	14	50.00
		10000 Volts—Maroon		
68769	1012	Plain	12	40.50
68770	1014	Plain	14	45.00
68771	1018	Plain	18	72.00
68772	1012R	Re-enforced palm	12	50.00
68773	1014R	Re-enforced palm	14	54.00
68774	1018R	Re-enforced palm	18	81.00
		15000 Volts—Maroon		
68775	1512	Plain	12	45.00
68776	1514	Plain	14	50.00
68777	1518	Plain	18	81.00
68778	1512R	Re-enforced palm	12	58.50
105926	1514R	Re-enforced palm	14	63.00
105927	1518R	Re-enforced palm	18	90.00
		5000 Volts—Black		
105928	12	Plain	12	27.00
105929	15	Lined—re-enforced.	15	45.00

When ordering, be sure to specify size in addition to trade number.



Hand Bellows

HAND BELLOWS

Trade No.	Width Inches	Price Each	Trade No.	Width Inches	Price Each
5311	10	$2.50	55142	14	$4.00
5306	12	3.00	.....	..	.....

UNIVERSAL DUSTERS

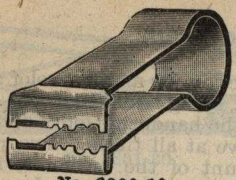
No metal mountings. The nozzle as well as the body is made of wood, precluding short circuits or injury of any kind.



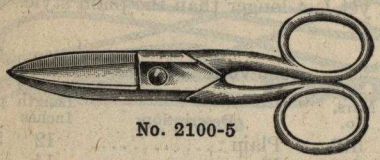
Universal Duster

Trade No.	Mfrs. No.	Length Inches	Weight Ounces	Price Each
09852	1	20	10½	$2.70
55143	2	22⅜	13½	3.60
09854	3	24¾	16½	5.90
55144	4	25⅛	23	9.00

ELECTRICIANS' TOOLS



No. 2300-10



No. 2100-5



No. 82



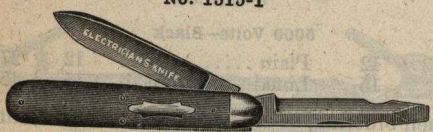
No. 49



No. 1560-2



No. 1515-1



No. 1550-2



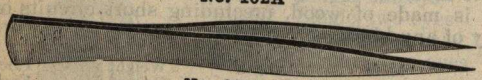
No. 402C



No. 402B



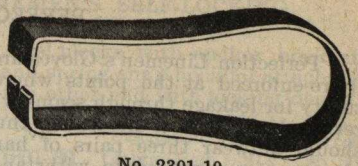
No. 402A



No. 2200-4½



No. 2201-3½



No. 2301-10

P. & G. WIRE PEELERS

Skin or split any kind of insulated wire, including weatherproof, rubber covered, cotton covered, braided, lead covered, single or duplex wires, lamp cord, etc. For No. 4 wire and smaller. Illustration is one-third actual size.

Trade No.	Mfrs. No.	Price Each
095074	2300–10	$2.00

PERRY WIRE PEELERS

Trade No.	Mfrs. No.	Description	Price Each
045162	2301-10	Will strip wire to No. 12	$1.50

ELECTRICIANS' SCISSORS

045163	2100–5	5 inches long, N. P.	1.50

ELECTRICIANS' SHEARS

095076	82	7 in. long, 2-in. blade	1.00
045164	49	12¾ in. long, 3-in. blade	1.50
045165	48	14 in. long, 3½-in. blade	2.00

CABLE STRIPPER KNIVES

045170	1560–2	For insulated wire	2.30

CABLE SHEATH SPLITTING KNIVES

045171	1515–1	For lead cable	2.30

ELECTRICIANS' KNIVES

045166	1550–1	Single blade	1.50
045167	1550–2	Double blade	2.00

NOVELTY POCKET-KNIVES

Blades slide up into handle, closing perfectly. Can be opened with one hand.

045168	402C	Length, open, 5½ inches	2.00

NOVELTY SCREWDRIVERS

045169	402B	Close in same manner as Novelty Pocketknife	2.00

NOVELTY SCREWDRIVER KNIVES

095075	402A	Single blade	2.00

WIRE TWEEZERS

045172	2200-4½	4½ in. long, needle point, nickel-plated	.70
045173	2201-3½	3½ in. long, blunt point, nickel-plated	.70

SCREWDRIVERS AND TOOL SETS



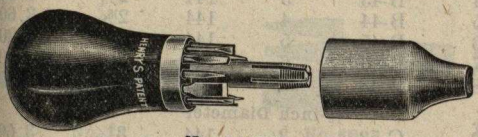
Champion, Cabinet Style



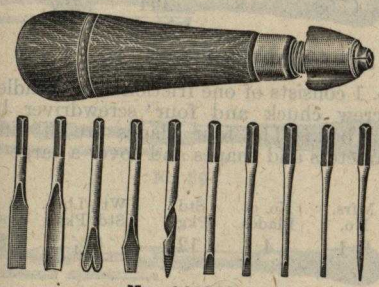
Champion, Electricians' Style



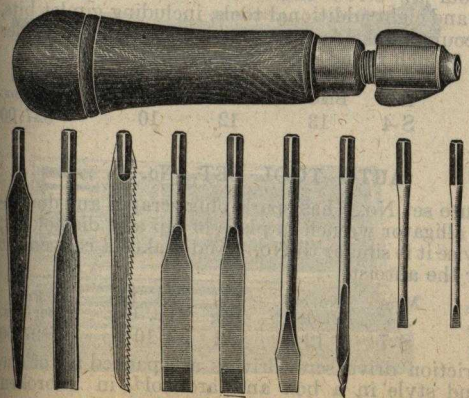
Assembler's



No. 046361



No. 046362



No. 046363

CHAMPION SCREWDRIVERS

Cabinet Style

Trade No.	Length of Blade, In.	Price per Doz.
046343	2½	$3.00
046344	3½	3.50
046345	4½	4.50
046346	5½	5.50
046347	6½	6.50
046348	8½	8.00
046349	10½	9.50
046350	12½	11.00

Electrician's Style

127257	2½	3.00
127258	3½	3.50
127259	4½	4.50
127260	5½	5.50
127261	6½	6.50
127262	8½	8.00
127263	10½	9.50
127264	12½	11.00

ASSEMBLERS' SCREWDRIVERS

Trade No.	Mfrs. No.	Nos. of Screws	Finish	Price Each
046340	513-1N	1 to 4	Nickel-plated	$0.50
046341	513-3P	3 to 5	Polished	1.00
046342	513-5P	5 to 7	Polished	1.00

COMBINATION TOOL SETS

Makes a convenient tool for light jobbing and repairing. No danger of handle splitting, for it is solid wood. After removing the metal cap, the tools all stand in view for selection. Special pains are taken to make these tools first-class in all respects.

Cocobolo handle, steel cap and ferrule nickel-plated.

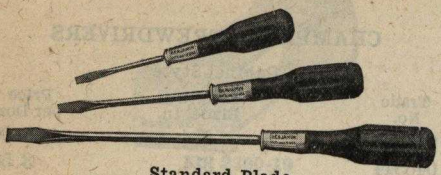
Trade No.	Description	Price Each
046361	Combination tool set	$1.35

HOLLOW HANDLE TOOL SETS

The handle and tools are first-class in every respect. The handle is cocobolo wood. The jaws, clamping nut and ferrule are nickel-plated. The shanks of the tools are 3/16 of an inch and are squared largest at the end to prevent their drawing out of the socket when in use. They are made of cast steel, properly tempered.

046362	10 Cast steel tools	1.75
046363	9 Cast steel tools	2.25

BENJAMIN SCREWDRIVERS AND TOOL SETS

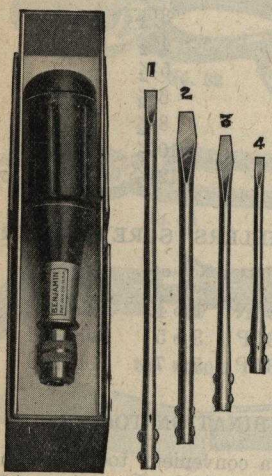


Standard Blade

SCREWDRIVERS WITH FRICTION DRIVE HANDLES

The Benjamin Friction Drive Cap revolves freely, and engages with the handle under ordinary working pressure without loss of motion.

The handle, ferrule and blade are permanently made into one inseparable unit by means of the Benjamin Locking Device. Each blade is of high grade tool steel, well finished and tempered.



Screwdriver Set, No. 1

With Standard Blade

Trade No.	Mfrs. No.	Length of Blade, In.	Std. Pkg.	Wt., Lbs. per Doz.	Price per Doz.
		5/16-inch Diameter			
056219	A-33	3	144	1 5/16	$2.40
056220	A-34	4	144	2	3.00
056221	A-35	5	144	2 1/8	3.60
056222	A-36	6	144	2 1/4	4.20
056223	A-38	8	144	2 1/2	4.80
		1/4-inch Diameter			
056224	B-43	3	144	2 3/4	3.00
056225	B-44	4	144	2 15/16	3.60
056226	B-45	5	144	3 1/8	4.20
056227	B-46	6	144	3 3/8	4.80
056228	B-48	8	144	3 3/4	5.40
		5/16-inch Diameter			
87282	C-53	3	144	3 1/2	3.60
87283	C-54	4	144	3 3/4	4.20
87284	C-55	5	144	4	4.80
87285	C-56	6	144	4 1/4	5.40
87286	C-58	8	144	4 1/8	6.00

SCREWDRIVER SET, No. 1

Set No. 1 consists of one friction drive handle with four-jaw screw chuck and four screwdriver blades put up in a box. The four blades are of different lengths, diameters and shapes and cover a large range of work.

Trade No.	Mfrs. No.	No. of Blades	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per Doz.
87287	S-1	4	12	6 3/4	$10.80

TOOL SET, No. 4

Tool set No. 4 consists of one friction drive handle with four-jaw screw chuck and the five screwdriver blades and eight additional tools, including gimlet bits, awls, countersink, reamer, tap holder and die holder taking 5/8-inch round dies.

Trade No.	Mfrs. No.	No. of Blades	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per Doz.
87288	S-4	13	12	10	$27.00



Tool Set, No. 4

AUTO TOOL SET, No. 7

Auto set No. 7 has spark plug scraper and double-ended alligator wrench in place of tap and die holders; otherwise it is similar to No. 4 and makes a convenient set for the autoist.

Trade No.	Mfrs. No.	No. of Blades	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price per Doz.
87289	S-7	12	12	10	$27.00

Friction drive screwdrivers are packed six of one size and style in a box and are sold in unbroken boxes only.

YANKEE SCREWDRIVERS



No. 10



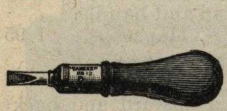
No. 15



No. 115



No. 65



No. 12



No. 60



No. 20



No. 30



No. 31



No. 35



No. 100

RATCHET SCREWDRIVERS

No. 10

Shifter moves in direction of length of blade.

Trade No.	Lgth., Blade Inches	Price Each	Trade No.	Lgth., Blade Inches	Price Each
054707	2	$0.40	054711	6	$0.65
054708	3	.45	054712	8	.75
054709	4	.50	054713	10	.90
054710	5	.55	054714	12	1.00

No. 15

Blade has knurled washer to turn with thumb and finger for starting small screws.

Similar to No. 10, but all sizes have 3/16-inch diameter blade and differ only in length.

054715	2	.40	054717	4	.50
054716	3	.45	054718	5	.55

No. 110

Same as No. 10, but with screw holder.

054719	3	.70	054722	6	.85
054720	4	.75	054723	8	.95
054721	5	.80	.....	..	...

No. 115

Same as No. 15, but with screw holder.

054724	3	.65	054726	5	.75
054725	4	.70	.....	..	...

No. 65

Has four sizes of blades to fit in shank and kept in magazine handle.

054730	1	1.00	054731	6	1.15

No. 12

Same as 6-inch, No. 11, but with blade only 1 1/8 inches long.

Trade No.	Length, Blade Inches	Price Each
054727	6	$0.60

No. 60

Pocket screwdriver; four different sizes of blades kept in magazine handle.

054728	..	.70

SPIRAL RATCHET SCREWDRIVERS

No. 20

Right-hand only and rigid, for driving screws only.

Trade No.	Length Inches	Lgth., Exten. Inches	Price Each
054729	Size 1	14	$1.25
054732	Size 2	17	1.50
054733	Size 3	19	1.75

No. 30

Regular pattern, right and left-hand, rigid.

054734	13 1/2	19 1/2	1.95

No. 31

Same as No. 30, but heavier and stronger.

054735	17 1/2	26 1/4	2.50

No. 35

Similar to No. 30, but lighter, for small screws and to carry in pocket.

054736	9 1/8	12 3/8	1.50

No. 130

Quick return, same as No. 30, with spring in handle, causing handle to automatically come back for the next push.

054737	15	20 1/2	2.25

TOOL SETS

No. 100 tool set contains the following: One No. 30 spiral ratchet screwdriver. Chuck with drill points, eight sizes—1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32 and 13/64-inch and countersink. No. 11 ratchet screwdriver with 6-inch blade. No. 15 ratchet screwdriver with finger turn on blade, with blade 3 inches long. Box is made of oak.

Trade No.	Mfrs. No.	Size, Box Inches	Price Each
054738	100	12 1/2 x 4 3/4 x 2 3/4	$5.25

YANKEE AUTOMATIC DRILLS



No. 054739



No. 054740



No. 054741



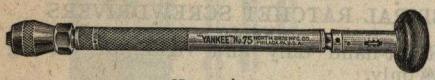
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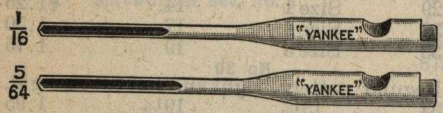
No. 054742



No. 054743



No. 054753



Nos. 054745 and 054746



No. 054755



No. 054756



No. 054757



No. 054758

AUTOMATIC DRILLS

No. 40

Has ratchet movement, drill stands still in backward movement of handle. Eight drill points, $\frac{1}{16}$–$\frac{11}{64}$, in plain sight when magazine is open. Has N. P. brass magazine head and handle.

Trade No.	Size, Drill Inches	Length Inches	Price Each
054739	$\frac{1}{16}$–$\frac{11}{64}$	10¾	$1.75

No. 41

Same as No. 40 but drill points revolve in backward movement of handle to clear chips, etc.

054740	$\frac{1}{16}$–$\frac{11}{64}$	11⅜	1.75

No. 42

No. 42 is of the same construction as No. 41 except is without magazine in head and has wood instead of metal handle.

054741	$\frac{1}{16}$–$\frac{11}{64}$	11⅜	1.35

No. 43

No. 43 is similar to No. 42, but is not adapted for drills larger than $\frac{3}{32}$ inch.

054754	$\frac{1}{16}$–$\frac{3}{32}$	10¾	.90

No. 44

No. 44 has adjustable tension for adjustment of different sizes of drills and hard or soft wood. Has N. P. brass magazine head and handle.

054742	$\frac{1}{16}$–$\frac{11}{64}$	11¼	1.95

RECIPROCATING DRILLS

No. 50

Drill continuously during forward and backward movement of driver.

Designed for drilling in steel, iron, brass and other metals as well as wood. Will hold any drill with straight shank. $\frac{3}{16}$-inch or smaller. Traverse, 8½ inches. Length of drill, 16 inches.

054743	.....	16	2.80

PUSH BRACES

No. 75

Holds any small tools used in brace. Operated by pushing same as spiral screwdriver. Has right and left hand ratchet. Holds round or square shanks. Drills holes, drives screws, etc. Will reach in places where bit brace cannot be turned.

054753	16¼	23½	3.20

DRILL POINTS

054744	Complete set of 8 points.....	0.80

Extra Drill Points

Trade No.	Size Inches	Price Each	Trade No.	Size Inches	Price Each
054745	$\frac{1}{16}$	$0.18	054749	$\frac{1}{8}$	$0.18
054746	$\frac{5}{64}$	.18	054750	$\frac{9}{64}$	.18
054747	$\frac{3}{32}$	.18	054751	$\frac{5}{32}$	.18
054748	$\frac{7}{64}$	.18	054752	$\frac{11}{64}$	.18

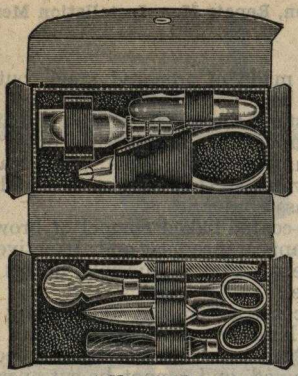
ATTACHMENTS FOR SPIRAL SCREWDRIVERS

For No. 30, have shanks $\frac{5}{32}$ in. dia. & fit No. 20 size 2
For No. 31, have shanks $\frac{5}{16}$ in. dia. & fit No. 20 size 3
For No. 35, have shanks $\frac{1}{32}$ in. dia. & fit No. 20 size 1

The shanks are same diameter as regular bit where it fits in chuck and spiral driver.

Trade No.		Price per Set
	CHUCKS	
054755	With 8 drill points $\frac{1}{16}$ to $\frac{11}{64}$, inclusive	$0.65
	COUNTERSINKS	
054756	Sizes for all No. 20, 30, 31, 35.....	.15
	BIT WITH SCREW EYE HOLDER ATTACHMENT	
054757	Sizes for No. 20, 30, 35.....	.35
	BIT WITH SCREW HOLDER ATTACHMENT	
054758	For Nos. 30 and 20 size 2.....	.35
054759	For Nos. 31 and 20 size 3.....	.35
055014	For Nos. 35 and 20 size 1.....	.30

ELECTRICIANS' TOOL KITS



No. 403D

Nos. 403D AND 403E

This outfit has a genuine leather case. It will be observed that the tools are arranged in two sections, so that when the case is closed one section is over the other. This arrangement makes a somewhat more compact kit, measuring 1⅝x3x6½ inches; when closed it is held by a metal clasp.

Trade No.	Mfrs. No.	Size of Leather Case, Inches	Price Each
045156	403D	With tools, 3x6½	$10.00
045157	403E	Without tools, 3x6½.....	5.00

Contains the following tools: 1 electrician's knife, 1 oil can, 1 pair nickel-plated 5-inch pliers, 1 file, 1 pair electrician's shears, 1 screwdriver and 1 pair of tweezers.

Case furnished either russet or black color.



No. 1301-2

Nos. 403A AND 403C

Genuine leather case, similar to No. 1301–2 Contains a selection of tools such as have been found particularly desirable by electricians and wiremen on switchboard and telephone work. Kit has a genuine leather case, of convenient pocketbook style, with firm metallic clasp, and measures 4½x9 inches.

045158	403A	With tools, 4½x9	10.00
045159	403C	Without tools, 4½x9	5.00

Contains the following tools: 1 electrician's knife, 1 oil can, 1 pair nickel-plated 5-inch pliers, 1 file, 1 pair electrician's shears, 1 screwdriver and 1 pair of tweezers.

Case furnished either russet or black color.

Nos. 1301-2 AND 1301-1

Genuine leather case. It is of convenient pocketbook style, with firm metallic clasp, and measures 4x9 inches.

045160	1301–2	With tools, 4x9	21.00
045161	1301–1	Without tools, 4x9.....	6.00

Contains one double-blade electrician's knife, one 5-inch side cutting pliers, one 5-inch oblique pliers, one 6-inch long nose side cutting pliers, one screwdriver, one pair 5-inch nickel-plated snips, 1 pair of tweezers, 1 file, and handle.

NOTE.—The pliers are plain black finish; if nickel-plated pliers are wanted, add 25 cents net, each, for plating.

Case furnished either russet or black color.



No. 1304-2

No. 1304-2

Contains all the necessary tools for electrical construction or repair work, and each is securely held in place. Genuine leather case.

095936	1304–2	With tools.....	18.00
095937	1304–1	Without tools	6.00

The case is 8 inches long, 3½ inches wide and 2 inches high when closed, containing seven tools, as follows: 7-inch special side cutting pliers, hand-forged, with knives of guaranteed quality; 5-inch nickel-plated scissors, double-bladed knife screwdriver and wire scraper combined, 3-inch half-round mill file and handle, 2½-inch screwdriver, 3½-inch nickel-plated tweezers and 2-foot four-fold boxwood rule.



No. 702U

INSPECTORS' POCKET KNIFE KITS

Any tool firmly attached to the pocket knife, as indicated by the arrow, in 1 second.

095935	702U	With tools.....	4.50

Size, 4¼ inches long, 3¼ inches wide and ¾ of an inch thick. Contains 1 pocketknife 3⅞ inches long, 1 reamer 3½ inches long, 1 file 4 inches long, 1 saw 4 inches long, 1 chisel 3⅝ inches long and 1 screwdriver 3¾ inches long.

KENNEDY ALL-STEEL TOOL KITS

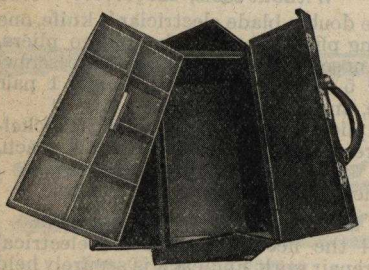
For Electricians, Mechanics, Railroad Men, Construction Men, Repair Men, Installation Men, Line Men, Meter Men, etc.



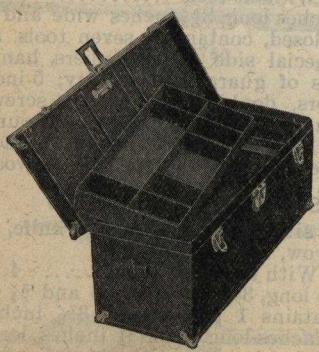
Standard Kit



Standard Kit Open



Standard Kit with Tray



Electrician's Case with Tray

Kennedy Kits are made of prepared steel, but are no heavier than other bags and tool kits.

They are built to stand the wear and tear of hardest usage. Re-enforced throughout, fitted with brass side catches, strong two-tumbler Yale locks, steel leather-covered handles and riveted so that they cannot pull out. Protected by solid brass corner irons.

Finished in a three-coated baked enamel of brown or black, they present an appearance neat and attractive and look like leather traveling bags. Invisible hinges give smooth carrying surface.

Material, special construction and overlapping features make Kennedy Kits wearproof, waterproof and weatherproof. Kennedy Kits are also thief-proof, because they can be locked, chained and cannot be cut open.

Heavy material can be carried without buckling or changing shape of bag. Tray very handy for carrying drills, bits, screws, small parts, etc. Tray, 1¾ inches deep.

Double formed, double seamed, electrically welded and re-enforced.

STANDARD KITS

(PATENTS PENDING)

Trade No.	Dimensions, Inches: Length	Width	Height	Net Wt. Lbs.	Price Each
		No. 114			
86696	14	7	9	5¼	$5.25
		No. 116			
86687	16	9	11	6¼	5.50
		No. 118			
86688	18	10	13	7⅜	5.75
		No. 120			
86689	20	11	13	8	6.00
		No. 122			
86690	22	11	13	11¼	6.25

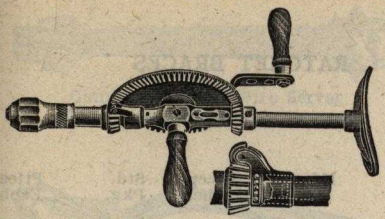
Furnished without tray if desired, at 35 cents less, each size.

ELECTRICIANS' CASES

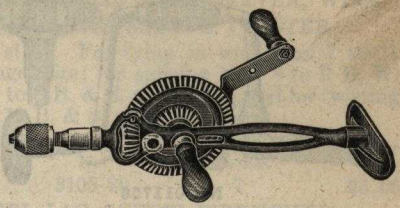
These cases are designed for and meet all the requirements of an electrician's tool kit. They have the necessary length, together with compactness and proper spacing for carrying the average equipment. They have a divided spacing at one end for blowtorch and ledge rests at top of grip for tray to carry drills, bits, small parts, etc., if desired. They have ample space at bottom for heavy tools, material, etc. In addition to leather handle, they are fitted with loops at each end for straps to pass under the case and over the shoulder for carrying heavy loads in this manner if desired. Furnished without tray, at 35 cents less, each size.

		No. 319			
86692	19	8	9	7¼	5.50
		No. 321			
86694	21	8	9	8½	5.75
		No. 324			
108213	24½	6	9	8¼	6.00

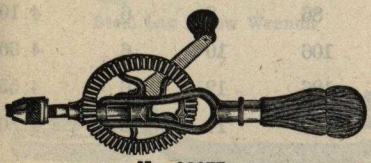
DRILLS AND BORING TOOLS



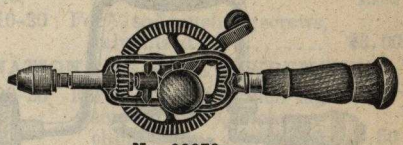
No. 08073



No. 08076



No. 08077



No. 08078

BREAST DRILLS

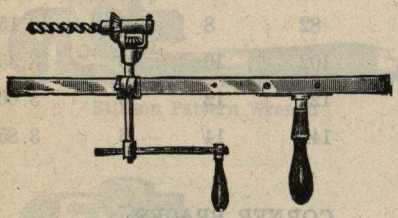
Trade No.	Mfrs. No.	Style of Gear	Price Each
08073	1	Double	$ 8.00
08074	5	Double	10.00
08075	2	Single	5.50
08076	6	Single	7.50

No. 5 is similar to No. 1, but has a chuck the same style as No. 6.

No. 2 is similar to No. 6, but has a chuck the same as style No. 1.

Nos. 1 and 2 have two-jaw chuck.

Nos. 5 and 6 have three-jaw chuck and will take from 0 to 7/16-inch round shank drills.



No. 08079

HAND DRILLS

Trade No.	Mfrs. No.	Size, Drill Inches	Length Inches	Price Each
08077	3	1/16 to 9/64	10 1/2	$3.50
08078	4	1/16 to 9/64	12 1/2	5.50

BORING MACHINES

Anthony

Trade No.		Price Each
08079	Without bits.....	$12.00

Made to take round shank machine bits. Chucks or square shank bits extra.

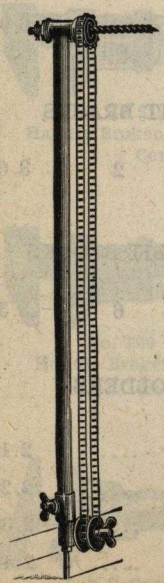
Henderson

08082	With one 11/16-inch bit.....	25.00

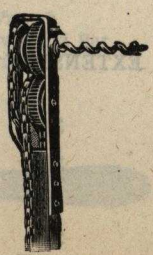
Has ball bearings and universal bit holders. Adjustable from 4 1/2 feet to 12 feet.

Standard

012890	For overhead work only.....	20.00
012891	With below boring fixtures.....	22.00
012892	For overhead only, to bore 17 feet	21.00
012893	Machine to bore 17 feet, including below boring fixture.....	23.00
012894	Below boring fixture with heads and bits.....	16.00
012895	Head only.....	14.00
012896	Base partition machine.....	12.00

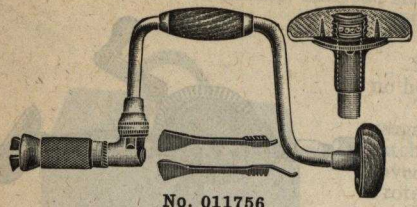


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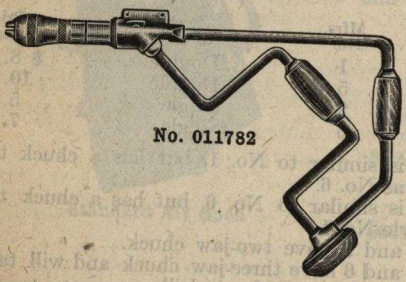
BRACES



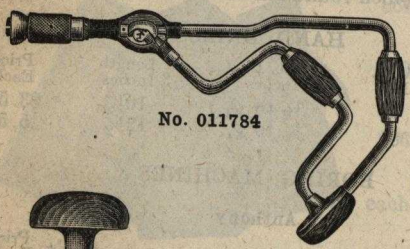
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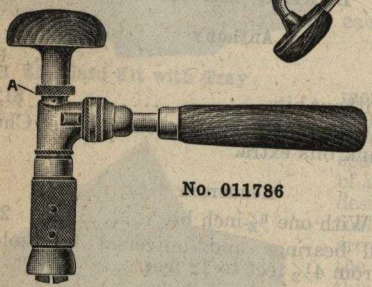
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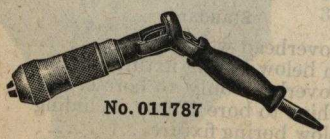
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No. 011784



No. 011786



No. 011787



No. 011788

RATCHET BRACES

With Ball-Bearing Heads

Trade No.	Mfrs. No.	Sweep Inches	Std. Pkg.	Price Each
011756	66	6	6	$4.10
011757	86	8	6	4.10
011758	106	10	6	4.30
011759	126	12	6	4.55
011760	146	14	6	4.80

Without Ball-Bearing Heads

011761	62	6	6	3.15
011762	82	8	6	3.15
011763	102	10	6	3.35
011764	122	12	6	3.60
011765	142	14	6	3.85

CORNER BRACES

011782	585	8	....	6.00
011783	586	10	....	6.50
011784	80	8	2	6.35
011785	100	10	2	6.95

CORNER RATCHET BIT BRACES

011786	70	....	2	3.65

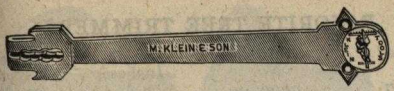
UNIVERSAL ANGULAR BIT STOCKS

011787	67	....	6	3.30

EXTENSION BIT HOLDERS

011788	3A	12	....	2.15
011789	3B	16	....	2.20
011790	3C	20	....	2.30
011791	3D	24	....	2.40
011792	3E	30	....	2.55

WRENCHES



Combination Tie Wire Server
Wire Splicer and Sleeve Twister

COMBINATION TIE WIRE SERVER, WIRE SPLICER AND SLEEVE TWISTER

W. U. style. For tying in with Nos. 7 to 11 B. & S. gauge wire; for splicing Nos. 8 to 9 B. W. gauge, or 6 to 8 B. & S. gauge wire, and for twisting Nos. 9 and 10 B. & S. gauge sleeves.

Trade No.	Mfrs. No.	Length Inches	Price Each
045246	3105–20	7	$3.00



Steel Lag Screw Wrench

STEEL LAG SCREW WRENCHES

Trade No.	Mfrs. No.	Description	Price Each
045253	3110–20	For ⅜ to ⅝-inch lag screws, galvanized	$3.00



Combination Lag Screw Wrench

COMBINATION LAG SCREW WRENCHES

045254	3109–20	For ⅜, ½ and ⅝-inch lag screws and ⅝-inch machine bolts, galvanized	3.50

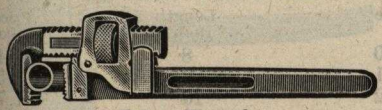


Stillson Pattern Wrench

STILLSON PATTERN WRENCHES

Trade No.	Takes Pipe, In.	Length Inches	Price Each
045222	½	6	$2.00
045223	¾	8	2.25
045224	1	10	2.50
045225	1½	14	3.50
045226	2	18	5.00
045227	2½	24	7.25
045228	3½	36	13.50
045229	5	48	20.00

Wood handle, 6 to 14 inches; steel handle, 18 to 48 inches.



Trimo Wrench

TRIMO WRENCHES

045230	½	6	2.00
045231	¾	8	2.25
045232	1	10	2.50
045233	1½	14	3.50
045234	2	18	5.00
045235	2½	24	7.25
045236	3½	36	13.50
045237	5	48	20.00

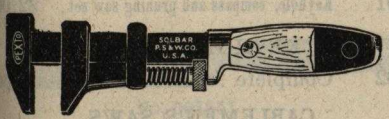


No. 25 Stronghold Wrench
Handle Broken to Show Stronghold Construction

KNIFE HANDLE WRENCHES

No. 25 stronghold knife handle wrenches have a one-piece forged head and bar, which runs entirely through the handle and is end riveted, in addition to two rivets in the handle. No. 100 solid handle wrench has the head, bar, shoulder and handle frame forged solid in one piece and casehardened.

No. 25 Trade No.	No. 100 Trade No.	Length Inches	Price per Doz.
115745	115752	6	$10.00
115746	115753	8	12.00
115747	115754	10	14.00
115748	115755	12	18.00
115749	115756	15	24.00
115750	115757	18	32.00
115751	115758	21	39.00



No. 100 Solbar Wrench
Handle Broken to Show Solid Bar Construction

B & C COMBINATION WRENCHES

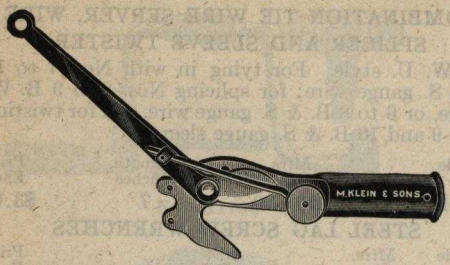
With Long Nut, Black Finish

Trade No.	Length Inches	For Pipe Size, Inches	Price per Doz.
115759	8	¼ to ¾	$23.00
115760	10	¼ to 1	25.25
115761	12	½ to 1¾	28.50
115762	15	½ to 2¼	40.50
115763	18	½ to 3	72.00



B & C Combination Wrench

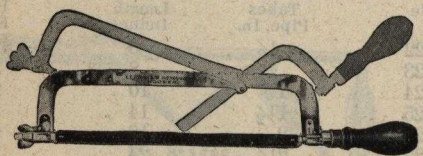
SAWS



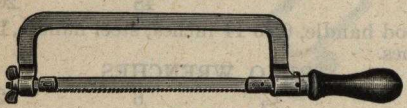
No. 3600-20



No. 3600-21



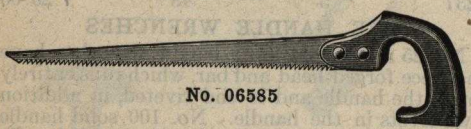
No. 06572



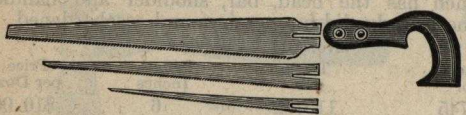
No. 06573



No. 06580



No. 06585



No. 06591



No. 906-14



No. 06595

FAVORITE TREE TRIMMERS

Trade No.	Mfrs. No.	Length Inches	Price Each
06517	3600–20	19	$5.00
06518	3600–21	21	7.00

No. 3600-21 is the same size as No. 3600–20 only arranged with saw.

Saw only

06516	913–12	12	2.00

TRIMMER HANDLES

Trade No.	Mfrs. No.	Description	Price Each
06519	3601– 9	18-foot length	$3.80
06520	3601–18	Two 9-foot handles, joined with ferrule	4.00

HACK SAW FRAMES

Adjustable

Trade No.	Description	Price per Doz.
06572	No. 50A, nickel-plated	$24.00

Solid

06573	8-in., nickeled	9.00
06574	10-in., nickeled	10.00

TRACK HACK SAW FRAMES

06579	12-in. blade, 10 in. depth	18.00

HACK SAW BLADES

Trade No.	Length Inches	Price per Doz.
06580	8	$1.40
06581	9	1.50
06582	10	1.70
06584	12	2.00

COMPASS SAWS

Trade No.	Length Inches	Price per Doz.
06585	10	$8.50
06586	12	9.00
06587	14	9.50
06589	16	10.00
06590	18	10.50

INTERCHANGEABLE SAWS

Trade No.	Description	Price Each
06591	Keyhole, compass and pruning saw set.	$2.00

KEYHOLE SAWS

06592	Complete	.50

CABLEMEN'S SAWS

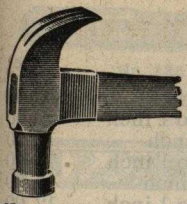
Trade No.	Mfrs. No.	Length Inches	Description	Price Each
06594	906–14	14	Double edge.	$2.50

HAND, PANEL AND RIPSAWS

Crucible steel, apple-wood handle, skew or straight back.

Trade No.	Length Inches	Price per Doz.	Trade No.	Length Inches	Price per Doz.
06595	16	$14.50	06598	22	$39.00
06596	18	16.00	06599	24	42.00
06597	20	17.50	06600	26	44.00

TOOLS



No. 063629 No. 063632

BELL-FACED NAIL HAMMERS

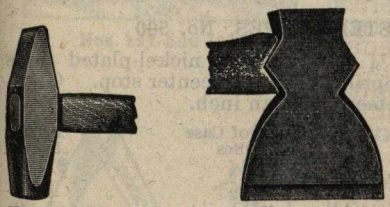
Solid Forged Steel, Polished

Trade No.	Size	Weight	Price per Doz.
063629	2	13 ounces	$8.00
063630	1½	1 pound	8.50
063631	1	1¼ pounds	9.00

MACHINISTS' HAMMERS

Forged Steel, Ball Pein

096868	0000	6	12.00
096869	000	6	12.00
063632	00	12 ounces	12.00
063633	0	1 pound	12.50
063634	1	1¼ pounds	13.50
063635	2	1½ pounds	14.50
063636	3	1¾ pounds	15.50



No. 063637 No. 063641

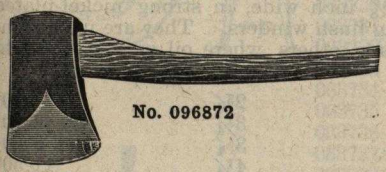
RIVETING HAMMERS

Forged Steel

096870	1	7 ounces	5.75
096871	2	9 ounces	6.00
063637	3	12 ounces	6.25
063638	4	15 ounces	6.50
063639	5	18 ounces	7.00
063640	6	22 ounces	7.50

BROAD HATCHETS

Trade No.	Mfrs. No.	Size of Cut Inches	Price per Doz.
063641	362	4½	$14.00
063642	363	5	15.00
063643	364	5½	17.00
063644	365	6	19.00



No. 096872

CHOPPING AXES

Trade No.	Weight Pounds	Price per Doz.
096872	4 to 5	$18.00
096873	5 to 6	21.00

COMMON COLD CHISELS

Octagon Tool Steel, Forge Finished



No. 063645

Trade No.	Size Inches	Wt., Lbs. per Doz.	Price per Lb.
063645	⅜x5½	2¼	$0.38
063646	½x6	4	.38
063647	⅝x7	7	.38
063648	¾x8	10	.38
063649	⅞x8½	15	.38
063650	1 x9	21	.38

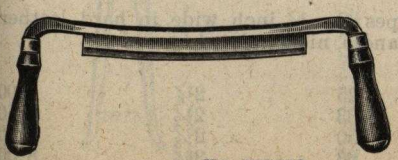
SOCKET FRAMING CHISELS

Cast Steel, Polished, Hickory Handle



No. 063651

Trade No.	Size Inches	Price per Doz.
063651	⅜	$9.00
063652	½	9.00
063653	¾	10.00
063654	1	11.00
063655	1¼	12.00
063656	1½	13.00
063657	1¾	14.50
063658	2	16.00

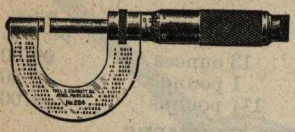


No. 063659

LINEMEN'S DRAW KNIVES

Trade No.	Blade Inches	Price per Doz.
063659	12	$21.60
063660	14	25.20

MEASURING TOOLS

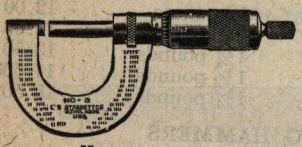


Nos. 204 and 205

MICROMETERS

Trade No.	Mfrs. No.	Measurements	Price Each
063574	*204	Thousandths up to 1 inch	$20.00
063575	*205	Ten thousandths up to 1 inch	22.00
063576	*3	Thousandths up to 1 inch	12.00
063577	*113	Ten thousandths up to 1 inch	14.00
063578	203	Thousandths up to 1 inch	10.00
063579	209	Ten thousandths up to 1 inch	12.00
063580	*232	Thousandths up to ½ inch	10.00
063581	*233	Ten thousandths up to ½ inch	12.00

*These numbers have ratchet stop and locknut.
If with leather case, add $1.00 to list

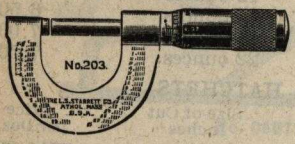


Nos. 3 and 113

POCKET STEEL TAPES, No. 500

No. 500 tapes are ¼ inch wide, in nickel-plated cases with rounded edges. Spring wind with center stop. Graduated in inches and sixteenths of an inch.

Trade No.	Length Inches	Diam. of Case Inches	Price Each
063582	36	1⅜	$1.20
063583	60	1½	1.50
063584	72	1 11/16	1.60
063585	96	1 13/16	2.30



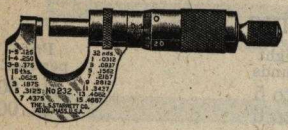
Nos. 203 and 209

STEEL TAPES, No. 505—STEEL CASE

No. 505 tapes are graduated in feet and twelfths of a foot, also in inches and eighths of an inch.

These tapes are ⅜ inch wide, in strong nickel-plated steel cases, with folding flush winders. They are used principally by engineers and others where oil or grease would soil leather cases.

063586	25	2¾	5.50
063587	50	3¼	6.80
063588	75	3¾	9.00
063589	100	4¼	11.50



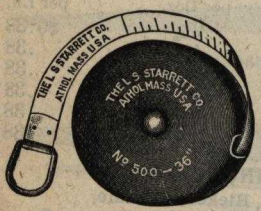
Nos. 232 and 233

STEEL TAPES, No. 510—LEATHER CASE

No. 510 tapes are graduated in feet and twelfths of a foot, also in inches and eighths of an inch.

These tapes are ⅜ inch wide, in hard leather cases; flush handle, trimmings nickel-plated.

063590	25	2⅞	6.50
063591	50	3⅜	8.00
063592	75	3⅞	10.50
063593	100	4½	13.50



No. 500



Nos. 505 and 506

STEEL TAPES, No. 512—LEATHER CASE

No. 512 tapes are graduated in feet and twelfths of a foot, also in inches and sixteenths of an inch.

These tapes are ¼ inch wide, in hard leather cases, flush handle, nickel-plated trimmings.

063594	25	2¼	6.00
063595	33	2½	6.50
063596	50	2⅞	7.00
063597	66	3⅜	8.00



Nos. 510 and 511



Nos. 512 and 513

TOOLS



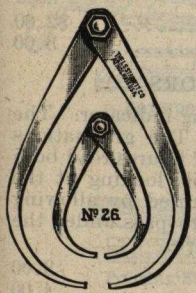
No. 135



No. 132



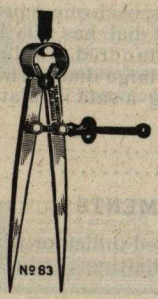
Nos. 197 and 198



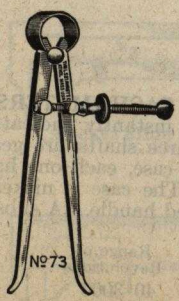
No. 26



No. 27



No. 83



No. 73

NICKEL-PLATED POCKET LEVELS

Trade No.	Mfrs. No.	Size Inches	Price Each
063708	135	2½	$0.80
063709	135	3½	1.00

BENCH LEVELS

063710	132	4	2.70
063711	132	6	3.00
063712	132	9	3.30
063713	132	12	3.50
063714	132	18	4.00
063715	132	24	4.50

ELECTRICIAN'S LEVELS

With Plain Vial

063716	197	8	5.00
063717	197	12	7.00
063718	197	16	9.00

With Ground and Graduated Vial

063719	198	8	9.00
063720	198	12	12.00
063721	198	16	16.00

IMPROVED FIRM JOINT CALIPERS

063722	26	3	.80
063723	26	4	1.00
063724	26	5	1.10
063725	26	6	1.30
063726	26	8	1.60
063727	26	10	1.80
063728	26	12	2.00
063729	26	14	3.00
063730	26	16	3.50
063731	26	18	4.20
063732	26	20	5.00
063733	26	24	6.00
063734	26	30	10.00
063735	26	36	12.00
063736	27	3	.80
063737	27	4	1.00
063738	27	5	1.10
063739	27	6	1.30
063740	27	8	1.60
063741	27	10	1.80
063742	27	12	2.00
063743	27	14	3.00
063744	27	16	3.50
063745	27	18	4.20
063746	27	20	5.00
063747	27	24	6.00

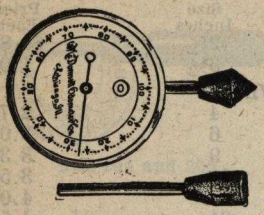
YANKEE SPRING DIVIDERS

Mfrs. No.	Size Inches	Solid Nut Trade No.	Solid Nut Price Each	Spring Nut Trade No.	Spring Nut Price Each
83	2½	063750	$1.30	42506	$1.60
83	3	063751	1.40	42507	1.70
83	4	063752	1.50	42508	1.80
83	5	063753	1.60	42509	1.90
83	6	063754	1.70	42510	2.00
83	8	063755	2.20	42511	2.50
83	10	063748	2.70	42512	3.00
83	12	063749	3.00	42513	3.30

YANKEE CALIPERS

73	2½	063756	1.30	42514	1.60
73	3	063757	1.40	42515	1.70
73	4	063758	1.50	42516	1.80
73	5	063759	1.60	42517	1.90
73	6	063760	1.70	42518	2.00
73	8	063761	2.00	42519	2.30
73	10	063762	2.70	42520	3.00
73	12	063763	3.00	42521	3.30

INDICATORS

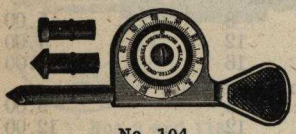


No. 063681

LIGHTNING SPEED INDICATORS

All parts are finely nickeled, the dial is pure white, like enamel watch dial, and the case enclosed with a strong watch crystal. Each instrument is put up in a neat cloth covered pocket case and weighs less than 2 ounces.

Trade No.	Description	Price Each
063681	In cloth case	$2.00
90325	In leatherette case	2.50

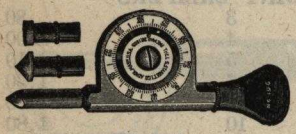


No. 104

HIGH SPEED INDICATORS

This indicator may run at highest speed required without heating, and this on account of our frictionless bearing against which the inner end of the spindle revolves. The working parts of this instrument are encased, and the dial plate has two rows of figures, reading right or left, as the shaft may run.

Trade No.	Mfrs. No.	Description	Price Each
063674	104	In pasteboard box	$2.00
063675	104	In leather case	3.00

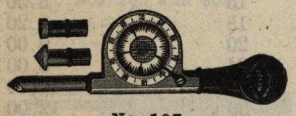


No. 106

IMPROVED SPEED INDICATORS

This is a nicely made and finely working indicator. The working parts are enclosed like a watch. The graduations show every revolution, and with two rows of figures read both right and left, as the shaft may run. While looking at the watch each hundred revolutions may be counted by allowing the oval headed pin on the revolving disk to pass under the thumb as the instrument is pressed to its work.

063676	106	In pasteboard box	3.00
063677	106	In leather case	4.00

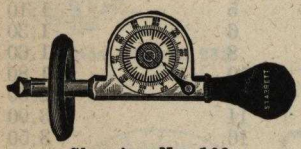


No. 107

REGISTERING SPEED INDICATORS

This instrument will register 5000 revolutions. The large dial is graduated into one hundred lines, each one representing a revolution of the spindle. The small dial has fifty lines cut upon its face, each representing one hundred revolutions of the spindle or one complete turn of the large dial. The instrument has a hard rubber handle, making a safe insulator when used on electrical machinery.

063678	107	In pasteboard box	6.00
063679	107	In leather case	7.00



Showing No. 109
Attached to Indicator

INDICATOR ATTACHMENTS

This attachment applied to the speed indicator will enable a workman to determine the speed of shafting.

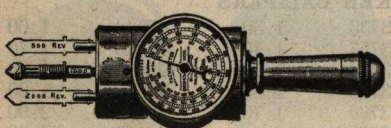
Trade No.	Mfrs. No.	Price Each
063680	109	$1.00



No. 063682

POLE COUNTERS

Trade No.	Numbers from	Price Each
063682	1–999	$5.00



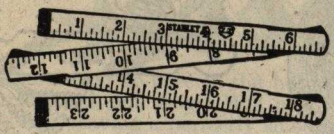
No. E-9009

QUEEN PORTABLE TACHOMETERS

Thoroughly reliable for instantly indicating the speed of rotating shafts. Three shafts are geared to the rotating parts inside of case, each one having a separate scale on the dial. The case is nickel-plated and has a conveniently shaped handle. A substantial carrying case is supplied.

Trade No.	Mfrs. No.	Range of Revolutions	Price Each
047237	E-9009	40–3000	$60.00
047238	E-9009A	75–5000	60.00

RULES

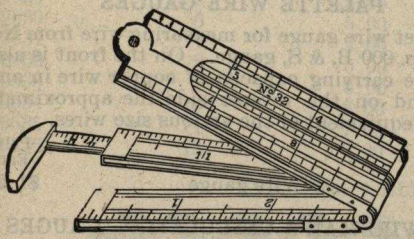


Zigzag Rule

ZIGZAG RULES

6-inch Fold, Yellow Enamel

Length Feet	Concealed Joint Trade No.	Concealed Joint Price per Doz.	Rivet Joint Trade No.	Rivet Joint Price per Doz.
2	063683	$2.20	069072	$2.00
3	063684	3.30	069073	3.00
4	063685	4.40	069074	4.00
5	063686	5.50	069075	5.00
6	063687	6.60	069076	6.00

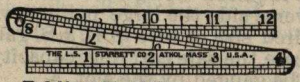


Boxwood Caliper Rule

BOXWOOD CALIPER RULES

Trade No.	Mfrs. No.	Price per Doz.
063689	32	$7.00

12-inch, arch joint, edge plates, four-fold, 8ths, 10ths, 12ths and 16ths of inches, 1 inch wide.

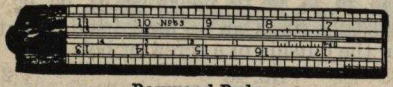


Folding Steel Pocket Rule

FOLDING STEEL POCKET RULES

Mfrs. No.	Length Feet	Width Inches	Rule Only Trade No.	Rule Only Price per Doz.	With Leather Case Trade No.	With Leather Case Price per Doz.
450	1	3/8	87056	$5.00	87058	$6.60
450	2	3/8	87057	9.00	87059	12.00

Nickel-plated, 1-foot, add $1.00 per dozen; 2-foot, add $1.50 per dozen.



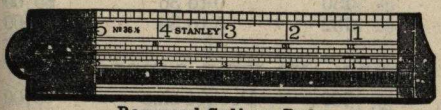
Boxwood Rule

BOXWOOD RULES

2-foot, Four-Fold

Trade No.	Mfrs. No.	Width Inches	Price per Doz.
063692	68	1	$2.50
	Round joint, middle plates, 8ths and 16ths.		
063693	61	1	3.00
	Square joint, middle plates, 8ths and 16ths.		
063694	*63	1	4.00
	Square joint, edge plates, 8ths, 10ths, 12ths and 16ths.		
063695	*51	1	3.50
	Arch joint, middle plates, 8ths, 10ths, 12ths and 16ths.		
063696	*52	1	7.25
	Arch joint, half-bound plates, 8ths, 10ths, 12ths and 16ths.		
063697	*53½	1	8.00
	Arch joint, edge plates, 8ths, 10ths, 12ths and 16ths.		

*These rules have drafting scales.



Boxwood Caliper Rule

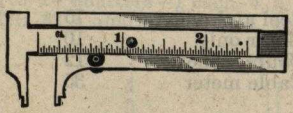
BOXWOOD CALIPER RULES

2-foot, Four-Fold

063698	36½	1⅜	6.50

Square joint, 8ths, 10ths, 12ths and 16ths.

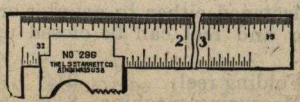
NOTE.—Price is for caliper left-hand. When ordered with caliper right-hand, add 25 cents per dozen net. Regularly graduated in 16ths, but can be furnished in 32nds, same price, if so ordered.



Pocket Slide Caliper

POCKET SLIDE CALIPERS

Trade No.	Mfrs. No.	Size of Calipers Inches	Price Each
063699	425	3	$5.00
063700	425	5	7.00



Slide Caliper Rule

SLIDE CALIPER RULES

The graduations are No. 4, with the 32nds and the 64ths on the front as shown, and the 8ths and 16ths on the back.

Trade No.	Mfrs. No.	Price Each
87060	296	$3.00

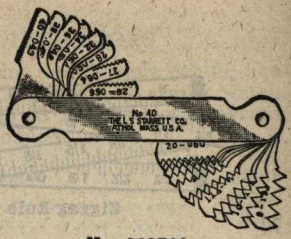
GAUGES AND REELS



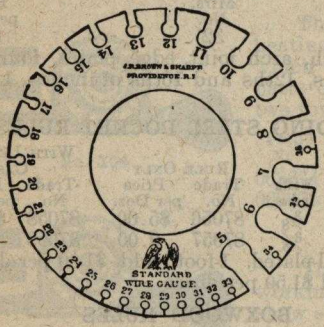
No. 063701



No. 063702



No. 063703



No. 063705

PALETTE WIRE GAUGES

Pocket wire gauge for measuring wire from No. 18 to No. 000 B. & S. gauge. On the front is also given the carrying capacity of copper wire in amperes and on the reverse side the approximate decimal equivalent of the various size wires.

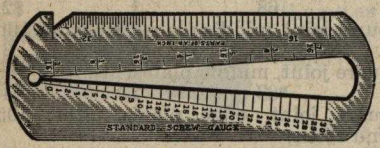
Trade No.		Price Each
063701	Wire gauge	$1.20

U. S. WIREMAN'S CALCULATING GAUGES

On one side set the required number of feet on the small circle opposite the required number of amperes on the large circle, then set the small pointer at the required voltage and loss.

On the reverse side the large pointer will indicate the required size of wire in B. & S. gauge and will also indicate the safe carrying capacity, while the wire may be gauged by the slot A.

063702	Wire gauge	2.00



No. 063706

STARRETT'S SCREW PITCH GAUGES

This gauge has twenty-two pitches, viz.: 9, 10, 11, 11½, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40. Can be used inside a nut as well as on the outside of a screw or bolt.

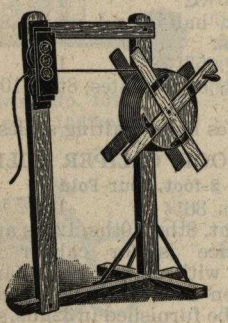
063703	No. 40	2.00

AMERICAN STANDARD WIRE GAUGES

Trade No.	Mfrs. No.	Wire Sizes B. & S.	Price Each
063704	730	0 to 36	$5.00
063705	732	5 to 36	4.00

SCREW AND WIRE GAUGES

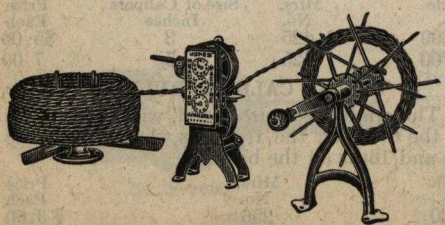
063706	760	Pocket size	5.00



No. 012640

MINNEAPOLIS REELS AND METERS

Trade No.		Wt Lbs.	Price Each
012640	Reel and meter	75	$30.00
012641	Meter only	10	19.25
012642	Counter meter	12	19.75
012643	Cable meter	35	30.00



No. 042548 No. 042549 No. 042550

WIRE MEASURING OUTFITS

For measuring lamp cord and wires from Nos. 0 to 40, inclusive.

It can be fastened either to counter or side of wall. Winder and reel can be closed up when not in use.

042548	Folding reel	3¾	6.00
042549	Measuring machine	8	15.00
042550	Wire winder	5½	10.00

MEPHISTO AUGER BITS

No. 8 AUGER BITS



Guaranteed to bore in the hardest woods with ease under any conditions, with or against the grain, and not clog. Will not tear the wood, but will bore all the way through without splintering, leaving a perfectly smooth bore.

Trade No.	Size, Inches in 16ths	Price per Doz	Trade No.	Size, Inches in 16ths	Price per Doz.
89528	4	$5.00	89537	13	$8.25
89529	5	5.00	89538	14	8.25
89530	6	5.00	89539	15	9.50
89531	7	5.00	89540	16	9.50
89532	8	5.00	89541	17	12.00
89533	9	6.00	89542	18	12.00
89534	10	6.00	89543	20	14.00
89535	11	7.00	89544	22	16.00
89536	12	7.00	89545	24	18 00

No. 9 ELECTRICIANS' BITS



This bit is designed especially for electricians' use, made of special steel and guaranteed to bore in hard or soft wood, fiber board, concrete, brick, plaster, etc., and so tempered that contact with nails will not damage it as the spur and cutting lip are so constructed that they can be sharpened over and over until completely worn out.

Trade No.	Size, Inches in 16ths	Price per Doz.	Trade No.	Size, Inches in 16ths	Price per Doz.
89546	10	$6.00	89548	12	$7.00
89547	11	7.00	....	..	.....

CAR AND SHIP BUILDERS' BITS



Designed for work of car builders, ship builders, dock builders, bridge builders and others requiring an extra length bit of durable quality.

No. 12, Twist 8 Inches, Shank 4 Inches

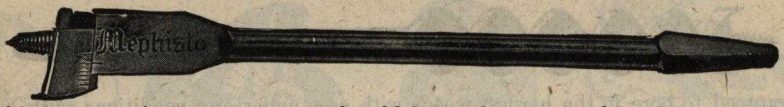
Trade No.	Size, Inches in 16ths	Price per Doz.	Trade No.	Size, Inches in 16ths	Price per Doz.
89549	4	$8.25	89557	12	$11.50
89550	5	8.25	89558	13	13.50
89551	6	8.25	89559	14	13.50
89552	7	8.25	89560	15	15.00
89553	8	8.25	89561	16	15.00
89554	9	10.00	89562	18	16.50
89555	10	10.00	89563	20	18.00
89556	11	11.50	....	..	....
89580	No. 21 quarters—1 each, 5, 6, 7, 9, 10, 11, 12 and 2 each 4 and 8—16ths, per set..				6.50
89581	No. 24 quarters—1 each, 4, 5, 7, 9, 11, 12 and 2 each, 6, 8 and 10—16ths, per set.				9.75
89582	No. 32½ quarters—1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16—16ths, per set....				12.00

No. 18, Twist 12 Inches, Shank 6 Inches

89564	4	11.25	89572	12	16.25
89565	5	11.25	89573	13	17.50
89566	6	11.25	89574	14	19.00
89567	7	11.25	89575	15	20.50
89568	8	11.25	89576	16	22.00
89569	9	12.50	89577	17	24.00
89570	10	13.75	89578	18	26.00
89571	11	15.00	89579	20	30.00
89583	No. 21 quarters—1 each, 5, 6, 7, 9, 10, 11, 12 and 2 each 4 and 8—16ths, per set..				11.00
89584	No. 24 quarters—1 each, 4, 5, 7, 9, 11, 12 and 2 each 6, 8 and 10—16ths, per set....				12.25
89585	No. 32½ quarters—1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16—16ths, per set				16.25

MEPHISTO AUGER BITS

SOLID STEM EXPANSIVE BITS



This bit is a great improvement over the old form of expansive bit. The dovetail method of holding the cutter is used, it being so constructed that the cutter will stand the severest strain without creeping, springing or loosening while boring.

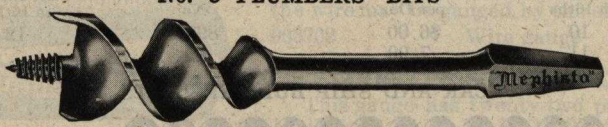
Trade No.	Mfrs. No.	Description	Price per Doz.
89590	87	Complete with two cutters, cutting from ½ to 1½ inches	$14.00
89591	88	Complete with two cutters, cutting from ⅞ to 3 inches	20.00
		Extra Cutters	
89592	1	Cutting from ½ to ⅞ inch	2.50
89593	2	Cutting from ⅞ to 1½ inches	3.00
89594	3	Cutting from ⅞ to 1¾ inches	4.00
89595	4	Cutting from 1¾ to 3 inches	5.00

No. 60 SCREWDRIVER BITS



Trade No.	Size Inches	Price per Doz.	Trade No.	Size Inches	Price per Doz.
89596	¼	$3.40	89599	½	$4.00
89597	5/16	3.40	89600	⅝	4.60
89598	⅜	3.40	....	..	....
89612	Assorted regular 3 each ¼, 5/16, ⅜ in., two ½ in., one ⅝ inch, per set				3.60
89613	Assorted large 3 each 5/16, ⅜, ½, ⅝ inch, per set				3.85

No. 5 PLUMBERS' BITS



These bits are designed especially for the use of plumbers and electricians using boring machines where work is to be performed in limited space. Made 5½ inches in length to meet these special requirements.

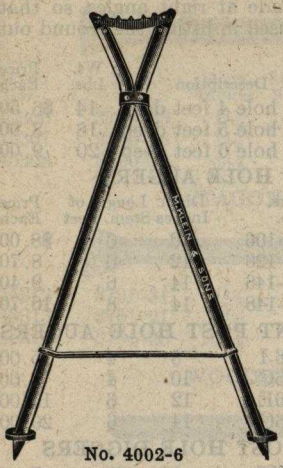
Trade No.	Size, Inches in 16ths	Price per Doz.	Trade No.	Size, Inches in 16ths	Price per Doz.
89601	10	$6.00	89607	16	$ 9.50
89602	11	7.00	89608	18	12.00
89603	12	7.00	89609	20	14.00
89604	13	8.25	89610	22	16.00
89605	14	8.25	89611	24	18.00
89606	15	9.50	....	..	.....

BELL HANGERS' DRILLS

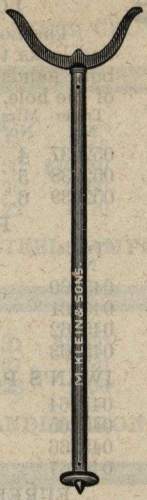


Trade No.	Size, Inches in 32ds	Price, per Dozen 12-inch	18-inch	24-inch	30-inch	36-inch
013276	6	$5.00	$7.00	$9.00	$11.00	$13.00
013277	8	5.00	7.00	9.00	11.00	13.00
013278	10	5.50	7.50	9.50	12.00	13.00
013279	12	6.00	8.00	10.00	12.00	13.00
013280	14	7.00	9.00	11.00	13.00	14.00
013281	16	8.00	10.00	12.00	14.00	15.00
013282	18	9.00	11.00	13.00	15.00	16.00
013283	20	10.00	12.00	14.00	15.00	16.00
013284	22	11.00	13.00	15.00	16.00	17.00
013285	24	12.00	14.00	16.00	17.00	18.00
013286	26	13.00	15.00	17.00	18.00	18.00
013287	28	14.00	16.00	18.00	19.00	19.00
013288	30	15.00	17.00	19.00	20.00	20.00
013289	32	16.00	18.00	20.00	20.00	20.00
013290	34	17.00	19.00	20.00	20.00	20.00
013291	36	18.00	20.00	21.00	21.00	21.00

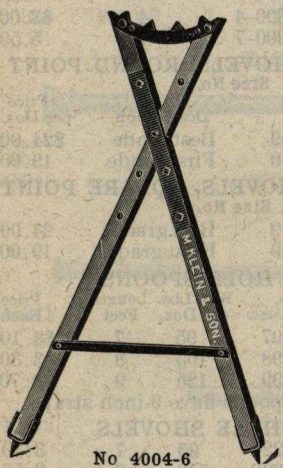
CONSTRUCTION TOOLS



No. 4002-6



No. 4003-6



No 4004-6



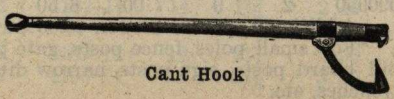
No. 4000-6



Guarded Pike



No. 3906-4 Swivel Carrying Hook



Cant Hook

METAL POLE SUPPORTS

Jenney Pattern

Trade No.	Mfrs. No.	Length Feet	Price Each
052950	4002–6	6	$18.00
052951	4002–7	7	19.50
052952	4002–8	8	21.00

Mule or Deadman Pattern

052953	4003–6	6	15.00
052954	4003–7	7	16.00
052955	4003–8	8	17.50

WOOD POLE SUPPORTS

W. U. Pattern

045255	4004–6	6	10.00
045256	4004–7	7	11.50
045257	4004–8	8	12.50

Mule or Deadman Pattern

045343	4000–6	6	7.00
045344	4000–7	7	8.00
045345	4000–8	8	10.00

GUARDED PIKE POLES OR RAISING FORKS

FOR WOOD POLES

Standard Weight

Trade No.	Mfrs. No.	Length Feet	Diam. of Handle, In.	Price Each
045331	4100–12	12	1¾	$3.40
045332	4100–14	14	1¾	3.60
045333	4100–16	16	1¾	3.90

Heavy Weight

045335	4101–12	12	2¼	3.90
045336	4101–14	14	2¼	4.20
045337	4101–16	16	2¼	4.50
045338	4101–18	18	2¼	4.70

TIMBER LUGS OR CARRYING HOOKS

Trade No.	Mfrs. No.	Length of Handle, Ft.	Price Each
045268	3906–4	4	$4.30
045269	3906–5	5	5.00
045270	3906–6	6	5.40
.....	3906–7	7	5.80

CANT HOOKS

Trade No.	Mfrs. No.	Length Feet	Price Each
045346	3903–4½	4½	$3.50
71092	3904–4½	4½	3.10

DIGGING TOOLS



No. 4



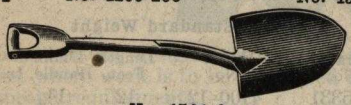
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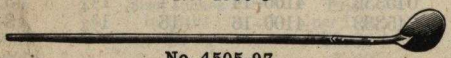
No. 396-I



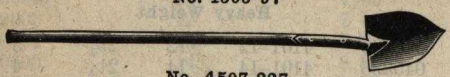
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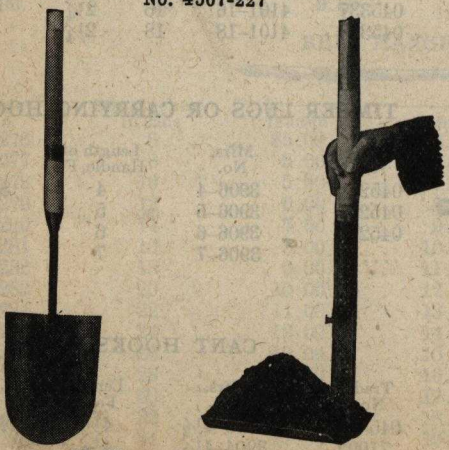
No. 4500-9



No. 4505-97



No. 4507-227



Matthews Spoovel Digger

LOCK-LEVER DIGGERS

The Lock-lever is an automatic self-lock, and locks the blade at right angles, so that both hands are used in lifting the ground out of the hole.

Trade No.	Mfrs. No.	Description	Wt. Lbs.	Price Each
052937	4	Digs hole 4 feet deep	14	$6.50
052938	5	Digs hole 5 feet deep	18	8.00
052939	6	Digs hole 6 feet deep	20	9.00

POST HOLE AUGERS

Trade No.	Mfrs. No.	Diam. Inches	Length of Stem, Feet	Price Each
045260	4200–106	10	6	$8.00
045261	4200–126	12	6	8.70
045262	4200–146	14	6	9.40
045263	4200–148	14	8	10.70

IWAN'S PATENT POST HOLE AUGERS

045264	396-I	8	4	5.00
045265	396C	10	4	6.00
045266	396E	12	6	16.00
045267	396G	14	6	20.00

EUREKA POST HOLE DIGGERS

Trade No.	Mfrs. No.	Length Feet	Price Each
045258	4300–4	4	$3.00
045259	4300–7	7	5.50

D HANDLE SHOVELS, ROUND POINT

Size No. 2

Trade No.	Mfrs. No.	Description	Price per Doz.
045272	4500–9	Best grade	$24.00
045280	4501–9	First grade	19.00

D HANDLE SHOVELS, SQUARE POINT

Size No. 2

045273	4502–9	Best grade	24.00
045281	4503–9	First grade	19.00

POST HOLE SPOONS

Trade No.	Mfrs. No.	Wt., Lbs. per Doz.	Length Feet	Price Each
045274	4505–97	95	7	$3.10
045275	4505–98	105	8	3.30
045276	4505–99	125	9	3.70

The above spoons have 9-inch straps.

POST HOLE SHOVELS

045277	4507–227	95	7	3.30
045278	4507–228	110	8	3.50
045279	4507–229	115	9	3.90

The above shovels have 22-inch straps.

Straight handle shovels, same price as above.

The above shovels and spoons are all fitted with hickory handles.

MATTHEWS SPOOVEL DIGGERS

These diggers combine a spoon and shovel in one tool. Two 5-foot pole holes can be dug in the same time that one could be dug with a spoon and shovel.

No. 1 with 11-inch Blade and 8½-foot Handle

Trade No.	Mfrs. No.	Shipping Wt., Lbs.	PRICE, EACH Less than 6	6 to 12	12 or more
090949	1	11	$8.00	$7.50	$7.00

***No. 2, with 9½-inch Blade and 6-foot Handle**

090950	2	9	7.00	6.50	6.00

Additional spoovel blades, $3.00 each.

*For small poles, fence posts, gate posts, bill board posts, sign posts, narrow ditches, trenches, etc.

CONSTRUCTION TOOLS

OCTAGONAL STEEL CROW AND DIGGING BARS



Trade No.	Mfrs. No.	Diam. Inches	Size Feet	Wt. Lbs.	Price Each	Trade No.	Mfrs. No.	Diam. Inches	Size Feet	Wt. Lbs.	Price Each
045306	3700–30	1⅛	8	30	$10.30	045309	3700–24	1	8	24	$8.00
045307	3700–26	1⅛	7	26	9.50	045310	3700–21	1	7	21	7.30
045308	3700–22	1⅛	6	22	8.70	045311	3700–18	1	6	18	6.50

OCTAGONAL STEEL TAMPING AND DIGGING BARS



045312	3701–31	1⅛	8	31	10.90	045315	3701–25	1	8	25	9.20
045313	3701–27	1⅛	7	27	9.80	045316	3701–22	1	7	22	8.70
045314	3701–23	1⅛	6	23	9.00	045317	3701–19	1	6	19	8.00

WOODEN HANDLE, IRON SHOD TAMPING BARS



Trade No.	Mfrs. No.	Length Feet	Wt. Lbs.	Price Each	Trade No.	Mfrs. No.	Length Feet	Wt. Lbs.	Price Each
045318	3800–7	7	12½	$3.40	045319	3800–8	8	13½	$3.70

DIGGING SPUDS AND TAMPING BARS



Trade No.	Mfrs. No.	Length Feet	Wt. Lbs.	Price Each
045340	3702– 9	9	19	$6.30

ELECTRIC TAMPING BARS



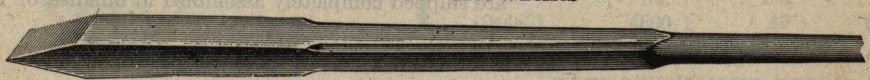
045341	3801– 8	8	18½	5.00

LOY DIGGING TOOLS



045342	3703–18	8	18	6.00

COMMON CROWBARS



Trade No.	Weight Pounds	Price Each	Trade No.	Weight Pounds	Price Each
052931	10	....	052934	16	....
052932	12	....	052935	18	....
052933	14	....	052936	20	....

PLAIN PIKES



Standard Weight

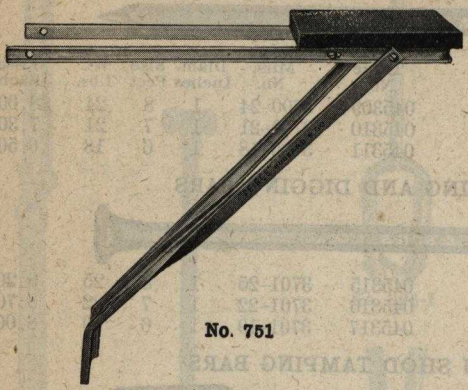
Trade No.	Mfrs. No.	Length Feet	Diam. of Handle, In.	Price Each	Trade No.	Mfrs. No.	Length Feet	Diam. of Handle, In.	Price Each
045321	4102–12	12	1¾	$2.10	045323	4102–16	16	1¾	$2.80
045322	4102–14	14	1¾	2.40	.....	.....	..	...	.....

Heavy Weight

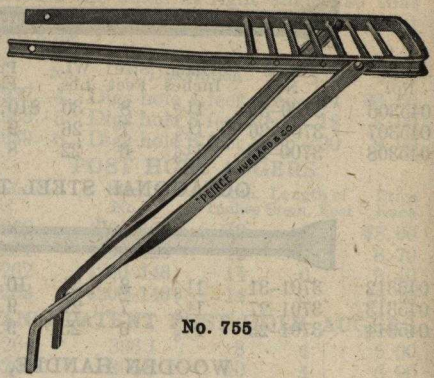
045325	4103–12	12	2⅛	2.90	045327	4103–16	16	2⅛	3.70
045326	4103–14	14	2⅛	3.30	045328	4103–18	18	2⅛	4.20

PEIRCE POLE SEATS

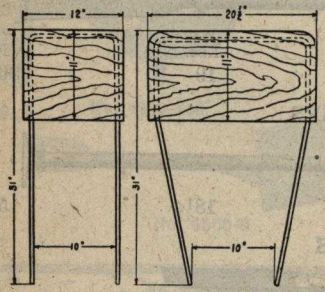
Hot Galvanized or Painted



No. 751



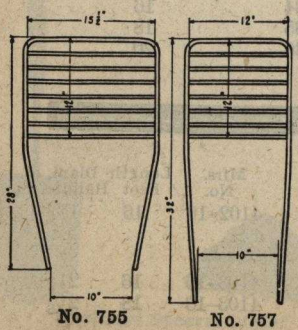
No. 755



No. 751 No. 753

These are the seats which, in a competitive test, held a dead load of 1740 pounds without deflection. A 1¼-inch angle iron seat, weighing 50 per cent more, collapsed with 960 pounds load.

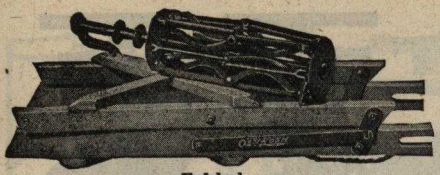
The frames and braces of all styles are of 1x½-inch channel steel. The wood seats are 1¼-inch cypress, boiled in creosote. The bars of the all steel seats are ⅜-inch square steel, let into the frame in such manner as to leave no projecting ends. There is no strain on the riveted joints. The bars are placed with corners up to prevent slipping. They are shipped completely assembled in bundles of five.



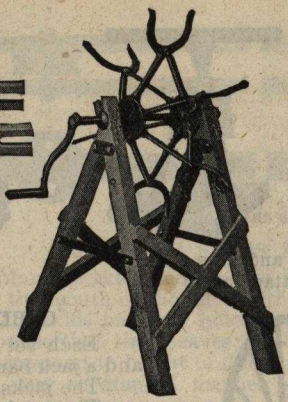
No. 755 No. 757

Trade No.	Mfrs. No.	Finish	Std. Pkg.	Wt., Lbs. per 100	Price per 100
41636	750	Painted	5	1260	$ 85.00
41637	751	Galvanized	5	1260	100.00
41638	752	Painted	5	1400	125.00
41639	753	Galvanized	5	1400	145.00
41640	754	Painted	5	1400	95.00
41641	755	Galvanized	5	1400	120.00
41642	756	Painted	5	1260	95.00
41643	757	Galvanized	5	1260	120.00

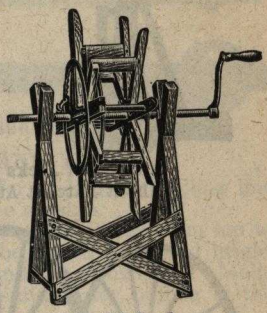
LINEMEN'S REELS



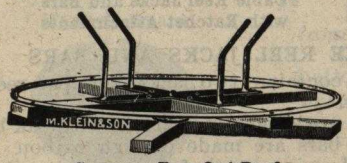
Folded



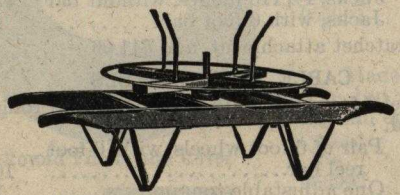
Folding Take-Up Reel



Take-Up Reel



Common Pay-Out Reel

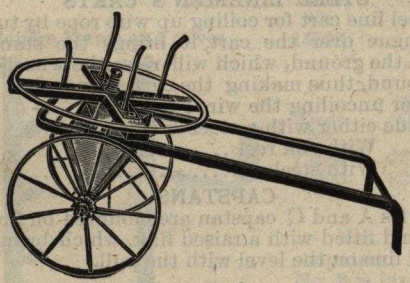


Barrow Reel

FOLDING TAKE-UP REELS

An invention that will absolutely save its cost on the first big job attempted. It makes a neater coil and throws it off in one fourth the time taken by the old reel. The reel part collapses and automatically throws off the coil at the same time and in an instant is ready for another coil. The frame, made of heavy hardwood, is strong and heavily re-enforced throughout and folds up like a hinge.

Trade No.	Description	Wt. Lbs.	Price Each
53475	For 12-inch coil	42	$8.35
53476	For 18-inch coil	42	8.60
53477	For 21-inch coil	42	8.75
53478	For 24-inch coil	42	9.00



Wasson Reel

TAKE-UP REELS

Trade No.	Mfrs. No.	Description	Wt. Lbs.	Price Each
045282	4608–1	For 18-inch coil	62	$28.00
045283	4608–2	For 21-inch coil	65	28.00

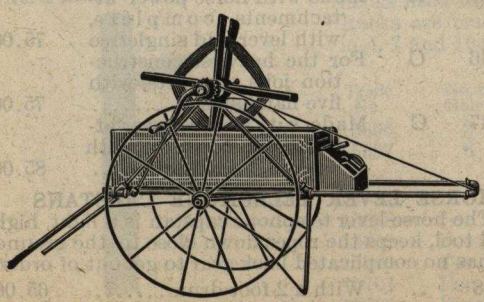
COMMON PAY-OUT REELS

Trade No.	Mfrs. No.	Wt. Lbs.	Price Each
044851	4600–1	40	$11.00

Complete with guard irons.

BARROW PAYOUT REELS

Trade No.	Mfrs. No.	Description	Price Each
044862	4601–1	Light weight.....	$18.70
044863	4601–2	Heavy weight....	22.50



Linemen's Cart

WASSON REELS

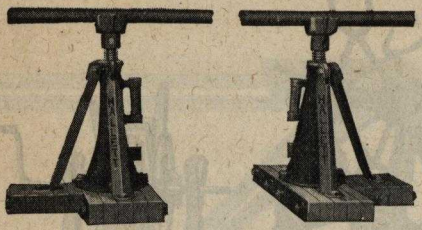
Made of steel, is strong, light, and always ready. Carries tools, pins, insulators and other material. Has brake to retain wire; can be anchored. For 14, 20 and 25-in. coils.

044864	4607–1	Single reel and cart	30.00
094722	4607–2	Double reel and cart	45.00

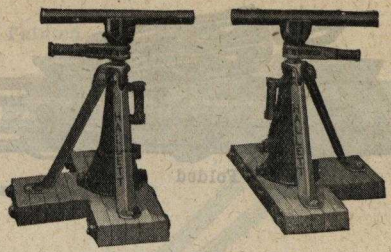
LINEMEN'S CARTS

045284	512	Complete with reel	48.00
045296	512A	Without reel.. ...	36.00

CABLE REEL JACKS, WHEELS AND CAPSTANS



Cable Reel Jacks and Bars without Ratchet Attachments



Cable Reel Jacks and Bars with Ratchet Attachments

CABLE REEL JACKS AND BARS

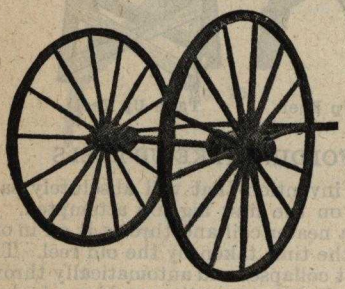
Each set contains two jacks, a 6-foot reel bar and a jack bar.

The jacks are locomotive pattern with oak bases.

The reel bars are made of high carbon steel. The outfit will swing a reel of any ordinary size and of any weight.

Trade No.	Description	Price per Set
052335	Jacks, 1¾x16 inches, without bar	$36.00
052337	Jacks, with 6-foot bar	42.00

For ratchet attachment, add $11.00.



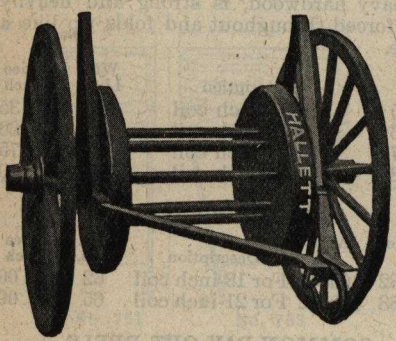
Cable Reel Wheels

CABLE REEL WHEELS

Wheel 6 feet high, with a reel bar and tongue if so desired.

052338	Pair of 6-foot wheels with 6-foot reel bar	108.00
052339	One adjustable tongue	16.00
052340	Set complete	124.00

These wheels are also furnished 5, 7, and 8 feet in diameter. Prices on application.



Steel Line Cart

STEEL LINEMEN'S CARTS

Steel line cart for coiling up wire rope by turning the tongue over the cart, it brings the standards against the ground, which will raise the wheels from the ground, thus making the cart immovable while coiling or uncoiling the wire rope.

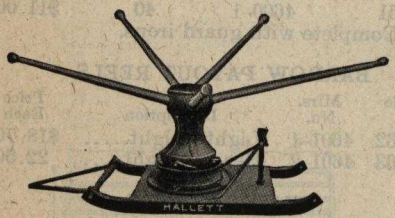
Made either with a steel or oak reel.

052341	With oak reel	87.50
052342	With steel reel	87.50

CAPSTANS

Styles A and C capstan are mounted on an iron frame and fitted with a raised link, which brings the holding line on the level with the pull.

Trade No.	Style	Description	Price Each
052344	A	For all ordinary use, with five hand spikes	$65.00
052345	A	Made with horse power attachments, complete, with lever and singletree	75.00
052346	C	For the heaviest construction jobs, complete, with five hand spikes	75.00
052347	C	Made with horse power attachment, complete, with lever and singletree	85.00



Styles A and C Capstan

HORSE LEVER TELEPHONE CAPSTANS

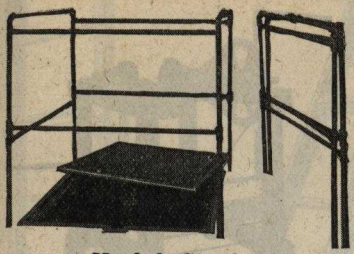
The horse lever telephone capstan is a light, high speed tool, keeps the ropes down close to the ground and has no complicated back gear to get out of order.

052348	..	With a 2-foot drum	65.00
052349	..	With a 2-foot 6-inch drum	70.00

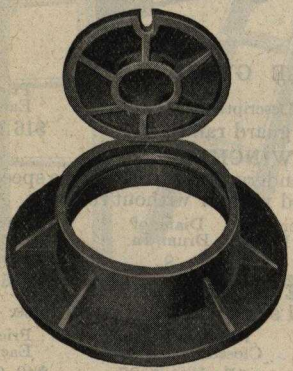


Telephone Capstan

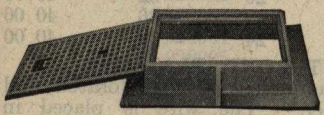
MANHOLE SUPPLIES



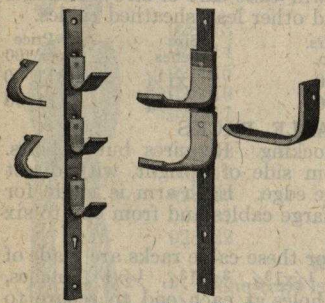
Manhole Guard



Round Frame and Cover



Square Frame and Cover



No. 1 Rack No. 2 Rack



No. 3 Rack



Manhole Skids and Sheaves

MANHOLE SKIDS AND SHEAVES

Manhole skids and sheaves for leading the pulling line from the mouth of the duct to the capstan.

The skids have pin holes every four inches from top to bottom so that the sheaves can be placed to desired height to correspond to height of duct and top of manhole. Made in a very substantial manner, suitable for pulling in the heaviest cables.

Standard length, 9 feet. Other lengths made to order, as desired.

Trade No.	Description	Price
055901	Skids and sheaves, per set, 9-foot skids	$60.00
055902	Additional length of skids, per foot....	3.00

MANHOLE GUARDS

Made of ¾-inch pipe, easily folded up and made portable, but when set and locked is rigid. The union in front top rail opens and the two arms swing out.

Trade No.	Shipping Wt., Lbs.	Price per Guard
055903	43	$25.00

MANHOLE FRAMES AND COVERS

Round Cover

Trade No	Diameter of Opening Inches	Height above Flange Inches	Projection of Flange Inches	Diameter of Flange Inches	Approximate Weight Pounds	Price
15693	22½	8	5	35	350	.....

Square Cover

Trade No.	Size of Opening Inches	Height above Flange Inches	Projection of Flange Inches	Width over Flange Inches	Approximate Weight Pounds	Price
15694	23½x21½	8	5	36x34	450	.....
15695	32 x28	8	3	40x38	700	.....

MANHOLE CABLE RESTS

Nos. 1 and 2 illustrate the standard keyhole, manhole strips and hooks. No. 1 is for single hook for one cable. No. 2 is for double hook for two or more cables.

No. 3 is steel channel rack and hook, holes in rack 2½ inches apart for supporting hooks. This arrangement makes a very compact rack. Cable can be laid close together and hooks need to be elevated but ⅝ inch to remove from rack. Racks are made with from 4 to 24 holes. Hooks are made in 4, 7 and 10-inch lengths.

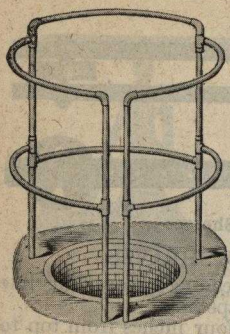
Cable Racks, Galvanized

Trade No.	No. of Holes	Price Each	Trade No.	No. of Holes	Price Each
15696	2	$0.26	091499	8	$0.52
15697	6	.34	091500	10	.90

Cable Rack Hooks, Galvanized

Trade No.	Description	Price Each
15698	For No. 1 Rack.....	$0.18
15699	For No. 2 Rack.....	.32
15700	For No. 3 Rack, length 4 inches.....	.12
15701	For No. 3 Rack, length 7 inches.....	.15
15702	For No. 3 Rack, length 10 inches.....	.18

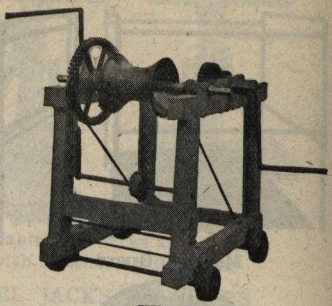
COPE UNDERGROUND CONSTRUCTION TOOLS



Manhole Guard Rail



Rail Closed



Winch

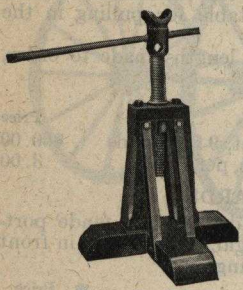
MANHOLE GUARD RAILS

Trade No.	Description	Price Each
128480	Manhole guard rail	$16.00

WINCHES

For drawing in underground cables; three speed; rope guide; furnished with or without rollers.

Trade No.	Rollers Size, In.	Diam. of Drum, In.	Price Each
128479	6	8	$140.00

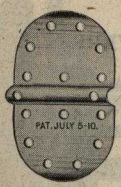


Cable Reel Jack

CABLE REEL JACKS

Jacks have steel screw and hard wood base.

Trade No.	Mfrs. No.	Height, Inches Closed	Raised	Price Each
128475	0	17	27	$40.00
128476	1	20	32	40.00
128477	2	22	36	40.00
128478	3	24	39	40.00



Bond Plate

PATENT BOND PLATES

Plates are made of copper, perforated and coated with solder. The wire is placed in position in the plate and the plate is soldered to the cable. They will take care of stray currents on underground and other lead sheathed cables.

Trade No.	Mfrs. No.	Size Inches	Price per 100
128484	130	2 x1¼	$11.00
128485	150	2⅛x1¾	14.00



Cable Rack



Cable Pulling Rigging

CABLE RACKS

Arms are self-locking. Requires but 2 bolts. The arms enter from side of upright, with direct pressure against the edge. Each arm is made for from one to three large cables and from one to six smaller ones.

The uprights for these cable racks are made of any length from ¼x1¾, ⅜x1¾, ½x1¾ inches, wrought iron with holes at each end to secure to the wall.

Arms for uprights are as follows: No. 1 for one cable; No. 2 for two cables; No. 3 for three cables; the cable bearings are 3 inches between centers. No. 1D, 2D and 3D arms are for the same uprights, but much heavier and with cable bearings of 4½-inch centers.

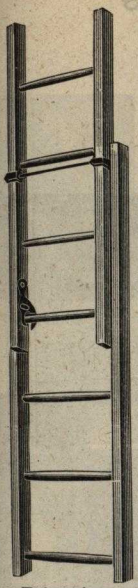
Prices on Application

CABLE PULLING RIGGING

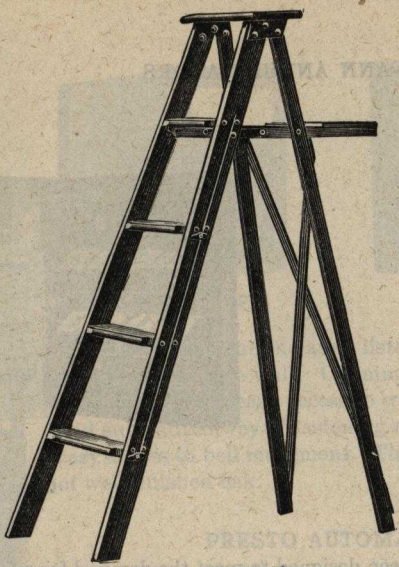
To be placed in manhole over the sheaves of which the rope passes at one end and the cable enters the duct at the other. This is made of hard wood with iron plates on sides and iron sheaves of 8 to 10 inches in diameter.

128481 Made in 10 and 12-foot lengths $54.00

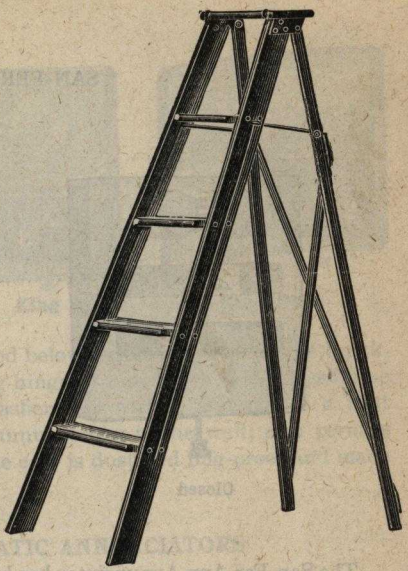
LADDERS AND BLOCKS



Extension Ladder



Ladder with Shelf



Ladder without Shelf

EXTENSION LADDERS

Trade No.	Length Feet	Weight Pounds	Price Each
028001	12	....	$ 5.40
028002	16	....	7.20
028003	20	....	9.00
028004	24	....	10.80
028005	28	....	14.00
028006	32	....	16.00
028007	36	....	18.00
028008	40	....	20.00

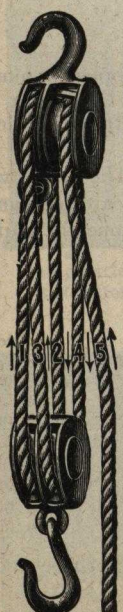
STEPLADDERS

With Shelf

028013	4	13	2.80
028014	6	19	4.00
028015	8	27	5.20
028016	10	34	6.40
028017	12	42	7.60

Without Shelf

028018	4	13	2.40
028019	6	18	3.60
028020	8	24	4.80
028021	10	32	6.00
028022	12	40	7.20



Walton Self-Locking Block

WALTON PATENTED SELF-LOCKING BLOCKS

The rope is locked by switching to the right, the eccentric score carrying the rope up to a rotating pin, which locks the rope without friction. To release the strain pull slightly forward till the rope switches into the true score, and lower away on the left. To reeve the rope correctly in the blocks fasten the end of rope to the becket or holdfast at bottom of block, then reeve through No. 1, and so on till the rope comes out through the wide score in upper block, which is the highest number. By looking at the mortises, the number will be seen stamped at the head of each mortise.

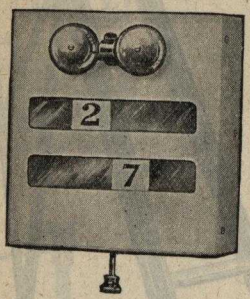
No. 30½ iron blocks are particularly adapted for telephone and telegraph wiring; No. 39 iron, for guy work, and No. 43 iron, for erecting poles.

Malleable Iron Blocks, Roller Bushed

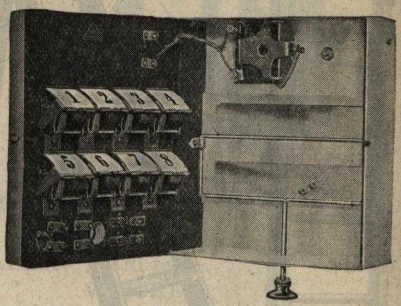
Trade No.	Mfrs. No.	Length Block Inches	Diam. Rope Inches	Upper and Lower Block	One Man can Lift Pounds	Block Capacity Pounds	Price per Set
42687	R-30½	3	⅜	Double	250	700	$ 8.00
42696	R-39	6	¾	T. & D.	500	2500	17.00
42700	R-43	4	½	Triple	600	1800	14.00

EDWARDS GRAVITY DROP ANNUNCIATORS

SAN-FER-ANN ANNUNCIATORS



Closed



Open

The San-Fer-Ann Annunciator has been designed to meet the demand for a form of construction that is normally sanitary and can be easily kept in a sanitary condition; and also for reliability of operation and service.

The special features which are predominant are the permanently hinged backboard, attached to which are the connectors and mechanism, in full view and ready access for quick and easy wiring, and complete installing of the annunciator.

The Ferro-Steel from which the case is made.

The attractive and sanitary whiteness of the enamel finish of the case.

The keyed slot for locking the backboard and case when the case is closed.

The strength of the backboard and its non-warping construction.

The twin-gong, nickeled brass bell equipment on the front of the case.

The shallowness of the case, measuring only 2¼ inches from face to back.

The superiority of the drops as compared with types commonly placed in low-priced annunciators.

Rustproof metal has been used throughout. The drops are released by electrical contact only. Vibration or other influences will not cause them to give a false indication.

The bell has double magnets, locked adjustment and a pivoted armature. The operative mechanism for the bells is mounted inside of the case and is connected with the backboard mechanism by a flexible cable so that the bell is always in the circuit whether the case is open or shut, thus greatly facilitating either connecting or testing.

Finished in white enamel with nickel trimmings. All other finishes special.

Trade No.	No. of Drops	Arrangement of Drops Across	Arrangement of Drops Down	Outside Dimensions, Inches Width	Height	Depth	Price Each
79784	2	2	1	6⅞	4¾	2⅛	$4.00
79785	3	3	1	6⅞	4¾	2⅛	4.50
79786	4	4	1	6⅞	4¾	2⅛	5.00
79787	5	3	2	6⅞	7¼	2⅛	5.50
79788	6	3	2	6⅞	7¼	2⅛	6.00
79789	8	4	2	6⅞	7¼	2⅛	7.00
79790	10	5	2	8¼	7¼	2⅛	8.00
79791	12	4	3	7⅛	9	3⅛	9.00

Dimensions do not include bell or reset rod, for which add 1¼ inches to height for reset rod and 1 inch to depth for bell.

13 to 24 drops, add to list per drop, $0.90.

25 drops and over, add to 12-drop list, for each additional drop, $1.80.

Letters on glass, up to 10 letters, $0.65. Each additional letter, $0.04.

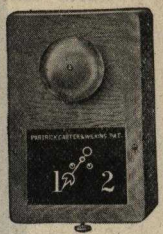
P & W ANNUNCIATORS



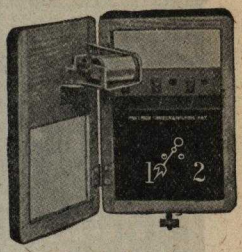
Presto



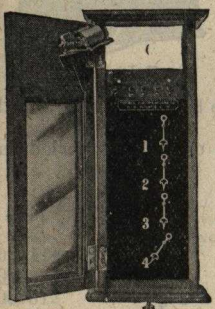
Presto, Open



King



King, Open



Competition
4 Needles, Open

None of the annunciators listed below require any catches or brackets to fasten to the wall. Opening hinged front, which holds glass frame and bell, permits easy access to washers for wiring, and makes a neat and substantial way of fastening annunciators to the wall; also permits easy access to bell movement. The case is dust and bug-proof and made of well finished oak.

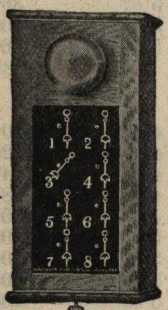
PRESTO AUTOMATIC ANNUNCIATORS

Two-Point

Indication always shows last call.

Trade No.	Size of Case, Inches: Height	Width	Depth	Price Each
39921	6½	4½	3	$3.50

All orders filled without buzzer, unless specified.



Competition
8 Needles

KING ANNUNCIATORS

One Needle for Two Indications

Hand reset.

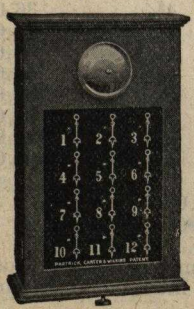
Trade No.	No. of Indications	Size of Case, Inches: Height	Width	Depth	Price Each
39923	2	6½	4½	3	$3.50

Above Presto and King Annunciators are furnished with lettered or figured indications as desired. All orders will be filled with figured indications unless otherwise ordered.

Buzzer Attachment

An additional point can be made on the Presto or King Annunciator by placing one of the pocket buzzers on top of case.

Trade No.		Price Each
39927	Buzzer attachment	$1.00



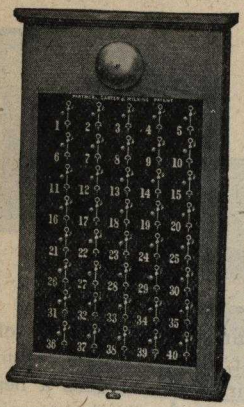
Competition
12 Needles

COMPETITION ANNUNCIATORS

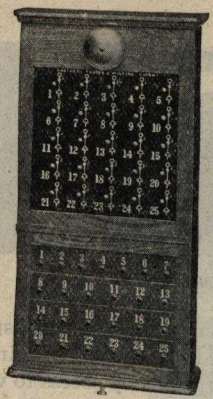
Trade No.	No.	Arrangement of Needles: Down	Across	Size of Case, Inches: Height	Width	Depth	Price Each
39928	3	3	1	14¾	6¼	4	$6.00
39929	4	4	1	14¾	6¼	4	6.60
39931	6	3	2	12¾	7½	4	8.00
39932	8	4	2	14¾	7½	4	10.00
39933	10	5	2	16¾	7½	4	12.00
39934	12	4	3	14¾	9½	4	14.00
39935	15	5	3	16¾	9½	4	17.00
39936	20	5	4	16¾	11½	4	20.00
39937	25	5	5	16¾	13¾	4	25.00

P & W ANNUNCIATORS

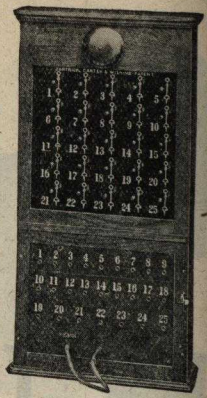
HOUSE, STYLE H



Plain



Return Call



Telephone

The Style H have hinged backs and all connections are cabled to the back. Easily wired and fastened to wall. Cases have rounded corners.

Made in the following sizes and in any of the standard woods. Oak cases are carried in stock by the manufacturer.

PLAIN

Trade No.	Arrangement of Needles: Number	Down	Across	Size of Case, Inches: Height	Width	Depth	Price Each
39851	6	3	2	12	7 5/8	4 3/4	$11.00
39852	8	4	2	14	7 5/8	4 3/4	13.00
39853	10	5	2	16	7 5/8	4 3/4	15.00
39854	12	4	3	14 1/4	9 5/8	4 3/4	17.00
39855	16	4	4	14 1/4	11 5/8	4 3/4	20.00
39856	20	5	4	16 1/4	11 5/8	4 3/4	25.00
39857	25	5	5	16 1/4	13 5/8	5	30.00
39858	30	6	5	18 3/4	13 7/8	5	36.00
39859	35	7	5	20 3/4	13 7/8	5	40.00
39860	40	8	5	22 3/4	13 7/8	5	46.00

Above 40 numbers, per number $1.25.

RETURN CALL

39861	6	3	2	20 1/2	7 5/8	4 3/4	20.00
39862	8	4	2	22 1/2	7 5/8	4 3/4	22.00
39863	10	5	2	24 1/2	7 5/8	4 3/4	24.00
39864	12	4	3	22 1/2	9 5/8	4 3/4	28.00
39865	16	4	4	22 1/2	11 3/4	4 3/4	35.00
39866	20	4	5	24 3/4	13 3/4	5	40.00
39867	25	5	5	26 3/4	13 3/4	5	50.00
39868	30	5	6	27 1/2	15 7/8	5	60.00
39869	35	5	7	27 1/2	17 7/8	5	70.00
39870	40	5	8	27 1/2	19 7/8	5	78.00

Above 40 numbers, per number $2.00.

TELEPHONE

39873	10	5	2	24 1/2	7 5/8	4 3/4	36.00
39874	12	4	3	22 1/2	9 5/8	4 3/4	43.00
39875	16	4	4	22 1/2	11 3/4	4 3/4	45.00
39876	20	4	5	24 3/4	13 3/4	5	50.00
39877	25	5	5	26 3/4	13 3/4	5	61.00
39878	30	5	6	27 1/2	15 7/8	5	71.00
39879	35	5	7	27 1/2	17 7/8	5	81.00
39880	40	5	8	27 1/2	19 7/8	5	91.00

Prices on larger size telephone annunciators quoted on application.

Fire alarm attachment to return call and telephone annunciators, $24.00.

If made with fire alarm, size of case and arrangement of needles subject to change.

Intercommunicating plugs, per set, $10.00.

When ordered intercommunicating can be made with visual (small lamp) or audible (buzzer) clearing out signal. All orders will be filled without fire alarm or intercommunicating attachment, unless specified in orders.

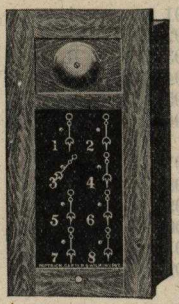
Operator's set included with telephone annunciator.

P & W ANNUNCIATORS

HOUSE STYLE, FLUSH CASE

Made in sizes from 6 to 40 numbers, and other sizes to order In any of the standard woods.

Made also to order with sheet metal front.



8-needle, Flush, Plain

PLAIN

Trade No.	Arrangement of Needles Number	Down	Across	Size of Wall Box, Inches Height	Width	Depth	Price Each
39811	6	3	2	12 5/8	6 5/8	3 1/4	$12.00
39812	8	4	2	14 5/8	6 5/8	3 1/4	14.00
39813	10	5	2	16 5/8	6 5/8	3 1/4	16.00
39814	12	4	3	16 1/8	8 5/8	3 1/4	18.00
39815	16	4	4	16 1/8	10 5/8	3 1/4	22.00
39816	20	5	4	18 1/8	10 5/8	3 1/4	28.00
39817	25	5	5	21 1/8	12 5/8	3 1/4	33.00
39818	30	6	5	23 1/8	12 5/8	3 1/4	39.00
39819	35	7	5	25 1/8	12 5/8	3 1/4	44.00
39820	40	8	5	27 1/8	12 5/8	3 1/4	50.00

RETURN CALL

39821	6	3	2	19 3/4	6 5/8	3 1/2	22.00
39822	8	4	2	21 3/4	6 5/8	3 1/2	24.00
39823	10	5	2	25 3/4	6 5/8	3 1/2	26.00
39824	12	4	3	23 3/4	8 5/8	3 1/2	30.00
39825	16	4	4	23 3/4	10 5/8	3 1/2	37.00
39826	20	4	5	23 3/4	12 5/8	3 1/2	42.00
39827	25	5	5	30 1/4	12 5/8	3 1/2	53.00
39828	30	5	6	30 1/4	14 5/8	3 1/2	63.00
39829	35	5	7	30 1/4	16 5/8	3 1/2	73.00
39830	40	5	8	30 1/4	18 5/8	3 1/2	82.00

TELEPHONE

39833	10	5	2	31 1/4	6 5/8	3 1/2	38.00
39834	12	4	3	27 1/4	8 5/8	3 1/2	45.00
39835	16	4	4	27 1/4	10 5/8	3 1/2	47.00
39836	20	4	5	29 1/4	12 5/8	3 1/2	52.00
39837	25	5	5	32 1/4	12 5/8	3 1/2	63.00
39838	30	5	6	32 1/4	14 5/8	3 1/2	73.00
39839	35	5	7	32 1/4	16 5/8	3 1/2	83.00
39840	40	5	8	32 1/4	18 5/8	3 1/2	93.00

Fire alarm attachment to return call or telephone, $24.00.

Intercommunicating plugs, per set, $10.00.

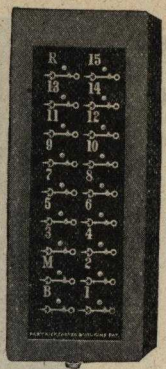
Size of wall box subject to change if made with fire alarm or other attachments or intervening numbers.

Flange extends beyond wall box, 1 inch all around.

P & W ANNUNCIATORS



Single Row Wood



Double Row Wood

ELEVATOR ANNUNCIATORS

Cases have hinged backs and all connections cabled on the back. Easy to connect up and handy to get at bells for adjustment. Concealed bells.

OAK WOOD CASE—HORIZONTAL NEEDLE

Single Row

Trade No.	No. of Drops	Size of Case, Inches: Height	Width	Depth	Price Each
40091	4	12 1/8	5 1/8	4	$ 9.00
40092	5	13 5/8	5 1/8	4	10.00
40093	6	15 1/8	5 1/8	4	11.00
40094	7	16 5/8	5 1/8	4	12.00
40095	8	18 1/8	5 1/8	4	13.00
40096	9	19 5/8	5 1/8	4	14.00

Double Row

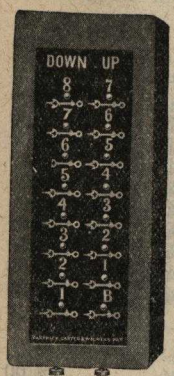
40097	10	13 5/8	6 5/8	4	15.00
40098	12	15 1/8	6 5/8	4	17.00
40099	14	16 5/8	6 5/8	4	19.00
40100	16	18 1/8	6 5/8	4	21.00
40101	18	19 5/8	6 5/8	4	23.00
40102	20	21 1/8	6 5/8	4	25.00

Up and Down

Trade No.	No. of Floors	No. of Drops	Arrangement Up	Down	Price Each
40133	4	6	3	3	$12.00
40103	5	8	4	4	14.00
40104	6	10	5	5	16.00
40105	7	12	6	6	18.00
40106	8	14	7	7	20.00
40107	9	16	8	8	22.00
40108	10	18	9	9	24.00
40109	11	20	10	10	26.00
40110	12	22	11	11	28.00

Basement is counted as a floor.

All orders will be filled with our regular standard oak wood, and indications marked B-1 up, unless otherwise ordered.



Up and Down Wood



Single Row Metal

SHEET METAL CASE—HORIZONTAL NEEDLE

Single Row

Trade No.	No. of Drops	Size of Case, Inches: Height	Width	Depth	Price Each
40111	4	14 1/2	4 1/2	3 1/2	$18.00
40112	5	14 1/2	4 1/2	3 1/2	19.00
40113	6	17 1/2	4 1/2	3 1/2	20.00
40114	7	17 1/2	4 1/2	3 1/2	22.00
40115	8	20 1/2	4 1/2	3 1/2	23.00
40116	9	20 1/2	4 1/2	3 1/2	24.00

Double Row

40117	10	15 1/8	7	3 3/4	27.00
40118	12	16 5/8	7	3 3/4	29.00
40119	14	18 1/8	7	3 3/4	32.00
40120	16	19 5/8	7	3 3/4	36.00
40121	18	21 1/8	7	3 3/4	38.00
40122	20	22 5/8	7	3 3/4	42.00

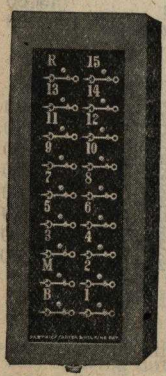
Up and Down

Trade No.	No. of Floors	No. of Drops	Arrangement Up	Down	Price Each
40134	4	6	3	3	$22.00
40123	5	8	4	4	24.00
40124	6	10	5	5	28.00
40125	7	12	6	6	30.00
40126	8	14	7	7	33.00
40127	9	16	8	8	37.00
40128	10	18	9	9	39.00
40129	11	20	10	10	43.00
40130	12	22	11	11	46.00

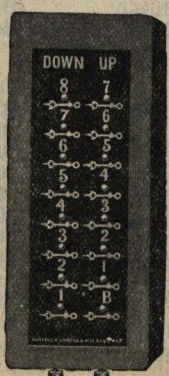
Basement is counted as a floor.

Large sizes to order.

All metal elevator annunciators, bull black finish, unless otherwise ordered, and indications marked B-1 up.



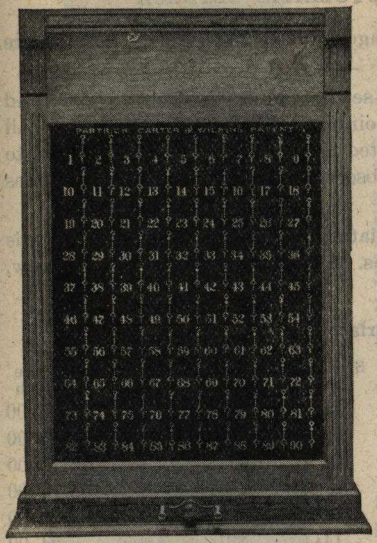
Double Row Metal



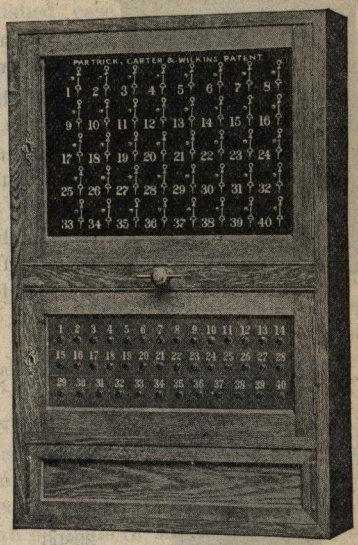
Up and Down Metal

P & W ANNUNCIATORS

HOTEL, STYLE E, AND SKELETON CASE



Plain



Skeleton Case

DIMENSIONS—PLAIN

Arrangement of Needles			Style E Size of Case, Inches			Skeleton Size of Case, Inches		
Number	Down	Across	Height	Width	Depth	Height	Width	Depth
40	8	5	32	18	7¼	31½	16½	5½
45	9	5	35	18	7¼	33½	16½	5½
50	9	6	35	20	7¼	33½	18½	5½
60	10	6	37	20	7¼	36	18½	5½
70	10	7	37	22	7¼	36	20½	5½
80	10	8	37	24	7¼	36	22½	5½
90	10	9	37	26	7¼	37	24½	5½
100	10	10	37	28	7¼	37	26½	5½

DIMENSIONS—RETURN CALL

40	5	8	44	24	7¼	36¾	22½	5½
45	5	9	44	26	7¼	36¾	24½	5½
50	5	10	44	28	7¼	36¾	26½	5½
60	6	10	48	28	7¼	41	26½	5½
70	7	10	52	28	7¼	45½	26½	5½
80	8	10	55	28	7¼	48½	26½	5½
90	9	10	58	28	7¼	51¾	26½	5½
100	10	10	62	28	7¼	57	26½	5½

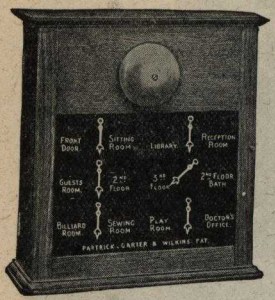
PRICES

	Style E				Skeleton			
	Plain		Return Call		Plain		Return Call	
No. of Needles	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
40	40227	$62.00	40235	$ 96.00	40251	$62.00	40259	$ 96.00
45	40228	64.00	40236	100.00	40252	64.00	40260	100.00
50	40229	70.00	40237	110.00	40253	70.00	40261	110.00
60	40230	80.00	40238	125.00	40254	80.00	40262	125.00
70	40231	90.00	40239	145.00	40255	90.00	40263	145.00
80	40232	100.00	40240	160.00	40256	100.00	40264	160.00
90	40233	115.00	40241	180.00	40257	115.00	40265	180.00
100	40234	125.00	40242	200.00	40258	125.00	40266	200.00

Simplified fire alarm to return call annunciators, $24.00.

Hotel annunciators requiring numbers between those specified above, will be charged for at the rate per number given for the next nearest number listed, and indicating needles arranged according to our best judgment.

P & W ANNUNCIATORS



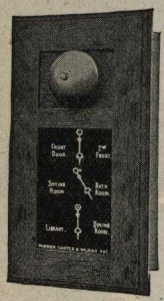
Standard Automatic

STANDARD AUTOMATIC SETBACK

Standard cases have hinged backs and all connections are cabled on back.

With the automatic self-setting annunciators only one, and that the last call, remains pointing, or indicating; each new call resets the pointer that indicated the previous call, no attention to the annunciator other than observing the dial when the call comes in being required.

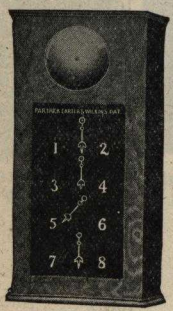
In the automatic annunciators, except the 4-number, there is one needle for two indications. The 4-number is in single row, upright form.



Flush Automatic

Surface Case

Trade No.	Arrangement of Needles Number	Down	Across	Size of Standard Case, Inches Height	Width	Depth	Price Each
39891	4	4	..	14	6⅛	4⅝	$11.00
39892	6	3	..	12	7⅝	4⅝	13.00
39893	8	4	..	14	7⅝	4⅝	15.00
39894	10	5	..	16	7⅝	4⅝	17.00
39895	12	3	2	12¼	12¼	4¾	20.00
39896	16	4	2	14¼	12¼	4¾	24.00
39897	20	5	2	16¼	12¼	4¾	28.00



Guarantee Double Row

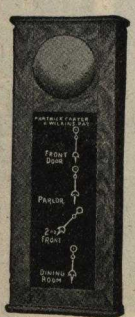
Flush Case

Trade No.	Arrangement of Needles Number	Down	Across	Size of Wall Box, Inches Height	Width	Depth	Price Each
39898	4	4	..	14⅝	5⅛	3⅜	$11.00
39899	6	3	..	12⅝	6⅝	3⅜	13.00
39900	8	4	..	14⅝	6⅝	3⅜	15.00
39901	10	5	..	16⅝	6⅝	3⅜	17.00
39902	12	3	2	12¾	11¼	3⅜	20.00
39903	16	4	2	14¾	11¼	3⅜	24.00
39904	20	5	2	16¾	11¼	3⅜	28.00

Flange of frame extends beyond wall box, 1 inch all around.

Made in any of the regular woods; oak cases carried in stock.

The automatic annunciator will be furnished in larger sizes and other styles of cases to order. Flush cases made with sheet metal front to order.



Guarantee Single Row

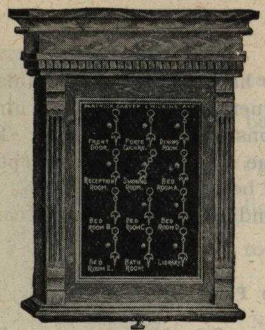
GUARANTEE AUTOMATIC SETBACK

The Guarantee has exactly the same movement as the Standard. It is made only in oak and in four sizes.

The bell is fastened to hinged frame or front. There is one needle for two indications, except the 4-number, which is in single row, upright form, with a needle for each indication.

Trade No.	No. of Needles	Size of Case, Inches Height	Width	Depth	Price Each
39905	4	14¾	6¼	4	$ 8.00
39906	6	12¾	7½	4	10.00
39907	8	14¾	7½	4	12.00
39908	10	16¾	7½	4	14.00

P & W ANNUNCIATORS



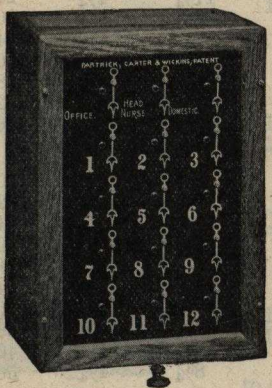
Style O
Concealed Bell

STYLE O ANNUNCIATORS

Handsomely finished case, heavy in appearance. Have hinged backs and cabled connections. Made in any of the standard woods. Concealed bell.

Trade No.	Arrangement of Needles Number	Down	Across	Size of Case Inches Height	Width	Depth	Price Each
39951	8	2	4	14 5/8	15	7 3/4	$22.00
39952	10	2	5	14 5/8	17	7 3/4	24.00
39953	12	4	3	19 1/8	13	7 3/4	26.00
39954	15	5	3	21 3/8	13	7 3/4	30.00
39955	16	4	4	19 1/8	15	7 3/4	34.00
39956	18	6	3	23 5/8	13	7 3/4	36.00
39957	20	5	4	21 3/8	15	7 3/4	38.00
39958	25	5	5	21 3/8	17	7 3/4	44.00

Made in special arrangement of needles and other sizes to order.



Style J, Upright
Concealed Bell

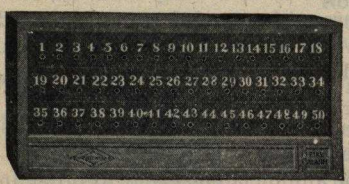
STYLE J ANNUNCIATORS—UPRIGHT

Plain, finely finished cases with rounded corners. Especially adapted for hospital use. Cases have hinged backs and cabled connections. Made in any of the standard woods. Can be made in sheet metal cases to order.

39980	6	3	2	8 1/2	6 5/8	4 3/4	12.00
39959	8	4	2	10 1/2	6 5/8	4 3/4	14.00
39960	10	5	2	12 1/2	6 5/8	4 3/4	16.00
39961	12	4	3	10 1/2	8 5/8	4 3/4	18.00
39962	15	5	3	12 1/2	8 5/8	4 3/4	21.00
39963	16	4	4	10 1/2	10 5/8	4 3/4	22.00
39965	20	5	4	12 1/2	10 5/8	5	27.00
39966	25	5	5	12 1/2	12 5/8	5	33.00
39967	30	6	5	14 1/2	12 5/8	5	38.00
39968	35	7	5	16 1/2	12 5/8	5	44.00
39969	40	8	5	18 1/2	12 5/8	5	50.00

Depth of case can be decreased if bell is located separate.

When ordering in intervening sizes we will use our best judgment in arrangement of indicating needles. Standard finish, oak; other finishes to order.

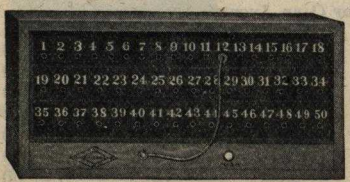


Return Call Board, with
Fire Alarm

RETURN CALL AND TELEPHONE BOARDS

Made especially for use where annunciators are already installed. They are made with or without fire alarm attachment. Telephone boards can be fitted with intercommunicating plugs when desired. These boards can be made in any finish of wood. If we are furnished with sample wood we will match it as near as possible. In asking for quotations be sure and give numbers of indications on annunciator in use, how indications are marked, and the size of case, depth and width over all. When possible to do so, send sketch of the bottom of annunciator case; also be sure and send diagram showing how the house is wired, and we will go over same; and, when necessary, send sketch for proper wiring, and make board connections accordingly.

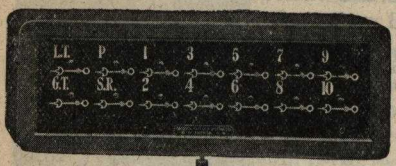
Prices quoted upon application.



Telephone Board, without
Fire Alarm

P & W ANNUNCIATORS

CAR

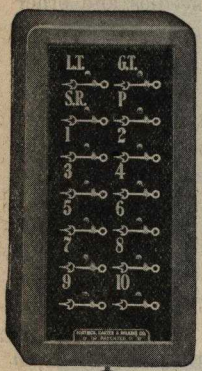


Style L

These annunciators have plain, smooth finished cases with rounded corners, concealed bells, hinged backs, and all connections are cabled on back. They are made in any of the standard woods. Depth of case can be decreased if bell is located separate. Impossible to make false indications by jarring of cars in turning sharp curves.

Style L—Landscape Form

Trade No.	Arrangement of Needles: Number	Down	Across	Size of Case, Inches: Height	Width	Depth	Price Each
40051	8	2	4	6	10 7/8	4 3/4	$22.00
40052	10	2	5	6	13	4 3/4	24.00
40053	12	2	6	6	15 1/8	4 3/4	26.00
40054	14	2	7	6	17 1/4	4 3/4	28.00
40055	16	2	8	6	19 3/8	4 3/4	30.00
40056	18	2	9	6	21 1/2	4 3/4	34.00
40057	20	2	10	6	23 5/8	4 3/4	36.00
40058	21	3	7	7 1/2	17 1/4	4 3/4	38.00
40059	24	3	8	7 1/2	19 3/8	4 3/4	42.00
40060	30	3	10	7 1/2	23 5/8	4 3/4	50.00

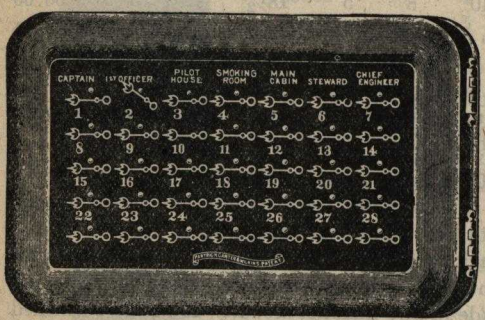


Style U

Style U, Upright Form

40061	8	4	2	9	6 5/8	4 3/4	20.00
40062	10	5	2	10 1/2	6 5/8	4 3/4	22.00
40063	12	6	2	12	6 5/8	4 3/4	24.00
40064	14	7	2	13 1/2	6 5/8	4 3/4	26.00
40065	16	8	2	15	6 5/8	4 3/4	28.00
40066	18	9	2	16 1/2	6 5/8	4 3/4	34.00
40067	20	10	2	18	6 5/8	4 3/4	36.00
40068	21	7	3	13 1/2	8 3/4	4 3/4	38.00
40069	24	8	3	15	8 3/4	4 3/4	40.00
40070	30	10	3	18	8 3/4	4 3/4	50.00

MARINE



Style R

Style R

The Style R is a finely finished, substantial case with rounded corners, hinged back and all connections cabled to back. Concealed bell. (Depth of case can be decreased if bell is located separate.)

Made in any of the standard woods Also made in upright form if preferred.

Marine annunciators made to order in other styles of cases; also in the return call or telephone form with or without fire alarm.

Trade No.	Arrangement of Needles: Number	Down	Across	Size of Case, Inches: Height	Width	Depth	Price Each
40071	35	5	7	15 1/2	21 3/4	6	$64.00
40072	40	5	8	15 1/2	24	6	72.00
40073	45	5	9	15 1/2	26	6	80.00
40074	50	5	10	15 1/2	28 1/8	6	90.00
40075	60	6	10	17	28 1/8	6	110.00
40076	70	7	10	18 1/2	28 1/8	6	120.00
40077	80	8	10	20	28 1/8	6	140.00
40078	90	9	10	21 1/2	28 1/8	6	156.00
40079	100	10	10	23	28 1/8	6	170.00

P & W ANNUNCIATORS

BURGLAR ALARM ANNUNCIATORS



Style D, Flush

These burglar alarms have substantial and finely finished cases. All switches are of the pull-out form and on front of case.

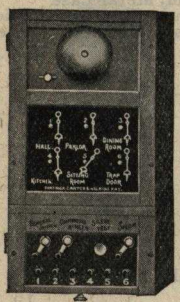
All alarms have continuous ringing bells, silent test switch, battery test switch, general cut-off switch, outside bell switch.

Attachment can be made on alarms so that when alarm is operated it will light an automatic burner.

Special attachments to work in connection with alarm for lighting incandescent lamps can also be furnished.

Style B alarms have hinged backs. All connections cabled to back. Panel for switches is black finish, same as face plate.

No. of Needles	Without Clock Trade No.	Without Clock Price Each	With No. 1 Clock Trade No.	With No. 1 Clock Price Each	With No. 3 Clock Trade No.	With No. 3 Clock Price Each
			Style D			
4	40141	$28.00	40151	$56.00	40161	$60.00
6	40142	32.00	40152	60.00	40162	64.00
8	40143	36.00	40153	64.00	40163	68.00
10	40144	40.00	40154	66.00	40164	72.00
12	40145	44.00	40155	70.00	40165	76.00
			Style B			
4	40146	24.00	40156	48.00	40166	52.00
6	40147	28.00	40157	52.00	40167	56.00
8	40148	32.00	40158	56.00	40168	60.00
10	40149	36.00	40159	60.00	40169	64.00
12	40150	40.00	40160	64.00	40170	68.00



Style B, Alarm

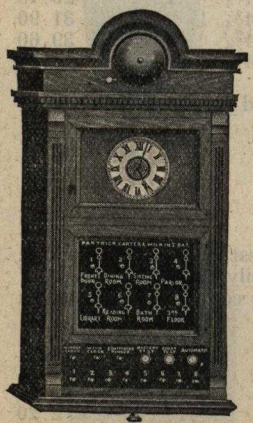
Size, Inches, of Wall Box, for Style D, Flush Alarm

No. of Needles	Without Clock Height	Without Clock Width	Without Clock Depth	With Clock Height	With Clock Width	With Clock Depth
4	17¾	8½	3½	28¼	12	5
6	17¾	8½	3½	28¼	12	5
8	17½	11	3½	28¼	14½	5
10	17½	13	3½	28¼	16½	5
12	20	11	3½	30½	14½	5

Alarms made in any of the standard woods and larger sizes, to order.

ALARMS WITH CLOCK ATTACHMENTS

Style A



Style A
With Clock Attachment

No. 1 attachment consists of a first-class 8-day movement for automatically switching off alarm at any desired hour. No extra wiring is required for this attachment.

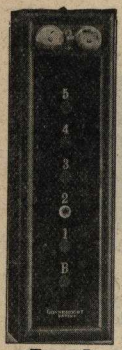
No. 3 attachment is the same as No. 1, with the addition of servant's call and an automatic setback in which a button located in servant's room, on being pressed after call bell is rung, opens circuit on bell—no switch in servant's room being required. In this system, when the servant stops bell from ringing, it is automatically cut off until again reset the following night at alarm.

In wiring for No. 3 attachment, run three wires from alarm to servant's room.

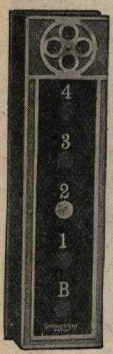
No. of Needles	Without Clock Attachment Trade No.	Without Clock Attachment Price Each	With No. 1 Clock Attachment Trade No.	With No. 1 Clock Attachment Price Each	With No. 3 Clock Attachment Trade No.	With No. 3 Clock Attachment Price Each
4	40173	$35.00	40178	$56.00	40183	$60.00
6	40174	38.00	40179	60.00	40184	64.00
8	40175	42.00	40180	64.00	40185	68.00
10	40176	46.00	40181	66.00	40186	70.00
12	40177	50.00	40182	70.00	40187	74.00

Trade No.	Description	Price Each
40171	Automatic burner attachment.....	$4.50

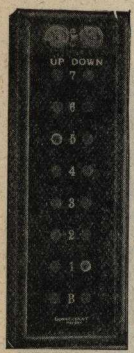
CONNECTICUT ANNUNCIATORS



Type L



Type LM



Type A



No. 316

ELEVATOR ANNUNCIATORS

Electric Reset

They are furnished with the signals arranged in one or two rows as desired. If more than ten drops are required, signals will be furnished in double rows. All drops are electrically reset by a push button on the annunciator. An extension reset button can be located in any desired position. All parts, including the drops, bell, and reset buttons are mounted on the back board so that when the front is removed they are accessible in their working conditions. No spring cover contacts are used. Furnished with bell or buzzer. Standard finish is ebony. Special finish extra.

Type M Metal Case

This style represents the neatest and most compact elevator annunciator. It is made up with drops mounted in single or double rows, the width of the single row type being only three inches. Illustration shows type M with buzzer and sound opening protected by bug-proof screen. Standard finish is dead black. Other finishes to order. Can be furnished with bell or buzzer, as specified.

Single Row, Types L and LM

No. of Drops	Type L, Wood Case Trade No.	Width Inches	Heigth Inches	Price Each	Type LM, Metal Case Trade No.	Width Inches	Height Inches	Price Each
3	71563	5	14	$11.00	71571	3	12½	$14.50
4	71564	5	14	12.50	71572	3	12½	15.90
5	71565	5	14	13.40	71573	3	12½	16.60
6	71566	5	16½	14.30	71574	3	17	17.60
7	71567	5	16½	14.40	71575	3	17	18.60
8	71568	5	22	16.50	71576	3	21½	19.60
9	71569	5	22	17.60	71577	3	21½	20.50
10	71570	5	22	18.70	71578	3	21½	21.40

Double Row, Types A and AM

	Type A, Wood Case				Type AM, Metal Case			
4	71579	6	13½	12.50	71590	...	....	15.90
6	71580	6	13½	14.30	71591	4¾	12½	17.60
8	71581	6	13½	16.50	71592	4¾	12½	19.60
10	71582	6	13½	18.70	71593	4¾	12½	21.40
12	71583	6	19½	20.90	71594	4¾	16¾	23.10
14	71584	6	19½	23.10	71595	4¾	16¾	25.30
16	71585	6	19½	25.30	71596	4¾	22½	27.60
18	71586	6	23½	27.50	71597	4¾	22½	29.70
20	71587	6	23½	29.70	71598	4¾	22½	31.90
24	71588	6	26	34.10	71599	4¾	30¾	39.60
30	71589	6	31	40.70	71600	4¾	30¾	45.30

EXAMPLE. — A 12-drop Type A or AM is designed for six floor elevator service, there being two rows of six buttons each.

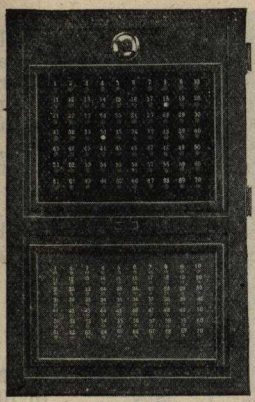
ELEVATOR CALL BUTTONS

The lines are simple and in keeping with the finest appointed interiors. The parts are well arranged and the cover can be easily removed in case of installation or adjustment. Standard finish is oxidized copper. Furnished in both flush and wall types.

Trade No.	Mfrs. No.	Description	Price Each
149140	315	One button, for top or bottom floor	$2.20
149141	316	Up and down elevator push	2.20
149142	317	Up and down elevator push, flush type	2.20

NOTE. — Connecticut annunciators will operate successfully with a 12-volt bell ringing transformer.

CONNECTICUT ANNUNCIATORS



Type R

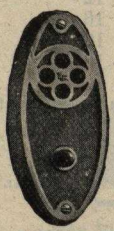
RETURN CALL ANNUNCIATORS

TYPE R, ELECTRIC RESET

The general cabinet design of the Type R annunciator is the same as the Type T telephone annunciator listed on another page. The lines of this cabinet are rich and the finish strictly high class, in keeping with the most modern office furniture. Return call buttons are mounted in a panel under the drops and are numbered to correspond, the reset button being mounted at the bottom of the panel. Annunciators have hinged back and front. Standard finish, golden oak. Special finishes are extra. Wired for two common and one direct wire unless otherwise specified.

Trade No.	No. of Drops	Arrangement Across	Arrangement Down	Dimensions, Inches Width	Dimensions, Inches Height	Price Each
149151	25	5	5	24	35½	$94.00
149152	32	8	4	24	35½	111.30
149153	40	8	5	26¾	37¾	135.30
149154	50	10	5	26¾	37¾	162.80
149155	60	10	6	26¾	37¾	192.50
149156	70	10	7	26¾	48¾	217.80
149157	80	10	8	26¾	48¾	244.50
149158	100	10	10	26¾	48¾	300.30

Prices for Type R annunciators, for less than 25 drops on request. Add $2.70 per drop over 100.



No. 303

AUTOMATIC SELF-SETTING DEVICE

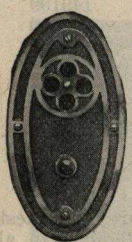
All annunciators can be arranged with a self-resetting device so that the last call will reset the previous drop display.

Price additional to annunciators, $2.40.

COMBINATION RETURN CALL AND PUSH

The lines are simple and in keeping with the finest appointed interiors. The parts are well arranged and the cover can be easily removed in case of installation or adjustment. Furnished in both flush and wall types. Sound opening is protected by a bug-proof brass screen.

Standard finish is oxidized copper. Special finishes to order.



No. 305

Trade No.	Mfrs. No.	Description	Price Each
149159	303	Return call buzzer and push	$2.75
149160	304	Return call bell and push	2.75
149161	305	Return call buzzer and push, flush type	4.10

Price includes metal outlet box.

TYPE P, ELECTRIC RESET, METAL CASE

The Type P compact annunciator is put up in a metal case with hinged cover. Capacity two to four drops. The reset button is mounted on side of case. Dimensions of case 7x5¼ inches. Finish, dull black. Furnished with bell or buzzer.



Type P

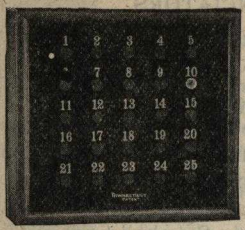
Trade No.	No. of Drops	Price Each
71551	2	$ 9.90
71552	3	11.00
71553	4	12.50

Automatic self-setting device extra 2.40

Note.—Connecticut Annunciators will operate successfully with a 12-volt bell ringing transformer.

CONNECTICUT HOSPITAL ANNUNCIATORS

Electric Reset

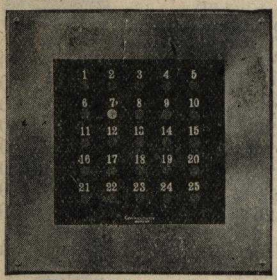


Type O Annunciator

Special service for hospitals can be furnished. The usual method is to have one master annunciator which is placed in the superintendent's office or head nurse's quarters or both; a number of smaller annunciators are placed in the various wards. Each patient is supplied with a pendent push outfit which operates a common drop on the master annunciators, also in the nurses' ward, indicating the bed number. When the nurse returns to the patient she pushes a button on the pendent wall plate which restores electrically all the corresponding drops on the various annunciators.

Telephone service can also be installed, if desired. The hand microphone can be arranged to plug in on a special pendent push plate.

TYPE O WALL ANNUNCIATORS



Type W Annunciator

Trade No.	No. of Drops	Arrangement Across	Arrangement Down	Dimens., In. Width	Dimens., In. Height	Price Each
149172	4	2	2	6½	8½	$13.80
149173	6	2	3	6½	8½	16.10
149174	8	4	2	13½	9	19.70
149175	10	5	2	13½	9	23.05
149176	12	6	2	13½	9	26.50
149177	16	4	4	11¾	12	34.30
149178	20	5	4	11¾	12	39.60
149179	24	6	4	17¼	16	45.60
149180	30	6	5	17¼	16	57.00
149181	36	6	6	17¼	16	68.40
149182	40	8	5	17¼	16	76.10

Standard finish, dark golden oak. Automatic self-setting device, $2.60 extra.

TYPE W FLUSH ANNUNCIATORS



No. 115 Flexiphone

No. of Drops	Arrangement Across	Arrangement Down	Dimens., In. Width	Dimens., In. Height	Wood Mat Trade No.	Wood Mat Price Each	Metal Mat Trade No.	Metal Mat Price Each
4	2	2	11	13	149183	$17.65	149194	$25.80
6	2	3	11	14	149184	19.55	149195	26.05
8	4	2	14½	13	149185	24.85	149196	31.55
10	5	2	16¼	13	149186	28.55	149197	35.30
12	6	2	18	13	149187	30.70	149198	39.35
16	4	4	14½	16	149188	35.90	149199	40.30
20	5	4	16¼	16	149189	40.90	149200	47.15
24	6	4	18	16	149190	48.00	149201	58.90
30	6	5	18	18	149191	59.05	149202	71.30
36	6	6	18	20	149192	66.70	149203	80.50
40	8	5	21½	18	149193	76.90	149204	87.10

Standard finish for wood mats, dark golden oak; for metal mats, brush brass.

FLEXIPHONES



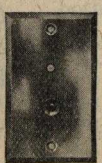
No. 230 Pendent Push Button with Cord and Plug

The flexiphone combines the essential feature of the desk stand and adjustable arm. It is self-adjusting and balancing in all positions. Regularly equipped with solid back transmitter, bipolar receiver and 6-foot green silk connecting cord.

Trade No.	Style No.	Description	Price Each
149205	115	Flexiphone complete.....	$26.00

Specify whether wanted for series, bridging or central energy. Prices do not include generators.

PENDENT PUSH BUTTONS



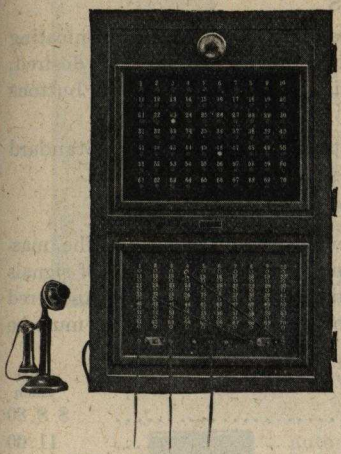
No. 230 Nurse's Call Plate

This outfit consists of a brush brass plate with jack and button which is set flush in the wall. A 10-foot cord and white celluloid pendent push and metallic plug are attached. The button on plate is used to restore the drop annunciator from bedside. No. 230 plate is 4½x3½ in., drilled to fit No. 37 Bossert cover.

149206	230	Complete with jack plate and pendent push.	5.00
149207	233	White celluloid pendent push only.....	1.10

Green silk cord attached to No. 233, 12 cents per foot.

CONNECTICUT TELEPHONES



Type T Annunciator

TELEPHONE ANNUNCIATORS

Type T, Electric Reset

These instruments are equipped with the Connecticut Double Spool Annunciator Drop Signals and are designed for a low-priced switchboard equipment for schools, hotels, apartment houses, etc. Standard finish of case is golden oak. Annunciators are not regularly fitted with intercommunicating cord pairs, unless so ordered. They are made up and wired for two different systems, Nos. 30 and 31. No. 30 requires a push button on phones for calling. No. 31 is automatic; removing receiver displays signal at annunciator.

Trade No.	No. of Drops	Price, Each System No. 30	Trade No.	No. of Drops	Price, Each System No. 30
46525	10	$60.50	17411	49	$167.70
46527	16	77.00	17412	56	187.00
46528	20	88.00	17413	64	209.00
46529	25	101.70	17414	72	231.00
17408	30	115.50	17415	81	255.70
17409	36	132.00	17416	90	280.50
17410	42	148.50	46536	100	308.00

Add for each additional drop above 100, $2.70.

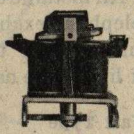
Intermediate sizes bear price of next higher size listed.

Add 25 per cent to net prices for system No. 31.

Prices include operators' transmitter and receiver attached to case. Extra for desk telephone or hand microphone operator's set, $6.60.

Trade No.	Description	Price Each
17398	Fire alarm attachment for 25 drops or less	$43.00
	Each additional number	.43

All cabinets above 25 numbers have special cabinet, hinged back and front with connections cabled to terminals on backboard.



Top View of Drop

Cross Connecting Cords

17401 For System No. 30, one pair of cross connecting cords with listening and ringing key 11.50

Supervisory signals not furnished with System No. 30.

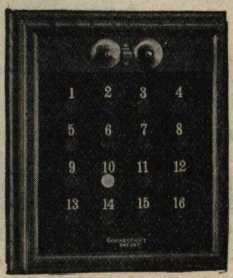
17402 For System No. 31, one pair of cross connecting cords with listening and ringing key and supervisory signals 15.80

SURFACE WALL TYPE ANNUNCIATORS

Type S, Electric Reset

The cabinet design is rich and in keeping with the most modern quartered oak office furniture.

The electric reset button is mounted on the bottom of the case. An extension reset button, however, can be located in any desired position. Annunciators over twenty drops have hinged back. Standard finish is dark golden oak, special finish extra. Furnished with bell or buzzer.



Type S

Trade No.	No. of Drops	Arrangement Across	Arrangement Down	Dimens., Inches Width	Dimens., Inches Height	Price Each
71554	4	2	2	6½	10	$12.50
71555	6	2	3	6½	10	14.30
71556	8	4	2	13½	9	16.50
71557	10	5	2	13½	9	18.70
71558	12	6	2	13½	9	20.90
71559	16	4	4	13½	15	25.30
71560	20	5	4	13½	15	30.20
71561	25	5	5	13½	15	36.80
71562	30	6	5	14½	15	44.00

For each additional drop over 30 add $1.60 list.

Automatic self-setting device, extra, $2.40.



Type K

TWO-DROP DOOR INDICATORS

Type K

These indicators are designed principally for house use, the targets corresponding to the front and rear door. Only the last call made will be registered.

Trade No.	No. of Drops	Price, Each
71601	2	$4.60

Furnished with bell or buzzer.

CONNECTICUT TELEPHONES

AUTOMATIC TELEPHONES

These instruments are recommended as the highest standard for intercommunicating service. The operation of this system is automatic. Pushing button calls party desired; hanging up receiver restores button automatically. No special restoring or ringing buttons are required.

This system is non-interfering, although a common return circuit is used. Standard finish for woodwork is golden oak. Special finish bears an extra charge.

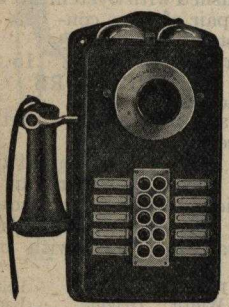
MASTER CALL BUTTON

The master call is used for ringing a number of telephone bells simultaneously. The master call is used in connection with the main or office station and by the use of a code of signals the superintendent or any other person can be located immediately. The calls are answered by calling the master station from the nearest telephone. For this service telephones must be ordered with 20-ohm bells.

Trade No.	Style No.	Description	Price Each
17544	34-A	One-button for 10-station capacity	$ 8.80
17545	34-B	Two-button for 16-station capacity	11.00
17546	34-C	Two-button for 20-station capacity	13.20
17547	4	20-ohm bells, extra per telephone	1.00

METALLIC CIRCUIT AUTOMATIC

All types of automatic telephones are furnished for metallic circuit. This system should always be used when absolutely non-interfering service is desired. All metallic circuit phones may be used to connect with one or more trunk lines to a public telephone exchange. When used in this manner, two extra buttons for each trunk line are furnished; one to connect to trunk and the other termed a retaining button for holding the trunk line while calling another party.



Nos. 35-B and 35-M

Nos. 35-B and 35-M, Wall Type

Furnished with long distance transmitter and receiver. Switch mechanism is designed and guaranteed to stand years of hard service. The talking circuit has been carefully and scientifically designed.

Trade No.	Style No.	System No.	Fin.	Price, 8 Buttons or Less	Extra Buttons per Set of 2
17537	35-B	1	Oak	$22.00	$1.75
17548	35-B	26	Oak	22.00	1.75
17538	35-M	3	Oak	24.00	2.20

No. 35-B for common return circuit. No. 35-M for metallic.
Special finish, extra.



Nos. 38-B and 38-M

Nos. 38-B and 38-M, Desk Type

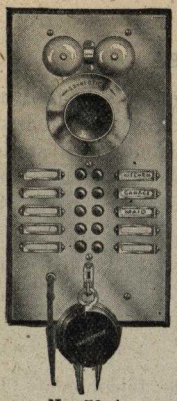
This style of full automatic desk phone is to be preferred over other automatic desk phones which are arranged with push buttons in base, which are apparently handy, but mechanically incorrect. With this style the ordinary desk cord can be used, thus doing away with the liability of broken wires in desk stand cable. It is absolutely positive in its action and can be mounted on the wall, or used in connection with roll or flat-top desks.

Trade No.	Style No.	Description	Price Each
17539	38-B	Desk phone, eight buttons or less, common return circuit	$31.20
17540	38-M	Desk phone, eight buttons or less, metallic circuit	33.00
		Buttons above eight, common return circuit, per set of two	1.75
		Buttons above eight, metallic circuit, per set of two	2.20

Special finish, extra.

NOTE.—Standard sizes are 8, 10, 12, 16 and 20 buttons.

CONNECTICUT TELEPHONES



No. 59-A

AUTOMATIC TELEPHONES

Nos. 59-A and 59-M Flush

This telephone is fitted with highest grade long distance parts throughout, and the Connecticut Automatic Switch. The front plate is of heavy brass with beveled edges. Heavy stamped metal outlet boxes are included with knock-out holes, in top and bottom.

Outlet boxes can be ordered in advance if desired and placed in position while building is in course of construction. Name cards are protected by transparent celluloid. Size of metal faceplate, for eight buttons or less is 12x6¼ inches. Make wall opening 10⅜x4x4⅜ inches. Length of plate and wall opening increases 1 1/16 inch for each two buttons.

Trade No.	Style No.	System No.	Description	Price Each
17519	59-A	1	Eight buttons or less, common return	$29.70
17520	59-M	3	Eight buttons or less, metallic circuit.	31.50
			Buttons above eight, common return, per set of two....	1.75
			Buttons above eight, metallic circuit, per set of two.....	2.20

Prices include metal outlet boxes.

Wood fronts furnished at same price as metal.



No. 38-A

Nos. 38-A and 38-C Flush

This set is designed principally for residence systems, the automatic button box being flush for wall mounting. Standard finish of plate is brush brass.

Size of plate for eight buttons or less is 8⅛x6¼ inches. Heavy stamped metal outlet box is included with the above. Make wall opening 6⅜x4 inches. Length of plate and wall opening increases 1 1/16 inch for each two buttons above ten.

Trade No.	Style No.	System No.	Description	Price Each
17532	38-A	1	Eight buttons or less, common return	$38.00
17533	38-C	3	Eight buttons or less, metallic circuit	41.20
			Buttons above eight, common return, per set of two....	1.75
			Buttons above eight, metallic circuit, per set of two....	2.20

MULTIPLE TELEPHONES

No. 54-A Flush Type

This telephone is regularly equipped with watchcase receiver. Card holders are furnished with transparent celluloid strips to protect name cards. The buttons are not automatic — special single point push buttons are furnished. Standard finish, brush brass. Special finishes bear extra charge.

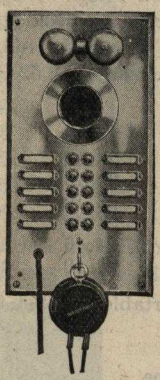
Working parts of this telephone are covered by a heavy tin casing, protecting them from dirt, etc. In cases where iron conduit is used metal outlet boxes are necessary.

Front plate is of beveled brass, size 12x6¼ inches, for ten buttons or less. For six buttons or less, 10¾x6¼ inches. Make wall opening for ten-button size 10⅜x4x4⅜ inches. Length of plate and wall opening increases 1 1/16 inch for each two buttons above ten.

Trade No.	Style No.	System No.	Finish	Price, Four Buttons or less	Extra Buttons
14485	54-A– 6	6	Brush brass	$19.00	$0.80
14486	54-A–12-A	12-A	Brush brass	19.00	.80
14487	54-A–19	19	Brush brass	19.00	.80

Prices include wood or metal fronts.

Metal outlet boxes, No. 199B, extra, $2.00.



No. 54-A

No. 62, Wall Type

This multiple telephone is furnished with heavy stamped metal case and can be used in place of the No. 52 wall telephone, if desired. Made only in five buttons.

Trade No.	Style No.	System No.	Finish	Price 5 Buttons
17468	62– 6	6	Dull black	$16.30
17469	62–12-A	12-A	Dull black	16.30
17470	62–19	19	Dull black	16.30



No. 62

No. 32, Wall Type

This is a high-grade low priced telephone.

17471	32–17	17	Oak	10.10
17472	32– 6	6	Oak	10.10
17473	32–12-A	12-A	Oak	10.10
17474	32–19	19	Oak	10.10

No. 100 choke coil, used for System No. 17 only, $1.20.



No. 32

CONNECTICUT TELEPHONES

MULTIPLE TELEPHONES



No. 52

These telephones are not non-interfering but are used on a common talking circuit system, the talking circuit of all instruments being connected to one pair of wires common to all stations. It will be understood that only two telephones on a system can be in use at the same time. Card holders are furnished with transparent celluloid strips to protect name cards.

Standard cabinet finish is golden oak Special finishes bear an extra charge.

No. 52, Wall Type

This is the standard wall type multiple telephone. It is efficient, well finished, and fitted with standard long distance transmitter and receiver.

Trade No.	Style No.	System No.	Finish	Price, 4 Buttons or Less	Extra Buttons
17459	52– 6	6	Oak	$15.80	$0.50
17460	52–12-A	12-A	Oak	15.80	.50
17461	52–19	19	Oak	15.80	.50

NOTE.—No. 52 with watchcase receiver, 4 buttons, $13.60. Additional buttons, each, $0.50.

Special finish, extra.



No. 52-A

Nos. 52-A and 52-C, Desk Type

This style is furnished with a push button block with card holder as illustrated, also 6 feet of green silk cord to desk stand. Button block can be furnished with weighted base, if desired, for portable use. It is furnished complete with buzzer. No. 52-C has flush button block.

17462	52-A– 6	6	*Nickel	23.10	.50
17463	52-A–12-A	12-A	*Nickel	23.10	.50
17464	52-A–19	19	*Nickel	23.10	.50
17475	52-A–17	17	*Nickel	23.10	.50
17465	52-C– 6	6	*Nickel	24.40	.70
17466	52-C–12-A	12-A	*Nickel	24.40	.70
17467	52-C–19	19	*Nickel	24.40	.70

Extra for weighted button block for portable use, list, $1.65

*Handle and base finished in dull black.



No. 52-H

Nos. 52-H and 52-HC, Desk Type

This style is furnished with a push button block with card holder, also 6 feet of green silk cord to desk stand. Button block can be furnished with weighted base if desired for portable use. It is furnished complete with buzzer. No. 52-HC has flush button block.

17476	52-H– 6	2	Nickel	23.10	.50
17477	52-H–12-A	12-A	*Nickel	23.10	.50
17478	52-H–19	19	*Nickel	23.10	.50
17479	52-H–17	17	*Nickel	23.10	.50
17480	52-HC– 6	6	*Nickel	24.40	.70
17481	52-HC-12-A	12-A	*Nickel	24.40	.70
17482	52-HC–19	19	*Nickel	24.40	.70

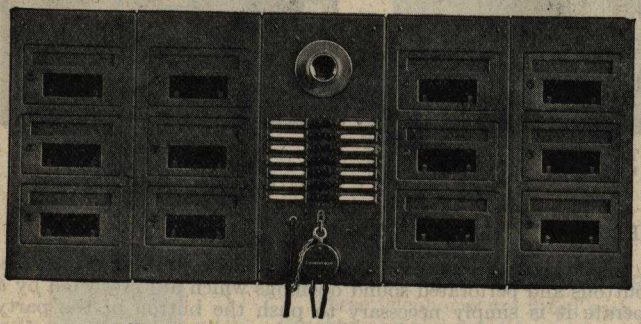
Extra for weighted button block for portable use, list, $1.65.

*Handle finished in dull black.

CONNECTICUT APARTMENT HOUSE TELEPHONES

No. 85 VESTIBULE TELEPHONE SETS

Non-Interfering



No. 85 Vestibule Telephone Grouped with Four No. 66 Units

Style No. 85 is somewhat similar to Nos. 83 and 86, shown on the following page, with the exception that it is fitted with an automatic switch for non-interfering service. This allows the use of any combination of stations at the same time without interference.

Vestibule, suite telephones, as well as suite and janitor's telephone, can be in use at the same time without any of the other telephones listening to the conversation.

The janitor's annunciator is designed for use in connection with the above with system No. 26.

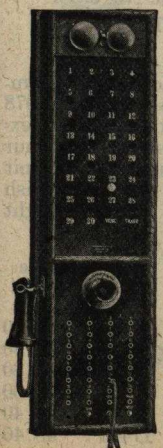
No. 85 vestibule telephone only, brush brass, four buttons or less, price, $27.30. Add $1.30 list for each additional button above four. Furnished in multiples of two buttons only.

Complete with Letter Boxes

Trade No.	Style No.	Letter Box Units	No. of Suites Designed for	Wiring System No.	Outside Dimens., In. Height	Width	Wall Opening, In. Height	Width	Price Each
122047	854	1—4-gang	4	11 or 26	18⅞	14	16¾	13	$46.60
122048	856	2—3-gang	6	11 or 26	15	21	13	20	59.00
122049	858	2—4-gang	8	11 or 26	18⅞	21	16¾	20	71.30
122050	8512	4—3-gang	12	11 or 26	15	35	13	34	95.90
122051	8516	4—4-gang	16	11 or 26	18⅞	35	16¾	34	120.60
122052	8518	6—3-gang	18	11 or 26	15	49	13	48	132.90
122053	8520	5—4-gang	20	11 or 26	18⅞	42	16¾	41	145.20
122054	8524	6—4-gang	24	11 or 26	18⅞	49	16¾	48	169.80
122055	8528	7—4-gang	28	11 or 26	18⅞	63	16¾	62	194.50
122056	8530	10—3-gang	30	11 or 26	15	84	13	83	206.80

Prices include extra button for calling janitor.

Prices are based on brush brass finish; other finishes bear an additional charge.



JANITOR'S ANNUNCIATORS—TYPE J

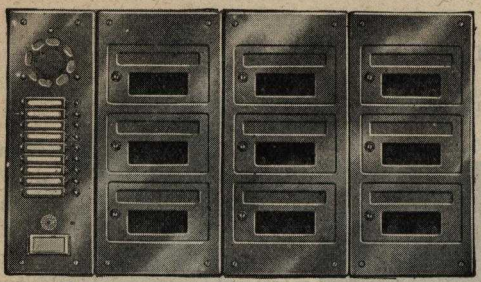
Type J is a complete janitor's telephone with annunciator drops. Calls are received and given through an answering cord and plug. In answering or giving a call the janitor plugs in the jack which corresponds with the drop displayed.

This annunciator is designed for use with non-interfering system No. 26.

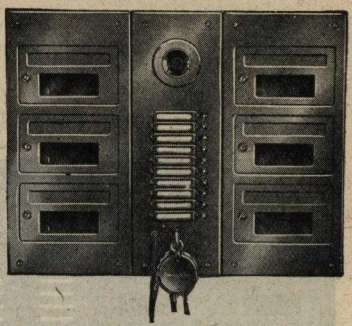
Trade No.	No. of Drops	Price Each	Trade No.	No. of Drops	Price Each
122060	10	$60.50	122064	30	$115.50
122061	16	77.00	122065	36	132.00
122062	20	88.00	122066	42	148.50
122063	25	101.80	122067	49	167.80

Intermediate sizes take price of next highest size listed.

CONNECTICUT APARTMENT HOUSE TELEPHONES



No. 86 Cordless Vestibule Telephone
Grouped with Three No. 66 Units



No. 83 Vestibule Telephone
Grouped with Two No. 66 Units

No. 86, CORDLESS VESTIBULE TELEPHONE SETS

Common Talking

The front of these cordless telephones is absolutely flush. There is nothing on the face-plate except the card holders, buttons and perforated sound openings which are protected by a bug-proof brass screen. To operate it is simply necessary to push the button of the party wanted. The answer will be received through the perforated sound openings and conversation can be carried on just the same as though the party were in front of you. These outfits are furnished with a specially constructed loud talking transmitter and receiver mounted behind the front plate.

No. 86 cordless vestibule telephone only, three buttons, brush brass, price, $31.20. Add $0.90 list for each additional button above three.

Complete with Letter Boxes

Trade No.	Style No.	No. of Three-gang Units	No. of Suites Designed for	Wiring System No.	Outside Dimens., In. Height	Outside Dimens., In. Width	Wall Opening, In. Height	Wall Opening, In. Width	Price Each
122029	863	1	3	24 or 27	15	12	12¼	11	$ 45.80
122030	866	2	6	24 or 27	15	19	12¼	18	62.90
122031	869	3	9	24 or 27	15	26	12¼	25	80.10
122032	8612	4	12	24 or 27	15	35	12¼	34	97.20
122033	8615	5	15	24 or 27	15	42	12¼	41	118.40
122034	8618	6	18	24 or 27	15	49	12¼	48	131.60
122035	8621	7	21	24 or 27	15	58	12¼	58	148.70
122036	8624	8	24	24 or 27	15	66	12¼	65	165.90
122037	8627	9	27	24 or 27	15	73	12¼	72	183.00
122038	8630	10	30	24 or 27	15	85	12¼	84	200.20

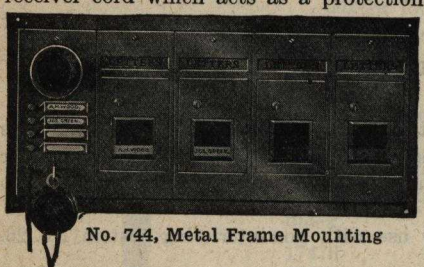
Furnished with No. 67 4-gang letter box units, if desired.

Prices are based on brush brass finish; other finishes bear an additional charge. Prices include extra button for calling janitor.

Nos. 83 AND 84 SETS WITH LETTER BOXES

No. 83 vestibule telephone is equipped with standard transmitter and watchcase receiver. For price deduct $10.00 from price of No. 86 cordless set listed above.

No. 84 vestibule telephone is similar to No. 83, but is equipped with a flexible armored receiver cord which acts as a protection against theft. Price the same as the No. 83.



No. 744, Metal Frame Mounting

No. 74, VESTIBULE OUTFITS

Common Talking

For small vestibule outfits No. 74 is recommended, mounted on metal frame with No. 1978 letter boxes. This makes a very compact and extremely handsome outfit. Furnished with four buttons or less and, if desired, mounted as a unit with letter boxes on a metal mat. Standard finish is brush brass. Other finishes bear a slight additional charge.

Style No.	No. of Suites Designed for	System No.	Outside Dimens., In. Height	Outside Dimens., In. Width	Wall Opening, In. Height	Wall Opening, In. Width	Without Frame Trade No.	Without Frame Price Each	With Frame Trade No.	With Frame Price Each
742–21	2	21	10⅝	16¾	8¼	15¾	122039	$29.00	17488	$34.80
742–22	2	22	10⅝	16¾	8¼	15¾	122040	29.00	17489	34.80
743–21	3	21	10⅝	21⅛	8¼	19⅞	122041	34.80	17490	41.60
743–22	3	22	10⅝	21⅛	8¼	19⅞	122042	34.80	17491	41.60
744–21	4	21	10⅝	26	8¼	24⅞	122043	40.50	17492	48.40
744–22	4	22	10⅝	26	8¼	24⅞	122044	40.50	17493	48.40

CONNECTICUT TELEPHONES



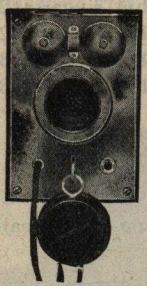
No. 50



No. 40



No. 25A



No. 60



Duplex



No. 64

No. 50—INTERCHANGEABLE

These telephones are fitted with jumper cords inside the phone. By changing the cords to correspond with diagram furnished with each instrument, any interior wiring can be secured. Case is stamped metal, dull black finish. All exposed parts are nickel-plated.

Trade No.	Style No.	Description	Price Each
17422	50	Interchangeable wall phone	$12.10

No. 40

Fitted with No. 43 transmitter, induction coil, and 63-C watch case receiver. Cabinet is dark golden oak.

069032 40 With one button 9.00

Extra buttons, each, $0.70.

No. 25A

Furnished with standard long distance 45-A transmitter, induction coil, and 71-C receiver. Base, handle and hook are finished in dull black; transmitter is nickel; green silk cords.

069033 25A With one button 18.70

Extra buttons, each $0.70.

No. 60—FLUSH

Designed for house and apartment use. The front plate is furnished regularly in brush brass. All parts are carefully insulated from the front plate and back of telephone is protected by a heavy tin box. No. 200 wood frame is regularly furnished with this outfit. Size of plate, 6⅝ x 4½ inches. Wall opening, 5⅜x3⅞ inches.

069035 60 With one button 9.30

Extra buttons, each $0.70.

No. 199A heavy metal outlet box can be supplied when ordered. The use of this box requires special construction of the telephone.

DUPLEX TWO LINE

Designed to connect two points. Can be used for service between two offices, house and garage, office and factory, etc. Case is metal, finished in dull black.

Trade No.	Description	Price per Pair
17418	No. 37 Duplex, without induction coil	$14.30
069036	39-40 Duplex, with induction coil	15.90

No. 64—HAND

Very convenient for pair service. Wired regularly for use with 39-40 Duplex. Can be furnished for use with No. 37 Duplex, if specified.

17421 No. 64–40 hand set, two line 22.00

CONNECTICUT TELEPHONES



No. 14

COMPACT MAGNETO WALL TELEPHONES

Style No. 14

These telephones are designed for farmers and all long distance telephone lines; also for short lines where the distance is too long for battery call telephones. They are regularly equipped with collapsible writing shelf. For heavy lines the ring through condenser is recommended. Prices do not include batteries.

Trade No.	Style No.		Price Each
17430	14-A	Series, 3-bar generator, 80-ohm ringer.....	$25.10
17431	14-E	Bridging, 3-bar generator, 1000-ohm ringer	27.10
17432	14-B	Series, 4-bar generator, 80-ohm ringer.....	26.40
17433	14-C	Bridging, 4-bar generator, 1000-ohm ringer	28.30
17434	14-D	Bridging, 4-bar generator, 1600-ohm ringer	29.65
17435	14-K	Bridging, 5-bar generator, 1600-ohm ringer	30.95
17436	14-M	Bridging, 5-bar generator, 2500-ohm ringer	32.40

Style No. 9

This type combines all the qualifications of our highest grade long distance instruments, the only difference being in the cabinet design.



No. 9

17437	9-A	Series, 3-bar, 80-ohm ringer.....	20.05
17438	9-B	Bridging, 3-bar, 1000-ohm ringer.....	22.70
17439	9-C	Bridging, 4-bar, 1000-ohm ringer.....	23.75
17440	9-D	Bridging, 4-bar, 1600-ohm ringer.....	25.10

MAGNETO CALL DESK TELEPHONES

This stand is a thoroughly modern equipment. Where a complete telephone is required for receiving and giving a call, the desk telephone should be purchased with magneto bell, or, if desired, the magneto and ringer can be furnished separately (see No. 88 extension bell and hand box generator).

If an extension telephone only is required for receiving a call, use No. 5-A or No. 2-A less call bell.



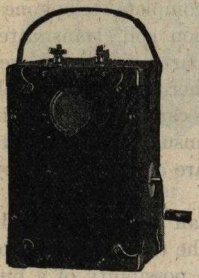
No. 5-A

17441	5-A	Desk telephone, without magneto bell.....	16.50
17442	5-A	With No. 82-A magneto bell.....	29.05
17443	5-A	With No. 82-C magneto bell.....	32.40
17444	5-A	With No. 82-D magneto bell.....	33.60
17445	5-A	With No. 82-K magneto bell, 1600 ohms...	36.35
17446	5-A	With No. 82-M magneto bell, 2500 ohms ..	37.55
17447	3-A	Desk telephone only, without call bell, for extension telephone.....	17.15
17448	2-A	Desk telephone complete, with call bell and condenser.....	27.70

Common battery and magneto switchboard, prices furnished on request.

CONNECTICUT TELEPHONES

MAGNETO TEST BELLS



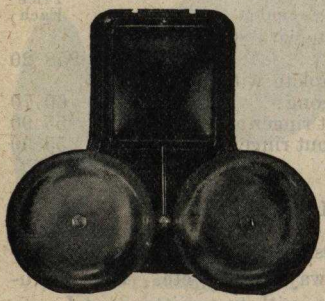
Magneto Test Bell

These bells are designed for locating grounds, open circuits, etc., in electric wiring. They are fitted with the well known Connecticut generators and ringers, and with inside bells. The opening on the side is arranged so that the bells can be heard. This opening is also protected from dust and insects by a wire gauze. The bells are guaranteed to ring through the resistance specified. Cabinets are oak and of very substantial construction and are fitted with heavy nickel-plated brass corners.

Trade No.	Style No.	Resistance Ohms	Price Each
149001	90	10000	$16.90
149002	91	25000	17.30
149003	92	35000	17.50
149004	93	50000	18.00
149005	94	75000	18.70
149006	95	100000	20.15

Prices include heavy metal corners.

LOUD RINGING EXTENSION BELLS

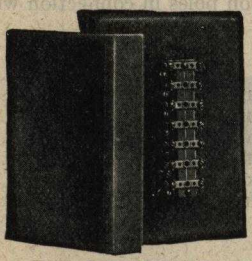


Loud Ringing Extension Bell

Furnished for common battery or magneto systems. The case is stamped metal, heavily enameled, practically water-proof, and suitable for installation in exposed places. Gongs are 6 inches.

Trade No.	St	Resistance Ohms	Price Each
149007	565–A	80	$17.50
149008	565–B	1000	18.00
149009	565–C	1600	18.35
149010	565–D	2500	20.40
For 2 M. F. condenser, add.....			3.00

JUNCTION BOXES

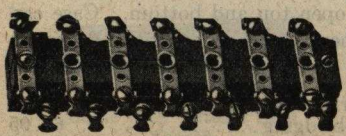


No. 107 Junction Box

Designed for use in places where splices in telephone cables, bells or annunciator wiring occur. Not only is this box a labor saver but all connections may be inspected at any time. From any junction box, circuits may be opened and tested without the use of a soldering iron. The brass connections are so arranged that wires may be soldered or fastened with machine screws. Each connector is numbered.

Trade No.	Style No.	No. of Connections	Price Each	Trade No.	Style No.	No. of Connections	Price Each
149011	107–A	14	$4.20	149016	107–F	36	$10.80
149012	107–B	20	5.50	149017	107–G	44	12.10
149013	107–C	24	6.80	149018	107–H	56	13.40
149014	107–D	30	8.10	149019	107– J	64	14.70
149015	107–E	34	9.50	.....	.....	..	.....

CONNECTING STRIPS



Connecting Strip

These strips can be used for all kinds of telephones, button and bell work, made up of multiples of seven connectors. Illustration shows two No. 108 mounted together; can also be mounted end to end. Each clip has two screw and two soldered connectors.

Trade No.	Style No.	Description	Price Each
149020	108	Strips of 7 connectors mounted on composition base.....	$1.60

CONNECTICUT TELEPHONES

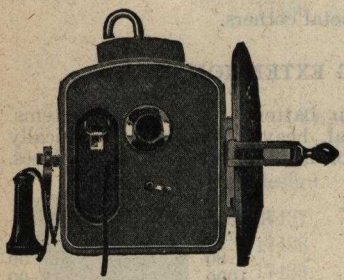
WEATHERPROOF IRON BOX TELEPHONES



No. 12

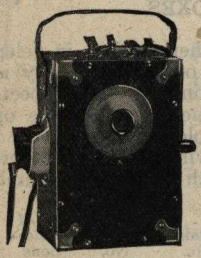
These telephones are designed for mine, street railway and police systems. This is a complete telephone with powerful generator, ringer, induction coil, transmitter, receiver, lightning arrester, etc., all parts of which have been specially treated to withstand weather conditions. Bells are mounted on top; if preferred, they can be mounted inside. Working parts are mounted on an insulated metal plate and can be removed as a unit. They are also protected by two waterproof rubber gaskets.

Styles No. 12C and No. 12D can be fitted with plunger cut-out so when the door is closed the telephone is automatically cut off the line. There is no possibility of a burnout or cross. All outside corners are rounded so dust and dirt will not collect. Also arranged for central energy, if desired. Prices do not include batteries.


No. 12, Open View

Trade No.	Style No.	Description	Price Each
149031	12A	Series, complete with 80-ohm ringer and gongs	$58.20
149032	12B	Bridging, complete with 1000-ohm ringer and gong	60.70
149033	12C	Series, without ringer and gongs	55.90
149034	12D	Bridging without ringer and gongs	55.90

No. 31 PORTABLE TELEPHONES


No. 31

These telephones are designed for linemen's test purposes, army, field, street railway service, etc. This instrument is the complete telephone with transmitter, watch case receiver, powerful generator, ringer, and two cells of pocket dry batteries. This set will work any distance and is suitable for testing electric light, telephone lines, cables, wiring in buildings, etc. For street railway service weatherproof jack boxes are arranged for mounting on poles in connection with No. 31.

149035	31A	80 ohms, series	24.00
149036	31B	1000 ohms, bridging	27.00
149037	31C	1600 ohms, bridging	28.80
149038	31S	Long carrying strap, extra	3.00
149039	31D	Extra Type D test set batteries	.70
149040	53	Weatherproof jack box	8.40
149041	53C	6-foot cord and plug, extra	4.80

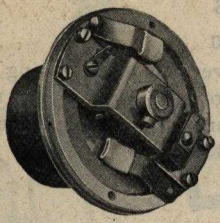
No. 36 PORTABLE TELEPHONES


No. 36

Designed for railroad, army, or field service. It is fitted with non-breakable hand telephone set, generator, ringer, capacity for two standard dry batteries, long shoulder strap, etc. Case is quartered golden oak with heavy metal corners and is designed to open top and bottom. Case can be supplied with four rubber legs, if so ordered. Prices do not include batteries.

149042	36A	80 ohms, series	56.40
149043	36B	1000 ohms, bridging	62.05
149044	36C	1600 ohms, bridging	64.45

CONNECTICUT TELEPHONES



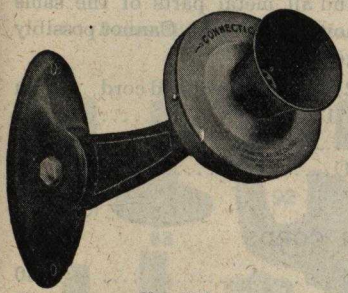
No. 45A
Transmitter

TRANSMITTERS

Style No. 45A

Connecticut Solid Back Transmitters are fitted with the finest imported mirror carbon electrodes. Every transmitter goes through a series of rigid tests before shipment, and all parts are carefully measured by a micrometer gauge to insure uniformity; thus the purchaser is assured of perfect results. This transmitter is guaranteed to work perfectly over hundreds of miles of toll lines or for interior telephone service. Furnished for magneto or central energy at prices quoted.

Trade No.	Style No.	Description	Price Each
17403	45A	Transmitter complete, with back shell	$3.00
17404	45B	Transmitter, with short adjustable arm	4.45
17405	45C	Operator's switchboard transmitter only	4.45
17407	47	Mouthpiece for No. 45 transmitter	.35



No. 46A
Transmitter

Style No. 46A

No. 46A is No. 45A transmitter mounted on an adjustable arm for magneto phones. Arm is finished in heavy black enamel.

17406	46A	Complete	4.80
17417	46B	Arm and base only	1.80

INTERCOMMUNICATING CABLE

Good cable is as important as good telephones. For this purpose two styles are carried for intercom service; one with outside braid treated with fire-proof paint for interior dry places, and intercom cable lead covered for use outside, also inside where there is the least trace of dampness. All line wires are No. 22 B. & S. gauge twisted in pairs with double silk and cotton insulation with different colored insulation to permit of quick testing. Battery wires are No. 18 B. & S. gauge.



Cable with Outside Braid

Style No.	No. of Pairs No. 22	No. of Pairs No. 18	Braided Trade No.	Braided Diam. In.	Braided Price per 100 Ft.	Leaded Trade No.	Leaded Diam. In.	Leaded Price per 100 Ft.
70	6	4	149055	5/16	$21.55	149063	23/64	$39.50
60	12	4	149056	27/64	32.30	149064	1/2	65.45
61	22	4	149057	33/64	51.15	149065	19/32	90.30
62	32	4	149058	9/16	70.00	149066	43/64	124.15
77	6 only	4	149059	13/64	14.50	149067	11/32	31.60
78	11 only	4	149060	11/32	21.55	149068	25/64	39.50
79	16 only	4	149061	23/64	26.95	149069	13/32	45.15
80	26 only	4	149062	13/32	34.45	149070	21/64	67.70



Cable with Outside Lead Sheath

THREE AND FOUR-CONDUCTOR CABLE

Style No.	Description	Damp Proof Trade No.	Damp Proof Price per 100 Ft.	Water Proof Trade No.	Water Proof Price per 100 Ft.
300	Three conductor	149071	$6.40	149073	$6.40
301	Four conductor	149072	8.30	149074	8.30

CONNECTICUT TELEPHONES



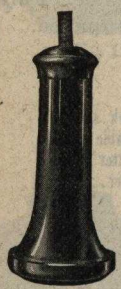
No. 63-C

RECEIVERS

Style No. 63-C

This double-pole watchcase receiver has the working parts mounted in the shell. The magnets are circular and will retain their magnetism permanently. They are fully as efficient as the long type.

Trade No.	Style No.	Description	Price Each
17359	63-C	Wired to 80 ohms	$1.70
		Extra receiver caps for No. 63-C	.50
		Extra receiver caps for duplex phones	.50
		Receiver diaphragms for No. 63-C	.20
		Receiver diaphragms for duplex	.20



No. 71-C

Style No. 71-C

This receiver is unquestionably the highest grade on the market. The shell is rubberoid and all metal parts of the same are self-contained and can be removed as a unit. Cannot possibly be affected by temperature changes.

17360	71-C	Receiver, with 2½ or 3-foot worsted cord	2.40
		Complete receiver shells, for No. 71-C	.85
		Extra receiver caps	.50
		Receiver diaphragms, for No. 71-C	.20



No. 427

RECEIVER CORDS

17361	254	2½-foot, worsted	.40
17362	256	3-foot, worsted	.50
17364	260	2½-foot, 2-conductor, silk	.65
17365	261	3-foot, 2-conductor, silk	.90
17366	262	6-foot, 2-conductor, silk	1.70

DESK SET CORDS

17367	170	6-foot, 3-conductor, green silk	2.05
17368	171	6-foot, 4-conductor, green silk	2.50
17369	172	6-foot, 5-conductor, green silk	3.00
17370	173	6-foot, 6-conductor, green silk	3.60

Special cords furnished on request.



No. 437

No. 427 OPERATORS' HEAD RECEIVERS

This receiver is specially designed for switchboard use. Headband is of steel, leather covered. Receiver is adjustable to fit any head. Comfortable, light and efficient.

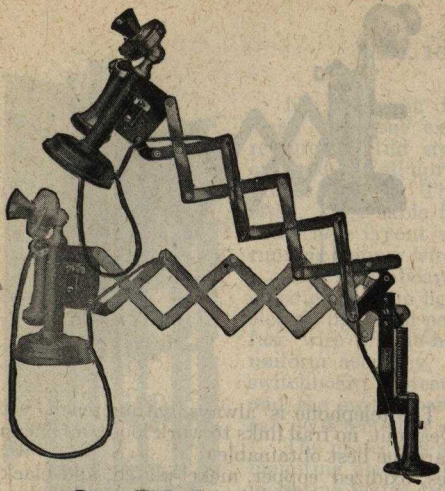
17371	427	With 6-foot green silk cord	4.55
		Without cord	3.60
		Headband only	1.45

No. 437 DOUBLE OPERATORS' HEAD RECEIVERS

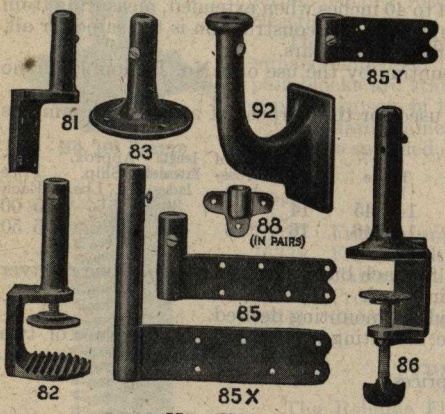
This material consists of two adjustable receivers with leather headband. This is also made up specially for wireless work.

17372	437	With cord	7.20
17373	447	Resistance of 1000 ohms, for wireless work	10.20

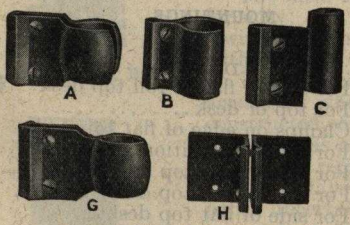
BURNS TELEPHONE BRACKETS



Burns Hi-Lo Telephone Bracket



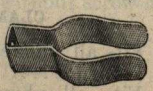
Mountings



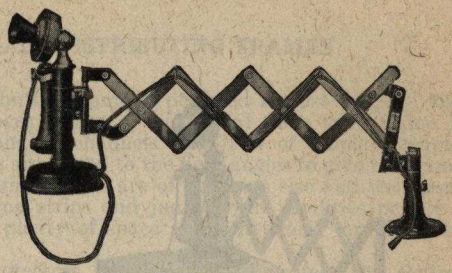
Clamps



Receiver Fork
No. 107 for
Improved Arms



Receiver Fork
No. 108 for
Hi-Lo Arms



Improved Burns Telephone Bracket

ADJUSTABLE BRACKETS

Slightest touch brings your phone to you or takes it away. No dangling cords to tangle or catch on desk or papers. Can be instantly attached or detached from any desk, either roll or flat-top. Trussed form of construction makes it many times stronger than any other bracket. Illustration shows standard size of eight 7-inch links and this size will be shipped, unless otherwise ordered.

The Hi-Lo Bracket has an additional adjustment feature which permits use from either a sitting or standing position.

To make a double bracket simply slide another single arm on rear rod. No extra appliance required.

IMPROVED BRACKETS

Trade No.	Mfrs. No.	Ext. Inches	*Price Each
042247	87	26	$4.00
042248	107	30	4.50
042249	127	34	5.00
042250	147	38	5.50

HI-LO BRACKETS

121579	H- 87	28	4.50
121589	H-127	32	5.00
121582	H-147	36	5.50

In ordering, be sure to specify the style of mounting for desk, style of clamp to hold telephone, and whether Improved or Hi-Lo Bracket.

*Prices are for bracket complete with No. 81, 83, 85, 85X, 85Y, or 92 mounting and any style clamp. Add 25 cents to list price when No. 82 or 86 is wanted.

PARTS

Mountings

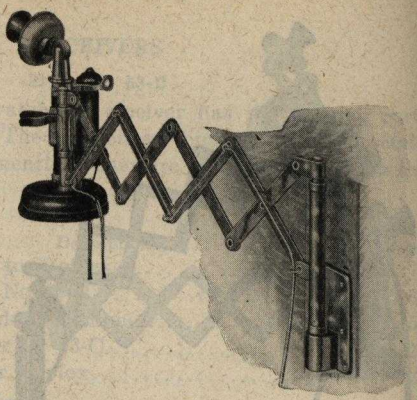
Trade No.	Mfrs. No.	Price Each
042559	81	$0.45
042560	82	.70
042561	83	.45
042562	85	.45
042563	85X	.45
042564	85Y	.45
042565	86	.70
121583	88	.45
121584	92	.45
.....	..	...
.....	..	...

Clamps

Trade No.	Mfrs. No.	Price Each
042555	A	.35
042556	B	.35
042557	C	.35
042558	G	.35
121586	H	.35
Arms only		
042566	87	3.10
121588	H87	3.60
Receiver Forks		
121587	107	.10
042567	108	.10

SPERRY TELEPHONE BRACKETS





The Sperry Telephone Bracket is well made. The telephone is always within reach, yet is entirely out of the way. There are no rollers to wear out, no frail links to work loose, no cheap rough steel to mar its appearance. The materials are the best obtainable.

Brackets are furnished in three standard finishes: oxidized copper, nickel-plated, and black enamel. From the point of view of appearance and durability, all three can be recommended, and the price is the same for each. Oxidized copper will always be furnished, unless otherwise specified.

They are made in five different lengths, from 24 to 40 inches when extended, measuring from the center of the mounting to the transmitter mouthpiece. The construction is the same for all, the variations in length being obtained by the addition of cross bars.

Two brackets may be attached to the same mounting by the use of a No. 10 double phone attachment.

The clamp furnished with this bracket may be used for the purpose of attaching a lamp as well as a telephone.

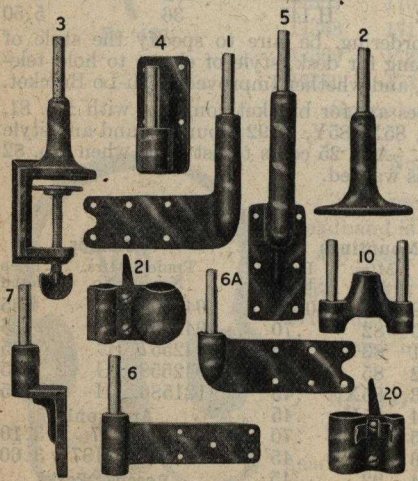
Trade No.	Mfrs. No.	No. of Cross-bars	Length Extended Inches	Approx. Ship. Wt., Lbs.	Price Each
142542	8	8	24	5	$3.50
142543	10	10	28	5½	4.00
142544	12	12	32	6	4.50
142545	14	14	36	6½	$5.00
142546	16	16	40	7	5.50

The above prices cover the complete equipment for each bracket: one mounting, one receiver hook, one telephone clamp, one set of eyelets for holding cord.

When ordering, it is necessary to specify the style of mounting desired.

The No. 10 double phone attachment and one mounting will be furnished in place of two mountings, without extra charge.

For No. 3 mounting, add 25 cents to the above prices.



Mountings and Clamps

MOUNTINGS AND CLAMPS

MOUNTINGS

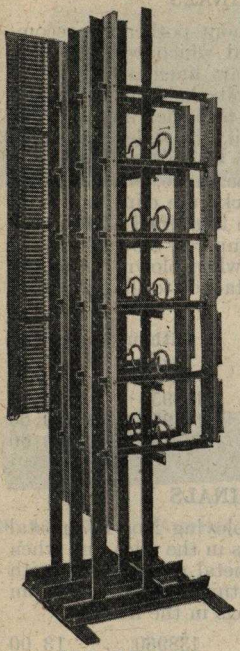
Trade No.	Mfrs. No.	Description	Price Each
142547	1	For side of flat or roll top desk	$0.35
142548	2	For top of desk	.35
142549	3	Clamps on edge of flat top desk	.60
142550	4	For wall or partition	.35
142551	5	For side of flat top desk	.35
142552	6	For side of roll top desk	.35
142553	7	For side of flat top desk	.35
142554	10	Fits any mounting and holds two arms	.35

CLAMPS

142555	20	Fits all phones with a cylindrical barrel	.35
142556	21	Fits all phones with a convex shaped barrel	.35

Black enamel mountings are furnished with black enamel and nickel-plated arms. Oxidized copper mountings with oxidized arms. No mountings are nickel-plated.

TELEPHONE DISTRIBUTING FRAMES AND TERMINALS



No. 101 Frame

No. 101 MAIN DISTRIBUTING FRAMES

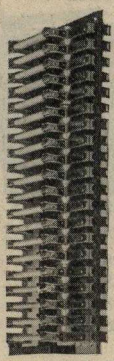
No. 101 main distributing frame is designed for use in large and small telephone exchanges where a substantial floor type frame is required. Mild steel angles, channels and bars of ample strength are used and all uprights are bolted to the floor angles to give the frame proper footing. The jumper rings are of generous size and well insulated. The cable fanning strips and jumper wire facilities permit a neat cable layout with plenty of space and convenient terminals for running jumper wires.

The switchboard protectors are designed to protect the central office plant from lightning, from sneak currents and from crosses with electric light and power wires. The flat fuses are lined with Blow-Rite fuse wire of one-half ampere carrying capacity, which blows with uniform accuracy, and the fuses have the advantage over ordinary switchboard protection of leaving a wide air gap between the trouble and the switchboard apparatus. The fuses are made so that opens can be detected at a glance and the old fuse wire easily removed.

The protectors are mounted in banks of twenty pairs on mild steel mounting plates with rigid supports for attaching to the frame. The mounting plates are covered with sheet micarta to prevent the possibility of contact between mounting plates and wiring. Heavy phosphor bronze fuse clips hold the fuse terminals in a firm grip and the wire terminals and fuse clips are riveted together to insure permanent electrical contact.

The cable terminals are made with German silver soldering terminals, embedded in hard rubber mounted on maple blocks. Twenty pair blocks are standard. Single rows, pairs, triples or quads can be supplied in sets of twenty or twenty-five per terminal block.

Standard frames are built with verticals on 9-inch centers unless otherwise specified. All frames are made for growth in either direction.



No. 101, 20 Pair Bank

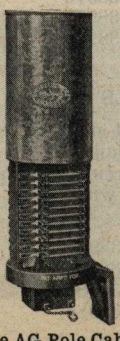
Trade No.	Description	Price
76337	Frame complete, for 100 pairs	$120.00
76338	Framework only, for 100 pairs	20.00
76339	Cable terminals and protector fanning strips, per pair	.20
76340	Protectors, per pair	.80
76341	Cable terminals, per pair	.12

TYPE AG POLE CABLE TERMINALS

The Reliable Flat Fuse is used in the Type AG Terminal. The terminal is compact, simple and inexpensive. Installation is quickly made without pothead.

The ideal fuse for telephone protection; blows accurately at rated capacity; can be rewired easily by anyone; blows accurately after rewiring; insures good contact in telephone circuit; can be replaced without tools.

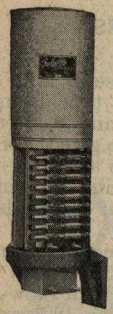
The flat fuse fulfills every one of the ideal requirements: It blows accurately when new because wired with Blow-Rite fuse wire. It is constructed so that anyone can rewire it in a moment. The flat fuse is as good as new when the blown fuse wire is replaced, because all the old wire is removed. When other types of fuses are rewired, the old fuse wire stays inside in contact with the new, which makes the blowing point uncertain and the fuse unsafe to use. The heavy phosphor bronze fuse clips grip the flat fuse terminals in a way that insures good contact. The flat fuse slips in and out of the phosphor bronze fuse clips, brightening the contact surfaces and insuring good contact without screw connections.



Type AG Pole Cable Terminal

Trade No.	No. of Pairs	Ship. Wt., Lbs. Without Stub	Price, Each With 6-ft. Cable Stub	Price, Each Without Cable Stub
76342	11	15	$21.00	$17.00
76343	16	17	26.00	22.00
76344	26	20	38.00	32.00
76345	50	33	66.00	56.00

TELEPHONE CABLE TERMINALS



Type A2 Terminal

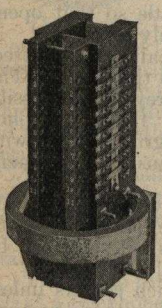
TYPE A2 POLE CABLE TERMINALS

The Reliable A2 Cable Terminal for use without pothead is recommended to those seeking an inexpensive terminal which will give full protection and which can be installed by the ordinary lineman.

The installation is made by loosening the bolts holding the panels and spreading the panels to give plenty of room to solder in the cable. After connecting the cable, the bolts are tightened, the slides slipped in place and cable compartment filled with Reliable Cable Compound.

The terminal is solidly built and of neat appearance, enclosed in a round galvanized iron cover. The heavy gooseneck fuse clips, and stiff, wide German silver carbon springs are mounted on kiln dried and treated maple panels. The No. 5 tubular wood fuses, 5 amperes, blow at exactly their rated capacity and do not continue the arc when blown. A 6-foot No. 22 B. & S. gauge cable stub will be furnished attached to the assembled terminal, if specified, at small additional cost.

No. of Pairs	Ship. Weight Pounds*	With Cable Stub		Without Cable Stub	
		Trade No.	Price Each	Trade No.	Price Each
11	15	138951	19.20	138954	16.20
16	18	138952	24.00	138955	20.00
26	21	138953	36.00	138956	30.00

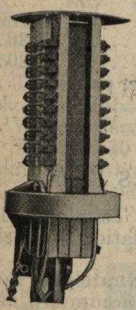


Type U Terminal

TYPE U POLE CABLE TERMINALS

Type U terminal is a mica fuse terminal employing No. 137 postal fuses. The fuses are made with discharge openings in the mica and when mounted in the terminal are held flat against a metal ground strip with the mica between the fuse wire and the strip. Lightning is dissipated from the fuse wire to the strip through discharge openings in the mica.

11	10	138957	16.00	138960	13.00
16	11	138958	19.00	138961	15.00
26	12	138959	32.00	138962	26.00

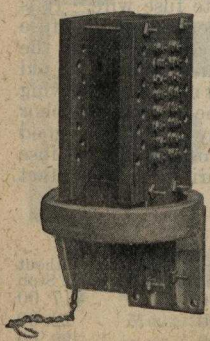


Types F and FP Terminals

TYPE F POLE CABLE TERMINALS

Types F and FP are mica fuse terminals for use without pothead, designed to meet the wide demand for fully protected cable terminals combining very low cost with substantial construction. The construction is identical with the Type A2, and if used with Reliable enclosed mica fuses, 5 amperes capacity, will give efficient service without the continual annoyance incident to the use of ordinary mica fuses. Type F employs the No. 19 Western Union fuse; Type FP, the No. 21 postal fuse.

		Type F			
11	10	138963	18.00	138971	15.00
16	13	138964	23.00	138972	19.00
26	18	138965	34.00	138973	29.00
50	30	138966	56.00	138974	46.00
		Type FP			
11	10	138967	18.00	138975	15.00
16	13	138968	23.00	138976	19.00
26	18	138969	34.00	138977	29.00
50	30	138970	56.00	138978	46.00



Type D Terminal

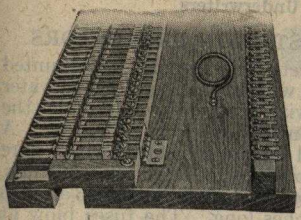
TYPE D POLE CABLE TERMINALS

Type D is an unprotected terminal for use without pothead, similar in construction to Type A2. It is designed for use in multiple tap distribution where drops to instruments are short and protection is not necessary. It is enclosed in a round, galvanized iron cover with safety chain attached.

11	9	138979	7.50	138983	4.50
16	10	138980	9.00	138984	5.00
26	12	138981	12.50	138985	6.50
50	18	138982	23.00	138986	13.00

*Weight, without stub.

TELEPHONE FUSE BLOCKS



No. 13 Protector

SWITCHBOARD PROTECTOR AND DISTRIBUTING BOARDS

Reliable switchboard protectors and distributing boards arranged for mounting on the wall are hinged so that all wiring is accessible. Screw terminals and jumper wire rings are provided for making cross connections. The boards are substantially built and the fuse contact posts give excellent service.

No. 13 protector is arranged for use with No. 19 Western Union Mica Fuses.

No. 131 protector is similar to No. 13 but is equipped with No. 9 tubular fuses 3 1/16 inches long from shoulder to shoulder.

Trade No.	Mfrs. No.	No. of Pairs	Width Inches	Length Inches	Wt. Lbs.	Price per Pair
139010	13	13	10 5/8	19 1/4	6 1/2	$0.60
139011	13	26	10 5/8	37 1/8	11 1/2	.60
139012	13	52	10 5/8	73	23	.60
139013	131	12 1/2	11	20 1/4	9	.80
139014	131	25	11	38 3/4	17 3/4	.80
139015	131	50	11	76 3/8	35	.80



No. 136 Fuse and Arrester Strip

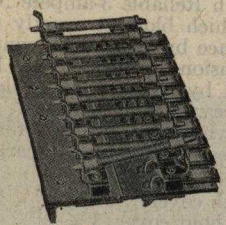
MICA FUSE PROTECTOR STRIPS

The fuse posts are mounted on kiln dried maple panels arranged for fastening on the wall or in cable boxes.

The No. 136 strip is made with perforated postal fuse resting upon a brass ground strip. This is specially designed for use in cable boxes and as an office terminal. Made in any number of lines ordered.

No. 136 uses No. 137 mica fuses.

Trade No.	Mfrs. No.	No. of Pairs	Dimensions Inches	Wt. Lbs.	Price per Pair
139016	136	26	14 x3 1/8x15/16	1 1/4	$0.30
139017	136	52	27 x3 1/8x15/16	2 3/4	.30
139018	136	104	51 3/8x3 1/8x15/16	5	.30



No. 992 High Tension Protector

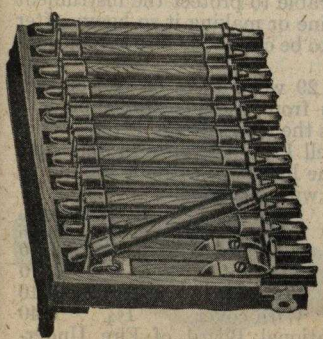
No. 992 HIGH TENSION PROTECTORS

No. 992 is mounted on an oxidized steel panel 3/16 inch thick and all parts are insulated with heavy rubber blocks. The solder terminals pass through large holes in the mounting plate with wide clearance between terminals and plate. A heavy fibre strip riveted to the mounting plate holds the terminals in position. The fuse clips and tension springs are very heavy.

They take No. 36 fibre fuses or No. 4 wood fuses, which are 4 inch shoulder to shoulder.

Trade No.	No. of Pairs	Length Inches	Width Inches	Wt. Lbs.	Price per Pair
139019	1	2 1/2	7	....	$1.50
139020	5	12 1/2	7	7 1/2	1.50
139021	10	25	7	15	1.50
139022	15	37 1/2	7	22 1/2	1.50
139023	20	50	7	30	1.50
139024	25	62 1/2	7	37 1/2	1.50

Prices include fuses.



Section of No. 900 Protector

No. 900 PROTECTORS

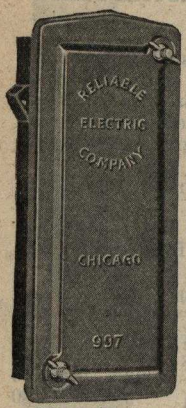
The No. 900 protector is mounted on treated maple panel and, like the No. 992 is provided with angle iron for mounting in cable box or on wall with both sides accessible for wiring and testing. The fuse clips are substantial and the No. 4 wood fuses are 4 inches shoulder to shoulder.

139025	12 1/2	19	6 1/2	3 1/4	.60
139026	25	38	6 1/2	6 1/2	.60

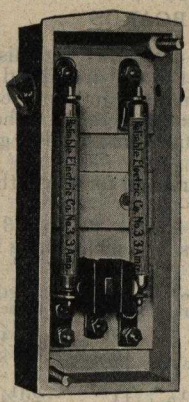
Prices include fuses.

TELEPHONE STATION PROTECTORS

Listed and Approved by the National Board of Fire Underwriters



No. 997 Closed



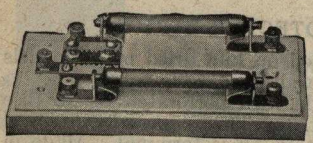
No. 997 Open

No. 997 INDIVIDUAL STATION PROTECTORS

No. 997 protector is perfectly waterproof. It is mounted in a vitrified porcelain box with top shaped to shed water away from the cover and with protected vents under the eaves to insure ventilation and prevent sweating. A smooth cast iron cover, red enameled, is fitted with a pure rubber gasket and locked in place by means of two wing nuts.

The protector is equipped with the Reliable 3-ampere No. 3 tubular fuses 4¼ inches long. The fuses blow at exactly their rated capacity without a flash and without danger of continuing the arc when blown.

Trade No.	Size Inches	Description	Wt. Lbs.	Price Each
10905	8⅜x4x2¼	With cover	3½	$1.70



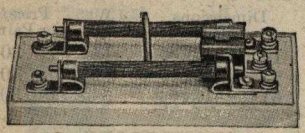
No. 998

No. 998 INDIVIDUAL STATION PROTECTORS

No. 998 protector is self-cleaning. It is equipped with Reliable 3-ampere No. 6 tubular fuses 3¾ inches long, which blow at exactly their rated capacity without a flash and without danger of continuing the arc when blown. The fuses are held in place by goose neck contacts with heavy German silver tension springs.

The self-cleaning arrester consists of a carbon ground plate with two saw-tooth metal discharge plates connected to line and held in place one-fourth inch from base. The discharge plates are adjustable and can be set close enough to the carbon ground plate to protect the most delicate apparatus. Fitted with oxidized sheet metal cover if desired.

10906	7⅜x3¾x¾	With cover	2	1.40
10907	7⅜x3¾x¾	Without cover	2	1.10

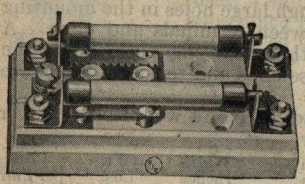


No. 991

No. 991 INDIVIDUAL STATION PROTECTORS

No. 991 protector is fitted with Reliable 3-ampere No. 3 tubular fuses 4¼ inches long, which blow at exactly their rated capacity and are held in place by goose neck contacts with heavy German silver tension springs. The large grooved carbon blocks, separated by U-shaped mica dielectrics are held in place by wide, heavy contact springs. Oxidized sheet metal covers, fitted with fiber bushings for the entrance of wires, cover the fuses as well as the carbons, acting as an additional insurance against fire.

10908	7¾x2⅞x¾	With cover	1¾	1.40
10909	7¾x2⅞x¾	Without cover	1¾	1.10



No. 975

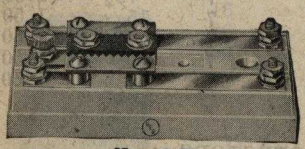
Nos. 975 AND 976 SELF-CLEANING PROTECTORS

The No. 975 protectors were designed to meet a demand for small lightning arresters which give good protection without grounding the line. Officials of several large railroads report that they give excellent protection without grounding the circuit.

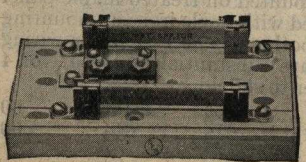
No. 975B is especially recommended for farm line protection because it is most desirable to protect the instrument without grounding the party line or making it so heavy after storms that the arresters have to be cleaned before the stations can be raised.

No. 975 takes either No. 29 wood fuses or No. 39 porcelain fuses; length, 3 inches from shoulder to shoulder.

No. 976 protector combines the many desirable features of the new flat fuse with the well known saw-tooth lightning arrester which takes care of the lightning without grounding the line. Furnished with and without cover.



No. 975B



No. 976

Trade No.	Mfrs. No.	Size Inches	Description	Weight Pounds	Price Each
10910	*975	5x2x2	.....	¾	2.00
10911	*975B	5x2x1½	.....	¾	.70
10912	976	6x3x1¼	Without cover	1½	1.10
10913	976	6x3x1¼	With cover	1¾	1.40

*Not approved by the National Board of Fire Underwriters.

SKYROCKET TELEPHONE SPECIALTIES

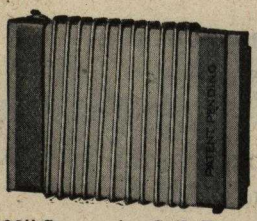
SKYROCKET LIGHTNING ARRESTERS



Skyrocket Lightning Arrester
With Case Cut Away Showing Coil Within

These are choke reactance arresters and can be installed on the service wire at the instrument, at the pole or along the line. The choke coil is made of the same size and kind of wire as the line it is to be used upon.

Made for Nos. 8, 10, 12 and 14 copper circuits and Nos. 10, 12 and 14 iron circuits. In ordering, always state the size and kind of line that the Skyrocket is to be used upon.



"400" Companion Coil, Type A

For Iron Circuits

Trade No.	Price, Each			
	Less than 25	25 to 49	50 to 99	100 and Over
41606	$0.65	$0.60	$0.55	$0.50

For copper, add 5 cents each.

"400" COMPANION COILS

To be used in Place of the Line Carbons of a "400" Carbon Arrester

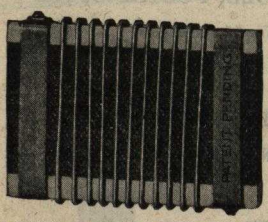
By the aid of the "400" Companion an old "400" can be converted into a choke coil arrester of very high efficiency. It is impossible to produce a partial ground on the line with the "400" Companion, because the wire presents a point or sharp edge surface to the carbon and will not collect or hold carbon particles separated from the ground block.

About one half of the wire used in the coil is in discharge contact with the ground block.

The "400" Companion is made in two forms or styles, viz.:

"400" Companion A. This style is simply a choke coil made from special non-arcing composition metal.

"400" Companion B. This style has an iron core and produces a very high choke reactance effect.

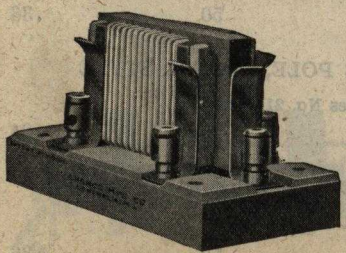


"400" Companion Coil, Type B

Trade No.	Price, Each			
	Less than 25	25 to 49	50 to 99	100 and Over
	Type A			
41607	$0.13	$0.12	$0.11	$0.10
	Type B			
41608	.15	.14	.13	.12

"400" COMPANION LIGHTNING ARRESTERS

These arresters are recommended for toll line and rural service where arresters are required that can be depended upon.



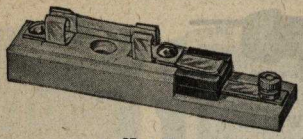
"400" Companion Arrester

Trade No.	Price, Each			
	Less than 25	25 to 49	50 to 99	100 and Over
	Type A, Full Nickel-plated			
41609	$0.45	$0.43	$0.42	$0.40
	Type B, Full Nickel-plated			
41610	.49	.47	.46	.44

TELEPHONE LIGHTNING ARRESTERS

LIGHTNING ARRESTERS AND FUSE BLOCKS

Reliable fuse blocks are made either with or without lightning arresters, designed for Western Union or Postal style fuses. The fuse contacts on the Western Union type arresters are made of spring brass correctly formed to insure a perfect talking circuit. The postal type fuse blocks are provided with cock screws for clamping the fuses.

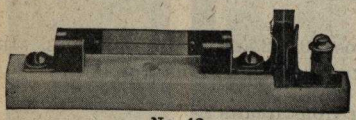


No. 41

No. 41, SINGLE POLE, W. U. STYLE

Takes No. 19 Fuse

Trade No.	Stdg. Pkg.	Wt. Lbs. per 100	Price Each
013540	100	38	$0.30

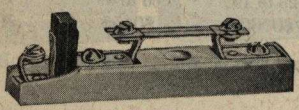


No. 42

No. 42, SINGLE POLE, W. U. STYLE

Takes No. 8 Fuse

093345	100	25	.30

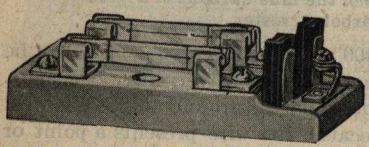


No. 47

No. 47, SINGLE POLE, POSTAL STYLE

Takes No. 11 Fuse

093346	100	25	.30

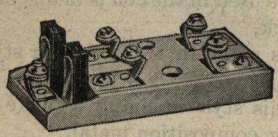


No. 57

No. 57, DOUBLE POLE, W. U. STYLE

Takes No. 8 Fuse

093347	100	50	.50

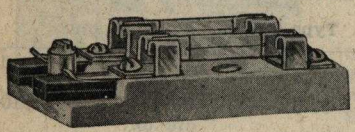


No. 59

No. 59, DOUBLE POLE, POSTAL STYLE

Takes No. 11 Fuse

093348	100	50	.50

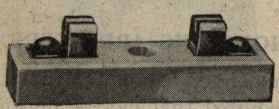


No. 86

No. 86, DOUBLE POLE, W. U. STYLE

Takes No. 8 Fuse

093349	100	50	.50



No. 18

No. 18, SINGLE POLE, W. U. STYLE

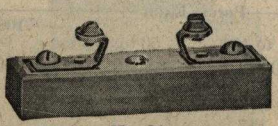
Takes No. 19 Fuse

093343	100	25	.24

No. 45, DOUBLE POLE, W. U. STYLE

Takes No. 19 Fuse, Same as No. 18

093350	100	50	.36



No. 20

No. 20, SINGLE POLE, POSTAL STYLE

Takes No. 21 Fuse

093344	100	25	.24

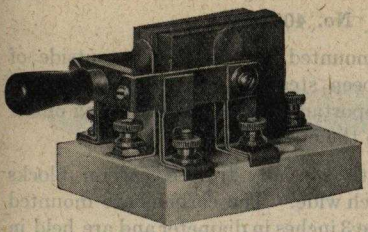
No. 46, DOUBLE POLE, POSTAL STYLE

Takes No. 21 Fuse, Same as No. 20

093351	100	50	.36

TELEPHONE STATION PROTECTORS

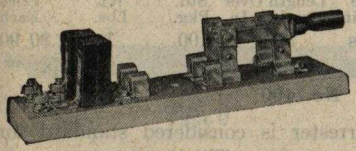
INDIVIDUAL STATION PROTECTORS



No. 406

The desirability of installing knife switches in connection with carbon arresters and fuses on rural lines and at railroad way stations is generally recognized. The installation of switches and arresters mounted separately necessitates extra wiring which sometimes causes loose connections and frequently does not present a good appearance.

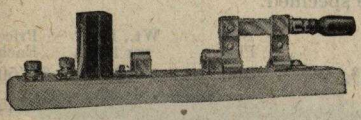
The Reliable combination baby knife switch and arresters eliminate the necessity of installing two separate pieces of apparatus to accomplish the desired results. The knife switches are of heavy copper, nickel-plated, with phosphor-bronze spring washers under the hinge post rivet heads to insure good contact in the talking circuit. The large carbon blocks and the mica fuses afford ample protection from lightning and high tension circuits. The heavy glazed porcelain base and high polished nickel-plated metal parts give the arresters a very attractive appearance.



No. 500

On long telephone lines, especially where a large number of telephones are installed on the same line, these combination arresters are indispensable. The opening of switches at the various stations enable the maintainer to locate trouble without the expense of going over the entire line. Opening switches during electrical storms prevents burning out fuses with consequent loss of service and troublesome replacement of fuses.

Reliable combination baby knife switches are made for metallic and grounded lines with and without fuses.



No. 501

The No. 406 Combination baby knife switch and carbon lightning arrester is designed especially for farmer line protection. Its use enables the farmer to disconnect his telephone during a storm and at the same time fully protect the telephone line. The heavy knife switch blades are riveted to the hinge posts with hollow rivets and two phosphor-bronze spring washers under the rivet heads on each hinge post insure perfect contact for the talking circuit. The large arrester carbons are separated by specially treated insulating cloth. The No. 406 lightning arrester is a neat-appearing, efficient protector for farmers' telephones.

Trade No.	Mfrs. No.	Size Inches	Style	Std. Pkg.	Wt. Lbs.	Price Each
138996	406	4½x2½x2	Double-pole	..	¾	$0.80
138997	500	8 x3 x2¼	Double-pole	50	1¾	1.50
138998	501	8 x1½x2¼	Single-pole	50	1	.80
138999	511	6¼x1½x2¼	Single-pole	50	¾	.60

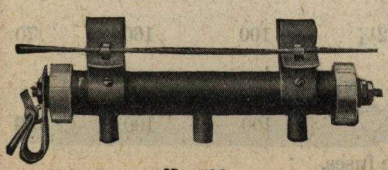


No. 511

No. 19 W. U. mica fuses are used with Nos. 500 and 501 protectors.

Prices do not include fuses.

No. 700 AERIAL LINE ARRESTERS



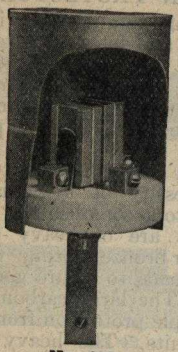
No. 700

No. 700 arresters are extensively used for protecting toll line and farmer line telephones, especially at isolated stations. A carbon rod, with a Fahnestock clip bolted to one end for attaching the ground wire, is insulated from the brass shell which is suspended from the line wire by means of two Fahnestock clips. The entire surface of the rod is exposed to the inner surface of the shell, giving an immense discharge area for the passage of high potential currents. It can be attached to the line without cutting the wire. It is waterproof, rustproof and self-cleaning. The use of No. 700 arresters does away with sending men out to clean carbons.

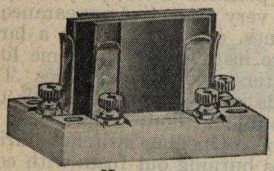
Trade No.	Mfrs. No.	Length Inches	Finish	Wt. Oz.	Price Each
139000	700	6	Brass	6	$0.90

TELEPHONE LIGHTNING ARRESTERS

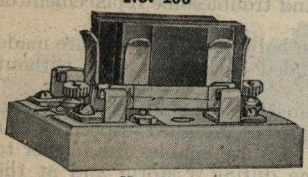
LIGHTNING ARRESTERS AND FUSE BLOCKS



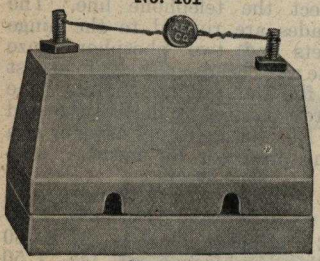
No. 402



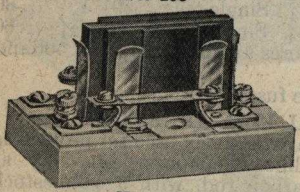
No. 400



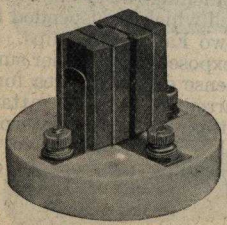
No. 401



No. 405



No. 404



No. 204

No. 402

No. 402 is usually mounted on the pole or outside of building. Its use has been steadily increasing during the last eight years as the importance of keeping lightning out of doors is brought home to the operating man.

No. 402 is fitted with specially treated carbon blocks 1½ inches long and ¾ inch wide. The carbons are mounted on a heavy porcelain base 3 inches in diameter and are held in place by wide, heavy retaining springs.

A close-fitting, galvanized iron cover extending 2 inches below the top of the porcelain base makes the arrester dust and weatherproof.

Trade No.	Mfrs. No.	Style Mounting	Length Over Bracket, In.	Std. Pkg.	Wt. Lbs.	Price Each
126078	402	Brass	8½	100	1	$0.90

No. 400

No. 400 lightning arrester is considered standard for farmer lines and toll line protection. This arrester is strongly built with heavy porcelain base, substantial brass mountings, large thumb nuts and three very large carbons. The arrester carbons are sufficiently large to carry off exceptionally heavy discharges of lightning. Insulating cloth dielectrics are used unless otherwise specified.

Trade No.	Size Inches	Std. Pkg.	Wt., Lbs. per 100	Price Each
013536	3⅜x2 x1¾	100	125	$0.50

No. 401

No. 401 fuse and lightning arrester is the same as the No. 400 except that it is equipped to take Western Union No. 8 fuses.

126079	4 x2½x2¼	100	160	.70

No. 405

No. 405 lightning arrester is the same as the No. 400 with a heavy dustproof cover to protect the inflammable material near the arrester. This arrester may be sealed to prevent outsiders tampering with it.

013538	4 x2¾x2½	100	240	.70

No. 404

No. 404 fuse and lightning arrester is the same as the No. 400, except that it is equipped to take No. 11 mica fuses of the postal type.

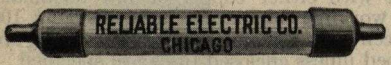
126080	4 x2½x2¼	100	160	.70

No. 204

10168	.....	100	100	.36

Prices do not include fuses.

TELEPHONE FUSES



Type A

TUBULAR FUSES

Tubular fuses for telephone protectors and cable terminals are made in wood, porcelain and fibre to fit all types of protectors. Drawn copper ferrules are used on all fuses unless otherwise specified.

All fuses are lined with special fuse wire, which has great tensile strength and accurate fusing characteristics.

TYPE A



Type C

Trade No.	Mfrs. No.	Style	Diam. Tip Inches	Size, In. Shoulder to Shoulder	Price Each
139037	3	Wood	11/64	4 3/16	$0.18
139038	5	Wood	11/64	2 1/4	.18
139039	6	Wood	11/64	3 3/4	.18
139040	35	Porcelain	11/64	3 3/4	.20

TYPE C

139041	27	Wood	13/64	4 3/4	.18
139042	28	Porcelain	13/64	4 3/4	.20
139043	29	Wood	13/64	3	.18
139044	30	Porcelain	13/64	3	.20



Type S

TYPE S

139045	37	Wood	15/64	5 1/8*	.18
139046	43	Wood	15/64	3 5/8*	.18

TYPE J

139047	4	Wood	15/64	4	.18
139048	36	Fibre	15/64	4	.22
139049	9	Wood	15/64	3 1/16	.18
139050	38	Wood	15/64	2 5/8	.18



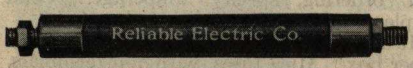
Type J

TYPE B, FIBRE

Type B fuse is made for those who prefer a screw clamp terminal and can be supplied in any length desired.

36416	..	Fibre	..	...	.24

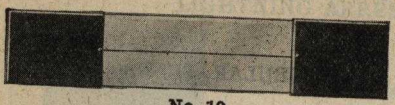
*Size, tip to tip.



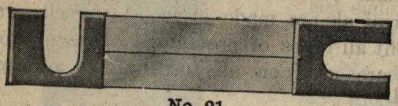
Type B

Tubular wood fuses weigh approximately 35 pounds per 1000; porcelain fuses, 45 pounds per 1000; fibre fuses, 33 pounds per 1000.

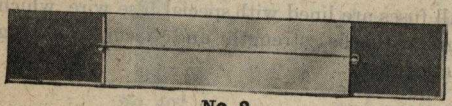
TELEPHONE FUSES



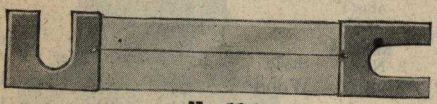
No. 19



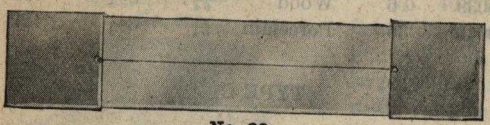
No. 21



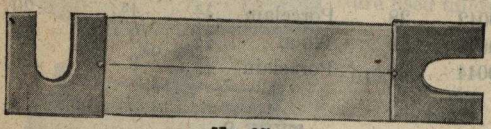
No. 8



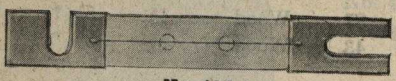
No. 11



No. 22



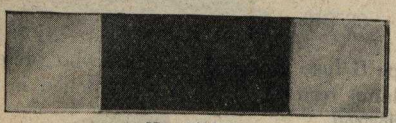
No. 25



No. 137



No. 1 Veribest



No. 26 Fiber



No. 5 Glass



Navy

MICA FUSES

Standard mica fuses are made the exact size of the illustrations on this page and are made with either copper or foil terminals. The workmanship is excellent, insuring 100 per cent good fuses. Uncovered fuses are shipped unless enclosed fuses are specified.

Trade No.	Description	Std. Pkg.	Price per 1000
	No. 19, W. U. Style		
016372	Copper terminals	50	$25.00
016373	Foil terminals	100	20.00
	No. 21, Postal Style		
016378	Copper terminals	50	25.00
016379	Foil terminals	100	20.00
	No. 8, W. U. Style		
016376	Copper terminals	50	25.00
016377	Foil terminals	100	20.00
	No. 11, Postal Style		
016380	Copper terminals	50	25.00
016381	Foil terminals	100	20.00
	No. 22, W. U. Style		
016374	Copper terminals	50	25.00
016375	Foil terminals	100	20.00
	No. 25, Postal Style		
016382	Copper terminals	50	25.00
016383	Foil terminals	100	20.00
	No. 137, Postal Style		
016384	Copper terminals	500	25.00
016385	Foil terminals	100	20.00

No. 1 VERIBEST FUSES

An enclosed tubular glass fuse for use in Western Union fuse mounts.

Trade No.	Description	Price per 100
089789	Tubular glass fuse	$2.50

No. 26 FIBRE FUSES

089792	Copper terminals	3.00

No. 5 GLASS FUSES

An enclosed tubular glass fuse with copper terminals. Diameter, $\frac{3}{16}$ inch; length over all, $1\frac{9}{16}$ inch.

089788	Copper terminals	2.50

NAVY FUSES

An enclosed tubular glass fuse with heavy brass ferrules, $\frac{1}{4}$-inch in diameter. Length over all, $1\frac{1}{8}$ inches and $1\frac{9}{32}$ inches.

089793	Brass terminals	3.00

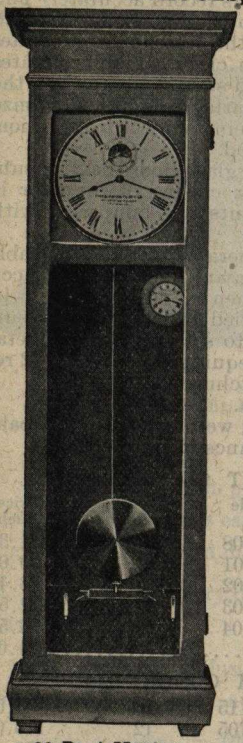
In ordering, specify amperage. Send samples of special fuses with order.

Mica fuses, with copper terminals, packed 50 per box. Mica fuses, with foil terminals, packed 100 in box.

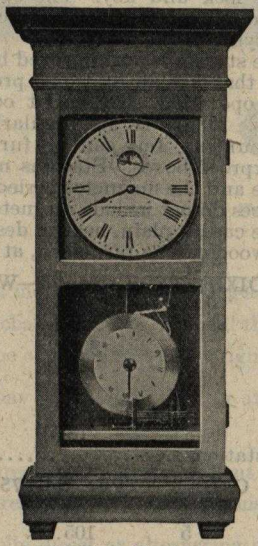
FRICK PROGRAM AND SECONDARY CLOCKS

SELF-WINDING AND PERPETUALLY AUTOMATIC

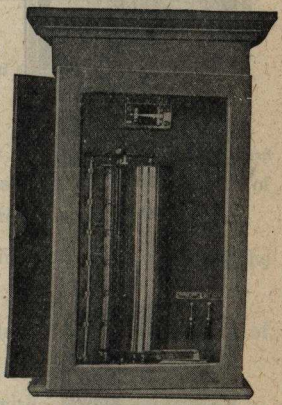
FOR SCHOOLS, PUBLIC BUILDINGS, MANUFACTURING PLANTS, ETC.



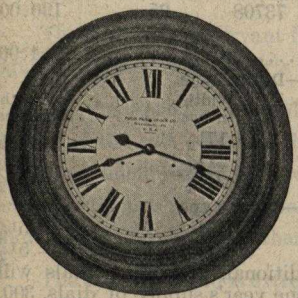
60-Beat Master



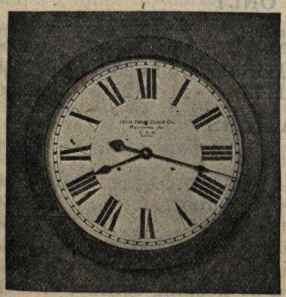
80-Beat Master
With 5-Minute
Program Apparatus



Minute Interval
Program Machine



No. 2 Secondary Clock



No. 1 Secondary Clock

The Frick system consists of a master clock, any number of secondary clocks, a program machine and any number of signal gongs. The whole system is operated by an electric battery and works automatically.

The master clocks are either self-wind or key-wind and are made in two grades, 60-beat and 80-beat, with highest grade regulator movement, Graham dead beat escapement, capable of regulation to within 10 seconds per month.

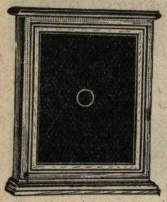
The secondary clocks are electrically operated, without springs, and are positively locked at all times so that they cannot move except when the impulse is given through the master clock. They are made with 8, 10, 12, 14 and 18-inch dial, either round or square frame. Standard finish of cases is golden oak or special finish to match woodwork, as required.

The program machines are of two kinds: the 1-minute, which will ring bells at minute intervals any time during the day or night, and the 5-minute, which rings bells at periods divisible by five. The 5-minute program machine is mounted in the same case with the master clock, the minute program machine always in a separate case. The number of different programs that may be rung is practically unlimited.

The automatic calendar switch, which is provided on all program machines, silences bells on days and nights when their ringing is not required.

EDWARDS WATCHMEN'S TIME DETECTORS

Approved by National Board of Fire Underwriters



No. 76

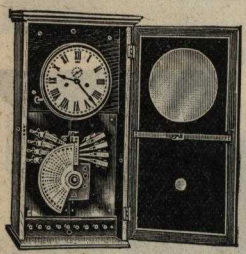
Edwards Watchmen's Time Detectors record accurately and indelibly each visit of the watchman to each station. At each station, by turning the magneto handle, the watchman generates current to operate the recording key in clock, which perforates the paper dial, ruled so that the time and station from which the signal is sent is recorded. All metal parts are brass or bronze except where steel is necessary, which, being subject to corrosion, is either heavily copper-plated or japanned.

Each instrument is equipped with a glass door, having substantial lock and key. The opening or closing of the door is recorded on the paper dial, which prevents any tampering with or falsifying of the records.

The station is an approved hand-generator, with a removable handle that fits all stations, preventing any malicious or accidental operation, that might occur when handles are left in stations. Magnetos are regularly supplied in oak cases for surface mounting, but can be furnished to set flush or in metal weatherproof boxes. Stations may be equipped with No. 72 receptacle and the magneto carried by watchmen.

Prices do not include magneto station.

The case is plain, neat in design and well made of heavy oak. Other wood can be furnished, at an advance in price.



No. 75

DIXIE TYPE, No. 76—WITHOUT CLOCK DIAL

Trade No.	No. of Stations	Price Each	Trade No.	No. of Stations	Price Each
071102	4	$56.25	071108	10	$84.35
071103	5	59.00	73701	12	90.00
071104	6	60.60	73702	15	98.40
071105	7	75.95	73703	20	112.50
071106	8	78.70	73704	25	126.50
Extra stations					4.00



No. 161

CADET TYPE, No. 75—WITH CLOCK DIAL

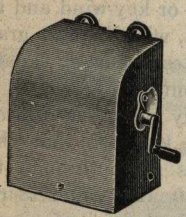
071109	4	100.00	071115	10	130.00
071110	5	105.00	73705	12	140.00
071111	6	110.00	73706	15	150.00
071112	7	115.00	73707	20	170.00
071113	8	120.00	73708	25	190.00
071114	9	125.00			
Extra stations					4.00

Dimensions of Case—Dixie Type

No. of Stations	Height Inches	Width Inches	Depth Inches
4 to 15	18	17½	5½
16 to 20	21¾	21¼	5½
21 to 25	24½	21¼	5½

Dimensions of Case—Cadet Type

4 to 15	31¾	17½	5½
16 to 25	35½	21¼	5½



No. 162

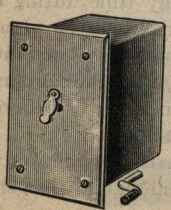
For more than 25 stations additional, recording dials will be used, 25 stations for each dial. One year's supply of dials, 300, are furnished with each clock.

PAPER DIALS ONLY

Trade No.	No. of Stations	Price per 1000	Trade No.	No. of Stations	Price per 1000
071116	Up to 10	$15.00	071118	16 to 20	$22.50
071117	11 to 15	18.00	071119	21 to 25	25.00

MAGNETO STATIONS

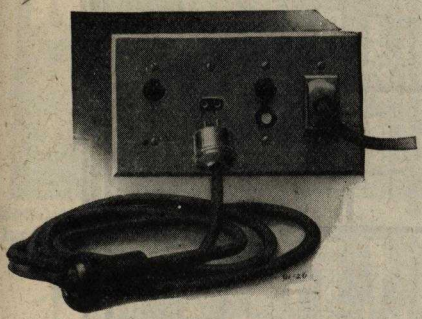
Trade No.	Mfrs. No.	Description	Price Each
071120	161	Surface—wood	$8.50
071121	162	Surface—metal, weatherproof	12.50
071122	163	Flush—metal, weatherproof	12.50



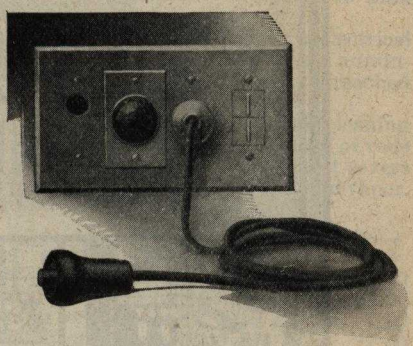
No. 163

Detectors can also be furnished to operate on batteries. These are equipped with Edwards Automatic Cut-Out Device which prevents dial getting torn or destroyed by keeping contact closed. Wiring diagrams on request.

BRYANT SILENT CALL SIGNAL SYSTEMS



No. 13 Calling Station



No. 16 Ward Calling Station

The Bryant System provides a means for transmitting a signal to one or as many points as desired, and the signals cannot be changed or effaced until the call has been answered at point of origin. Positive record may also be obtained as to the origin of and response to calls as made.

The use of auxiliary devices may also be provided for at the calling station, as shown in the illustrations.

The following exclusive features of the Bryant Silent Call Signal System are worthy of consideration by anyone at all interested in such installations:

Operates direct on 100–125 volts direct or alternating current, without relays, motor generators, transformers or auxiliary apparatus of any kind.

The wires of the Bryant System are usually installed in the same raceways with the house lighting circuits, and all parts of the system were designed with an ample margin of safety.

The "call-push" and cord to calling station become "dead" simultaneously with the registration of the call. Besides the circuit fuses regularly employed, there are fuses in the detachable plug which protect both wires of the cord. This provides an element of safety not found in any other system and affords absolute protection against the liability of shock due to worn cords, short circuits, grounds or other possible electrical trouble.

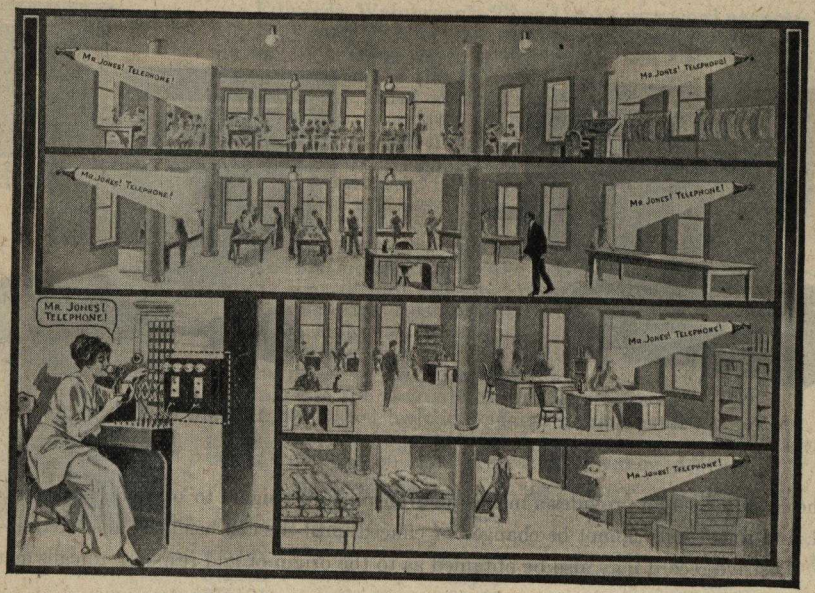
The extension cord is extremely flexible, being specially manufactured for the purpose. Each wire is heavily insulated with rubber, and the two conductors are then surrounded with additional rubber insulation, the whole being protected by a heavy braid of cotton. This insures uninterrupted service under the most severe conditions.

Plug receptacles for current-consuming devices, such as fan motors, heating pads, reading lamps, etc., may be made a part of the calling station plates.

Current for operating the system may be taken from lighting panel boards instead of from centralized source of energy, such as a low voltage motor generator or storage battery. This simplifies and cheapens the whole electrical layout by eliminating the double distributing systems and by reducing the amount of copper necessary with low voltages.

Cost of operation is negligible, since current is consumed only during the time signal lamps are lighted, and these consume less than 10 watts each.

AUTOMATIC ENUNCIATOR SYSTEM



For the handling of every routine detail, in every time of emergency, whenever and wherever it is desired to convey the human voice quickly, clearly and powerfully, to many people or to many places at once, "The Big Voice" offers the only solution.

A few of its particular applications are:

Doctors, nurses, internes and other members of hospital staffs are instantly located by it.

Guests of hotels and members and guests of clubs are paged quickly and conveniently.

Trains are quickly and distinctly announced in all parts of passenger terminals.

Heads of departments, salesmen and other employees are communicated with immediately.

General or special orders are transmitted at one time to all foremen in factories and other shops.

Large bodies of people — employees, guests or the general public — are controlled and directed in times of fire or other emergency.

Engineers, janitors and other employees in office buildings and similar institutions are summoned or directed as to their duties.

Coming features and other special information are announced in motion picture theaters.

Umpires' decisions, line-up and results in sporting events are given to the spectators easily and quickly.

The Automatic Enunciator system is so flexible and adaptable that a list of all its use is impossible.

If you have a need not listed above, write us about it. We can probably meet it.

This equipment is designed to operate on a voltage ranging from 12 to 120 volts D. C. at the control board only.

The line wiring consists of No. 19 gauge duplex wire (telephone style). A pair of wires will operate from one to six stations.

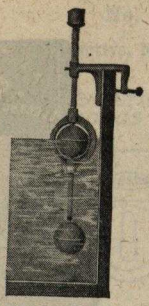
One transmitter will operate any number of stations, adjusted either loud for factory, or low for offices. Additional transmitters may be added at any point.

Write for special catalogue on this equipment.

TANK INDICATORS AND FIRE ALARMS



Model A-20 Indicator



Model B-21 Indicator



Model D-23 Indicator



Model E-24 Indicator

PATTERSON ELECTRIC TANK INDICATORS

Patterson Electric Tank Indicators are made in six styles, each designed to fill certain requirements met with in tank work.

Patterson Electric Tank Indicators give a positive electrical alarm either in connection with a signal gong or an annunciator, showing when the contents of a tank have reached a maximum or minimum level, or both.

Patterson Electric Tank Indicators have self-cleaning contacts, brass-bushed bearings for vertical movement of rods in pipe, and will not fail when exposed to the most severe weather conditions. They are not affected by steam and vapor. All contacts are housed and protected against injury.

Trade No.	Mfrs. No.	Description	Price Each
081112	A-20	High and low water for closed tank .	$12.00
081113	B-21	High and low water for open tank..	12.00
081114	C-22	Low water for closed tank.....	7.00
081115	D-23	Low water for open tank	7.00
081116	E-24	High water for closed tank	7.00
081117	F-25	High water for open tank	7.00
Extra length stem for any of the above indicators, per foot.....			.40

Models A-20 and B-21 are furnished regularly, allowing 12 inches between upper and lower balls.

Models C-22 and D-23 are furnished regularly with 24-inch iron pipe stem.

Models E-24 and F-25 are furnished regularly with 20-inch iron pipe stem.

If greater distance between base of flange and ball is required, same will be furnished up to 12 feet for $0.40 per foot.



No. 77

BREAK GLASS FIRE ALARM BOXES

No. 77

This box is particularly adapted for factories and hotels. The circuit is automatically closed by breaking the glass. There is no switch to be turned on.

Trade No.	Description	Price Each
081118	Complete with hammer	$2.00

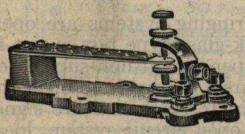


No. 227

No. 227

The No. 227 fire alarm boxes are made perfectly weatherproof, fastened with strong brass padlock, and arranged for iron pipe to enter at bottom of box. Are arranged so as to operate by breaking glass and pushing button. The box is finished in red enamel, letters in black.

081119	Complete with padlock	35.00



No. 1673

ADJUSTABLE THERMOSTATS

This thermostat can be set for any desired degree of temperature, and will make electrical contact on the rise or fall of temperature. Call bells, or other electrical alarms, can be connected in the circuit at any desired distance from the thermostat.

Trade No.	Mfrs. No.	Price Each
081120	1673	$1.30



No. 1653

AUTOMATIC THERMOSTATS

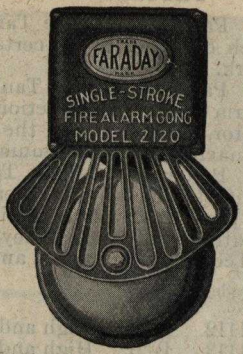
081121	1653	.60

When not otherwise ordered, this thermostat is set at 125° Fahrenheit.

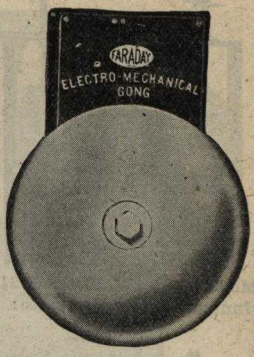
FARADAY FIRE ALARM SYSTEMS



Model F-2022
Enclosed Pull-lever Code-ringing Type Fire Alarm Box



Model 2120
Single-stroke Half-guarded Gong



Model 2620
Electro-mechanical Gong

GENERAL OUTLINE OF FARADAY FIRE ALARM SYSTEMS

Faraday Interior Fire Alarm Systems are particularly designed and suitable for factories, schools, colleges, public institutions, hotels, theaters, office buildings, department stores, warehouses, apartment houses, etc., in fact, for every class of building where life and property should be protected from the fire hazard, but with full consideration that an interior fire alarm system must be simple and economical, both as to initial cost and maintenance.

Faraday Fire Alarm Systems are designed to operate from three sources of electrical energy, viz.:

(1) D. C. electric light and power circuits.
(2) A. C. electric light and power circuits.
(3) Battery (both primary and storage) circuits.

Faraday Interior Fire Alarm Systems represent the latest developments in the fire alarm field. Particular attention is called to the entirely original cabinet-unit mounting feature of all control apparatus and instruments. Cabinets are absolutely fire-proof. They are of heavy pressed steel, finished in glossy vermilion. All instruments and control mechanisms are back connected, mounted on slate panels. Cabinets are furnished with glass windows through which all instrument dials are easily read without opening doors. Terminals on slate panels are latest type Underwriters' pattern, with each terminal so plainly marked that the connecting of circuit wires to mains, boxes, gongs and trouble bells can be readily made by any good mechanic.



Model 2500
Vibrating, Half-guarded Fire Alarm Gong

Faraday Fire Alarm Systems may perhaps be classified in two general types, viz.:

(a) Electrically-supervised closed circuit code ringing.
(b) Non-supervised open circuit non-code ringing.

Electrically-supervised closed circuit code ringing systems are operated by a continuous flow of electric current, by either pull-lever or break-glass boxes, indicating by powerful single-stroke signals on gongs, location of box from which signal originates. Main circuits, box circuits and gong circuits are constantly under electrical test. Trouble of any nature on any part of this system or failure of operative current automatically indicating itself by ringing of trouble bell.



Model 2040
Break-glass Non-code-ringing Fire Alarm Box with Box Outlet Back for Conduit

Non-supervised open circuit non-code ringing systems are operated by the current when the simple break-glass type box is put in service. The great disadvantage of this open-circuit non-supervised system is that some accident may, of course, at any time open the circuit and when this happens an attempt to send in a fire signal completely fails. Furthermore, with the open circuit system, location of box from which signal originates cannot be indicated, as the bells simply ring continuously till the glass in the box is replaced.

Electrically-supervised closed circuit systems may be subdivided into two classes, viz:

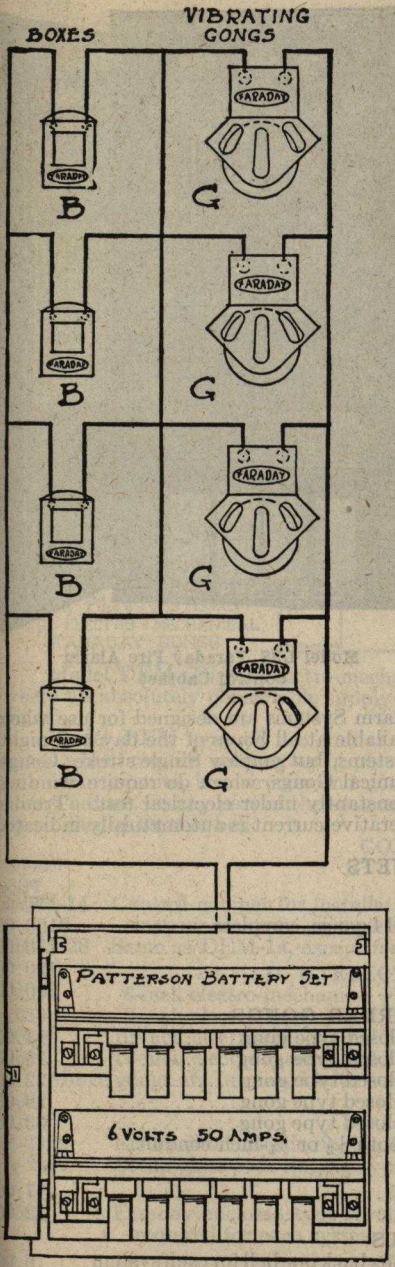
(a) Non-clock-work single-stroke gong systems.
(b) Electro-mechanical (clock work) gong systems.

Send for Special 32-page Bulletin on Faraday Fire Alarm Systems

FARADAY FIRE ALARM SYSTEMS

No. 1, NON-SUPERVISED, OPEN CIRCUIT

Non-selective, Non-code-ringing, Open Circuit Type, for Battery Circuits Using Vibrating Gongs





Model 2040 Break-glass Non-code-ringing Box



Model 2500 Enclosed Vibrating Gong

Faraday No. 1 Fire Alarm System is a simple open-circuit, non-selective, non-code ringing, non-supervised system, i.e., does not indicate the location of the box from which the signal originated and does not automatically indicate failure of operative current or derangement of circuits or apparatus.

Breaking the glass of any box automatically rings all gongs. Gongs are vibrating type and after glass is once broken, will continue ringing until glass is replaced in box.

GONGS

Model No.	Description	Price Each
2500	8-inch enclosed type vibrating gong, wound to special resistance as follows: Up to and including 4 gongs, resistance per gong, 10 ohms. Up to and including 9 gongs, resistance per gong, 20 ohms. 10 gongs and over, resistance per gong, 40 ohms...	$16.50
2500	10-inch gong, same as above.....	22.00
2500	12-inch gong, same as above.....	28.00

BOXES

2040	Break-glass fire alarm box for surface work, for ½-inch conduit ...	7.00
2042	Break-glass fire alarm box for concealed work, for ½-inch conduit .	8.00

BATTERY SETS

FA-62	Battery set, surface steel, for not over 4 gongs, no cells.....	18.00
FA-102	Battery set, surface steel, for 5 to 9 gongs, inclusive, no cells.....	30.00
FA-122	Battery set, surface steel, for 10 gongs and over (subject to certain limitations), no cells.....	36.00

COLUMBIA IGNITOR SCREW-TOP CELLS

..... For use in Patterson Battery Sets. .50

NOTE.—Conduit box backs are shipped separately for roughing. They are packed in individual cartons labeled B-2500 for enclosed type vibrating gongs, B-2040 for break-glass boxes, surface type, and B-2042 for break-glass boxes, flush type. When so shipped, conduit box backs will be charged out at $2.00 list for bells and boxes and corresponding reduction made in billing bells and boxes.

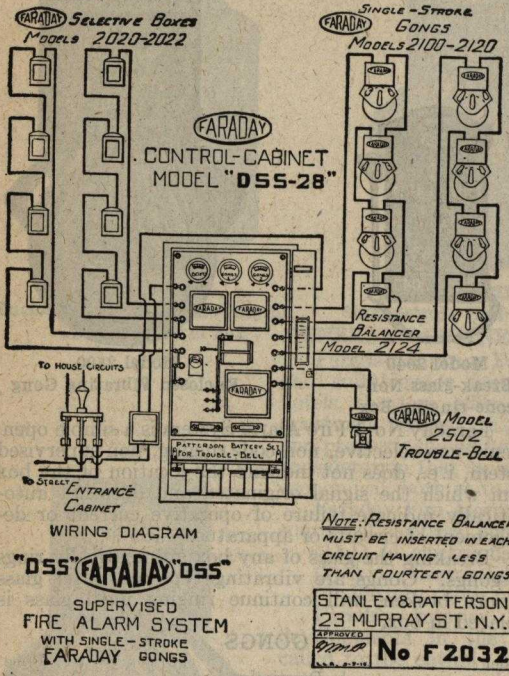
Send for Special 32-page Bulletin on Faraday Fire Alarm Systems

FARADAY FIRE ALARM SYSTEMS

MODEL DSS, ELECTRICALLY SUPERVISED

Selective Code-ringing Closed Circuit Type, for 100-250-volt D. C. Circuits Using Single-stroke Non-clock-work Faraday Gongs

Wiring Diagram Faraday "DSS" System



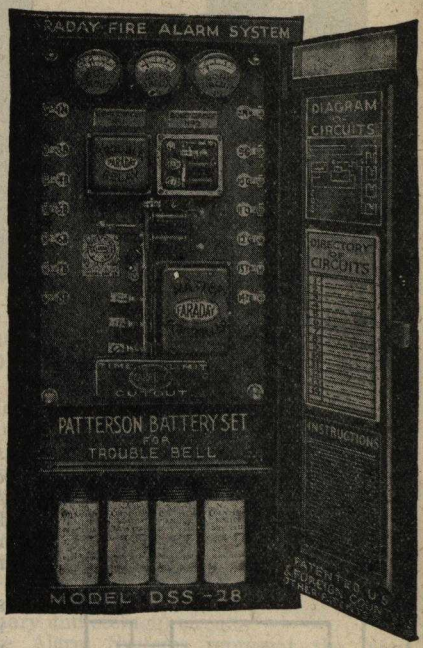
WIRING DIAGRAM

"DSS" FARADAY "DSS"

SUPERVISED FIRE ALARM SYSTEM WITH SINGLE-STROKE FARADAY GONGS

NOTE:-RESISTANCE BALANCER MUST BE INSERTED IN EACH CIRCUIT HAVING LESS THAN FOURTEEN GONGS.

STANLEY & PATTERSON 23 MURRAY ST. N.Y. APPROVED No F 2032



Model DSS, Faraday Fire Alarm Control Cabinet

Model DSS (Direct Single-stroke) Faraday Fire Alarm Systems are designed for use where an absolutely dependable supply of direct current is available at all hours of the day and night.

Model DSS systems are similar to Model DEM systems, but employ Single-stroke Gongs, which require no winding up, in place of Electro-mechanical Gongs, which do require winding.

Main circuits, box circuits and gong circuits are constantly under electrical test. Trouble of any nature, on any part of the system or failure of operative current is automatically indicated by ringing of trouble bell.

CONTROL CABINETS

Model No.	Description	Price Each
DSS-14	Control Cabinet for installations not exceeding 14 gongs, complete	$150.00
DSS-28	Same as DSS-14, except for 15 to 28 gongs	170.00
DSS-42	Same as DSS-14, except for 29 to 42 gongs	190.00
DSS-56	Same as DSS-14, except for 43 to 56 gongs	210.00

SINGLE-STROKE HALF-GUARDED GONGS

2120	6-inch half-guarded single-stroke Faraday enclosed type gong	14.00
2120	8-inch half-guarded single-stroke Faraday enclosed type gong	18.00
2120	10-inch half-guarded single-stroke Faraday enclosed type gong	22.00
2120	12-inch half-guarded single-stroke Faraday enclosed type gong	28.00
2120	14-inch half-guarded single-stroke Faraday snclosed type gong	33.00

Above gongs are furnished with knock-outs to slip both ½ or ¾-inch conduit.

BOXES

F-2022	Enclosed-lever code-ringing type Faraday box	17.00
A-2020	Break-glass code-ringing type Faraday box	22.00

TROUBLE BELLS

2502	Faraday enclosed type trouble bell, with outlet box back one bell for each system	6.00

RESISTANCE BALANCERS

2124	Faraday resistance balancer (number of gongs in each circuit and voltage of same must be given)	12.00

One resistance balancer required for each circuit of less than 14 gongs. Where 14 gongs are used in each circuit no resistance balancer is required.

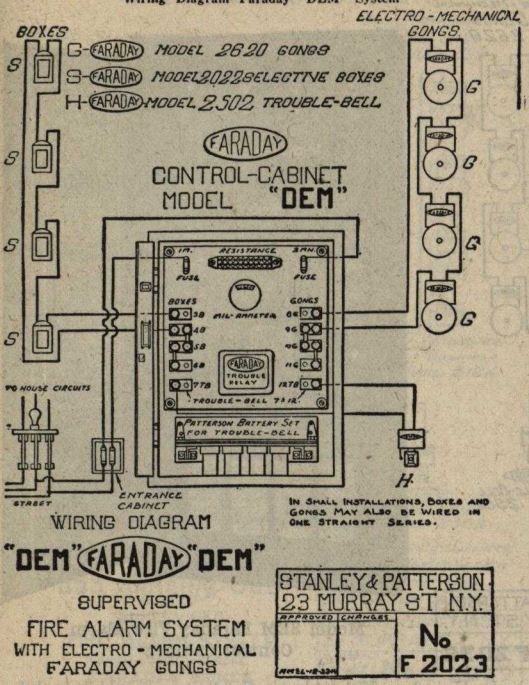
Send for Special 32-page Bulletin on Faraday Fire Alarm Systems

FARADAY FIRE ALARM SYSTEMS

MODEL DEM, ELECTRICALLY SUPERVISED

Selective Code-ringing Closed Circuit Types, for 100-250-volt D. C. Circuits Using Electro-mechanical Faraday Gongs

Wiring Diagram Faraday "DEM" System



"DEM" FARADAY "DEM"

SUPERVISED

FIRE ALARM SYSTEM

WITH ELECTRO-MECHANICAL FARADAY GONGS

STANLEY & PATTERSON 23 MURRAY ST N.Y.

APPROVED | CHANGES | No F 2023



Model DEM, Faraday Fire Alarm Control Cabinet

Model DEM (Direct Electro-mechanical) Faraday Fire Alarm Systems are designed for use where an absolutely dependable supply of direct current is available at all hours of the day and night.

Model DEM systems are similar to Model DSS systems, but employ electro-mechanical gongs which require winding up in place of single-stroke gongs which require no winding up.

Main circuits, box circuits and gong circuits are constantly under electrical test. Trouble of any nature, on any part of the system, or failure of operative current is automatically indicated by ringing of trouble bell.

CONTROL CABINETS

Model No.	Description	Price Each
DEM-14	Control cabinet for installations not exceeding 14 gongs, with slate panel, instruments, etc., complete	$124.00
DEM-28	Same as DEM-14, except for 15 to 28 gongs	154.00

D. C. ELECTRO-MECHANICAL GONGS

2620	6-inch electro-mechanical Faraday gong	35.00
2620	8-inch electro-mechanical Faraday gong	36.20
2620	10-inch electro-mechanical Faraday gong	38.50
2620	12-inch electro-mechanical Faraday gong	40.80

Above gongs are furnished with outlet box backs to slip ½-inch or ¾-inch conduit, as specified.

BOXES

F-2022	Enclosed-lever code-ringing type Faraday box	17.00
A-2020	Break-glass code-ringing type Faraday box	22.00

TROUBLE BELLS

2502	Faraday enclosed type trouble bell, with outlet box back (one trouble bell required for each system)	6.00

TESTING DEVICE

TT-2022	Testing device consisting of telephone receiver, cord and plug	5.00

NOTE.—Conduit box backs are shipped separately for roughing. They are packed in individual cartons labeled B-2620 for electro-mechanical gongs, BF-2022 for enclosed lever boxes, B-2502 for trouble bells.

Prices for larger or special Model DEM systems on application.

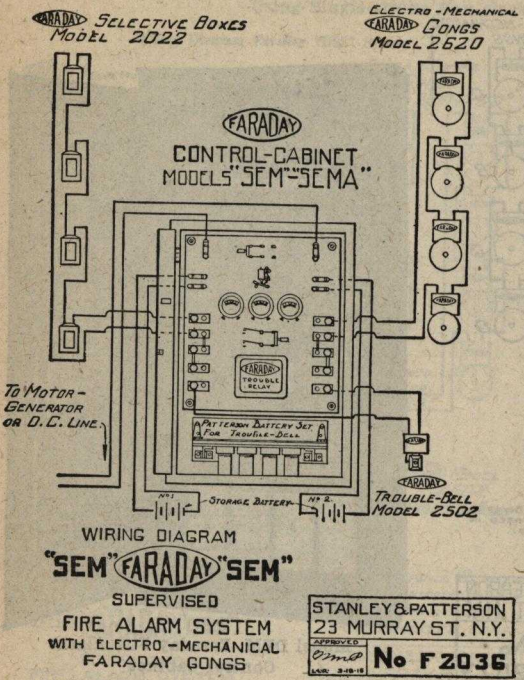
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FARADAY FIRE ALARM SYSTEMS

MODEL SEM, ELECTRICALLY SUPERVISED

Selective Code-ringing, Closed Circuit Type, Using Electro-mechanical Faraday Gongs

Wiring Diagram Faraday "SEM" System





Model SEM Faraday Fire Alarm Control Cabinet

Model SEM (Storage Electro-mechanical) Faraday Fire Alarm Systems are designed for use where neither A.C. nor D.C. electric light or power current is at all times available from a constant absolutely dependable source, but where either A.C. or D.C. at certain periods is available.

Model SEM systems are similar to Model SSS systems, but employ electro-mechanical gongs which require winding up in place of single-stroke gongs which do not require winding up.

Main circuits, box circuits and gong circuits are constantly under electrical test. Trouble of any nature, on any part of the system, or failure of operative current is automatically indicated by ringing of trouble bell.

CONTROL CABINETS

Model No.	Description	Price Each
SEM–14	Control cabinet for installations not exceeding 14 gongs, complete	$200.00
SEM–28	Control cabinet for installations 15 to 28 gongs, inclusive, complete	220.00
SEMA–14	Similar to SEM–14, except has in addition controller for motor generator	220.00
SEMA–28	Similar to SEM–28, except has in addition controller for motor generator	240.00

STORAGE BATTERY

SB–24	Storage battery for above systems complete, (not charged), per cell	5.40

MOTOR GENERATOR

MG–108	Motor generator, direct connected unit, to generate direct current for storage battery charging, complete, with base (may be used in connection with either SEMA–14 or SEMA–28 control cabinets)	200.00

D. C. ELECTRO-MECHANICAL GONGS

2620	6-inch electro-mechanical Faraday gong	35.00
2620	8-inch electro-mechanical Faraday gong	36.20
2620	10-inch electro-mechanical Faraday gong	38.50
2620	12-inch electro-mechanical Faraday gong	40.80

Above gongs are furnished with outlet box backs to slip either ½ or ¾-inch conduit.

BOXES

F–2022	Enclosed lever code-ringing type Faraday box	17.00
A–2020	Break-glass code-ringing type Faraday box	22.00

TROUBLE BELLS

2502	Enclosed type trouble bell, with outlet box back one bell for each system	6.00

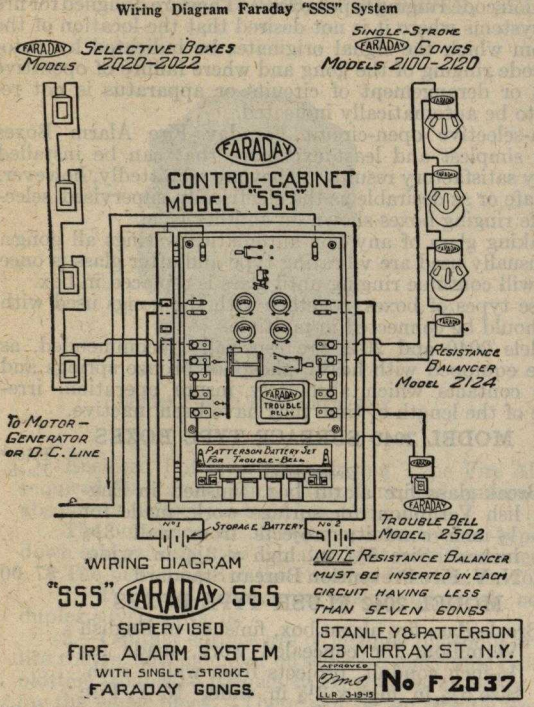
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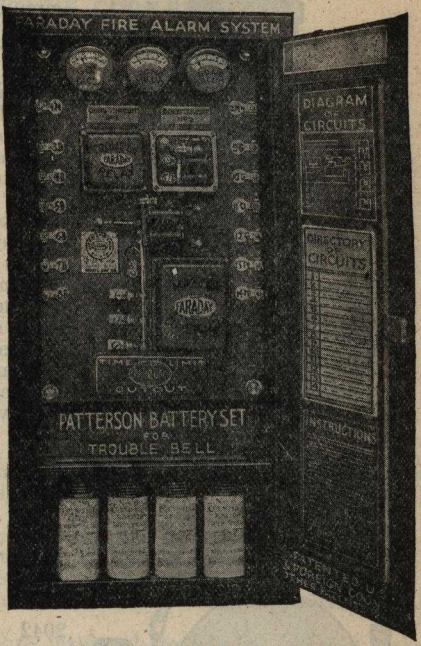
FARADAY FIRE ALARM SYSTEMS

MODEL SSS, ELECTRICALLY SUPERVISED

Selective Code Ringing Closed Circuit Type Using Single-stoke Faraday Gongs

Wiring Diagram Faraday "SSS" System





Model SSS Faraday Fire Alarm Control Cabinet

Model SSS (Storage Single Stroke) Faraday Fire Alarm Systems are designed for use where neither A. C. nor D. C. electric light or power current is available for a constantly dependable source, but where either A. C. or D. C. at certain periods is available.

Model SSS systems are similar to Model SEM systems, but employ single stroke gongs which require no winding up in place of electro-mechanical gongs which do require winding up.

Main circuits, box circuits and gong circuits are always under electrical test. Trouble on any part of system, or failure of operative current is automatically indicated by ringing of trouble bell.

CONTROL CABINETS

No. Model	Description	Price Each
SSS-7	Control cabinet for installations not exceeding 7 gongs, complete	$170.00
SSS-14	Same as SSS-7, except for installations 8 to 14 gongs	200.00
SSCD	Charging cabinet for charging storage battery from D. C. circuits	200.00
SSCM	Charging cabinet for charging storage battery from motor generator	230.00

BATTERIES

SB-24	Storage battery for above systems, complete per cell	5.40

MOTOR GENERATORS

MG-108	Motor generator, with base direct connected, for storage battery charging	200.00

HALF-GUARDED SINGLE-STROKE GONGS

2120	6-inch half-guarded single-stroke enclosed type gong	14.00
2120	8-inch half-guarded single-stroke enclosed type gong	18.00
2120	10-inch half-guarded single-stroke enclosed type gong	22.00
2120	12-inch half-guarded single-stroke enclosed type gong	28.00
2120	14-inch half-guarded single-stroke enclosed type gong	33.00

BOXES

F-2022	Enclosed-lever code-ringing type Faraday box	17.00
A-2020	Break-glass code-ringing type Faraday box	22.00

TROUBLE BELLS

2502	Enclosed type trouble bell, with outlet box back one bell for each system	6.00

RESISTANCE BALANCERS

2124	Resistance balancer (one required for each circuit of less than 7 gongs)	12.00

Send for Special Bulletin on Faraday Fire Alarm Systems

FARADAY FIRE ALARM BOXES



Models 2040 and 2042



Model 2077



Model 2031



Model 2032



Model 2024

OPEN CIRCUIT NON-SELECTIVE TYPES

Faraday Fire Alarm Boxes, listed below, are open-circuit non-code-ringing type boxes. They are designed for fire alarm systems where it is not desired that the location of the box from which the signal originates be indicated by automatic code ringing of the gong and where failure of operative current or derangement of circuits or apparatus is not required to be automatically indicated.

Non-selective open-circuit Faraday Fire Alarm Boxes are the simplest and least expensive that can be installed with any satisfactory results. They are admittedly, however, not as safe or as desirable as the electrically supervised selective code ringing boxes shown on another page.

Breaking glass of any box automatically rings all gongs. Gongs usually used are vibrating type and after glass is once broken will continue ringing until glass is replaced in box.

These types of boxes, together with the gongs used with them, should be connected in multiple.

Models 2040 and 2042 are especially recommended, as they are equipped with heavy phosphor bronze springs and plunger contacts which absolutely insure operation, irrespective of the length of time they have been inactive.

MODEL 2040 SURFACE TYPE BOXES

Model No.	Description	Price* Each
2040	Break-glass fire alarm box, finished in English Vermilion, for surface work, made for ½-inch conduit, projects from wall 3⅛ inches. Size 5¼ in. high x 3¼ in. wide, N. Y. Fire Prevention Bureau Standard.....	$7.00

MODEL 2042 FLUSH TYPE BOXES

2042	Break-glass fire alarm box, finished in English Vermilion, for concealed work, made for ½-inch conduit, projects from wall 1 inch. Size 5¼ in. high x 3¼ in. wide. N. Y. Fire Prevention Bureau Standard.....	8.00

MODEL 2077 SURFACE TYPE BOXES

2077	Break-glass fire alarm box, finished in brush brass, round pattern, for surface work, non-conduit installations. Size 3¾ in. diam.....	1.00

MODEL 2031 FLUSH TYPE BOXES

2031	Break-glass fire alarm box, finished in brush brass, round pattern, for concealed work, will fit standard outlet box for conduit. Size 4 in. diam.....	2.00

MODEL 2032 FLUSH TYPE BOXES

2032	Break-glass fire alarm box, finished in brush brass, for concealed work, will fit standard switch outlet box for conduit. Size 4½ in. high x 2¼ in. wide.....	2.00

MODEL 2024 FLUSH TYPE BOXES

2024	Break-glass fire alarm box, finished in brush brass, with black background, will fit standard outlet box for conduit. Furnished with special test key and contact device. Test may be made with key without breaking glass, but without key it is impossible to send test signal. Size 4⅜ in. high x 3 7/16 in. wide.....	3.35

*Prices include hammers and chains.

Prices on special finishes quoted on application.

EXTRA GLASSES, HAMMERS, ETC.

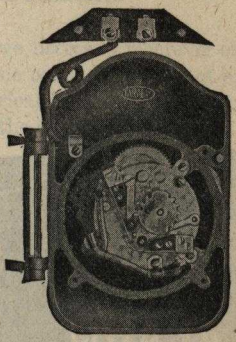
Description	Price Each
Extra Faraday Glasses with papers for any type of box listed above.....	$0.20
Extra chain and hammer for No. 2077 box.....	.25
Extra chain and hammer for other boxes.....	.35

FARADAY FIRE ALARM BOXES

ENCLOSED, PULL-LEVER, SELECTIVE CODE-RINGING



Model F-2022 Fire Alarm Box



Model F-2022, Showing Mechanism

Enclosed Pull-lever Code-ringing Type Fire Alarm Boxes are designed to give any signal required for standard fire alarm work, and automatically transmit the signal four times with absolutely perfect timing of each signal.

The boxes are absolutely non-interference type; i. e., after the lever has once been pulled down and released, the signal cannot be either intentionally or unintentionally disarranged.

The mechanism of the Faraday Box has the following important points of superiority:

1.—Positive, self-cleaning make and break contactors, each of which is provided with duplex silver contacts.

2.—Contact springs are of genuine phosphor-bronze, insulated from break wheel by Bakelite rollers, and mounted on separate individual Bakelite blocks. This completely overcomes the oldtime trouble so frequently experienced in boxes where the two contact springs were mounted on the same block. There can be no trouble from grounds and shorts—a common source of annoyance in competitive boxes, wherever there is careless use of flux in soldering.

3.—Solid brass code or break wheel is rigidly mounted on shaft. The break wheel requires no insulation from shaft, which is provided with a square shoulder, making it impossible for the break wheel to turn on the shaft or work loose, a trouble frequently found in other boxes.

4.—Strong powerful train of heavy cut-gears.

5.—Three separate and distinct test devices, viz:

(a) Silent test with Model TT-2022 telephone receiver and plug. This test enables the box to be operated in a manner exactly similar to an actual sounding of the alarm, but does not ring the gongs, although the signal can be heard in the telephone receiver.

(b) Silent test by left-hand turn of test key. This test, by pulling down the lever, tests the box train only.

(c) Standard key test by right-hand turn of test key. This test, without pulling down lever, permits any pre-determined signal to be given and also test of gong circuits and gongs.

6.—Contact points can be very positively cleaned by right-hand turn of test key.

7.—Transparent glass enclosing case over mechanism, securely seated onto a heavy felt gasket, keeps all dust out of mechanism, yet affords full view of every part of the mechanism.

8.—Seal feature prevents unauthorized access to the mechanism. Mechanism may be readily re-sealed by any authorized person.

9.—Circuit-wire terminals, approved Underwriters' pattern, on substantial Bakelite blocks are mounted at the front and top of outlet box, convenient to conduit entrances where circuit wires are brought in.

10.—Separable outlet box backs for conduit entrances render unnecessary the installation of mechanism and doors untill after roughing is done.

Model No.	Description	Price Each
F-2022	Enclosed pull-lever code-ringing type fire alarm box, with outlet box back for Conduit, complete	$17.00
BF-2022	Outlet box back only	2.00
MF2022	Mechanism only and doors (no outlet box back)	15.00

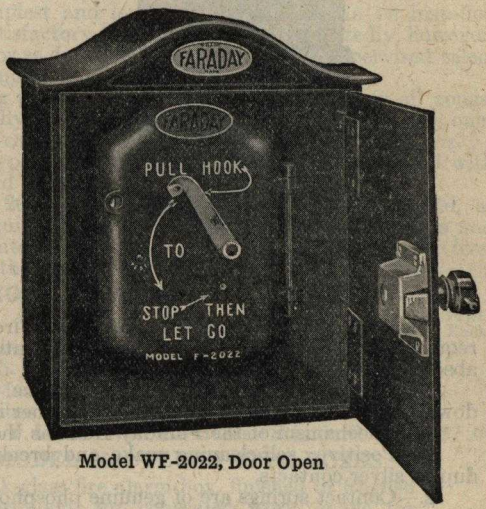
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FARADAY FIRE ALARM BOXES

WEATHERPROOF, ENCLOSED, PULL-LEVER, SELECTIVE CODE-RINGING



Model WF-2022, Door Closed



Model WF-2022, Door Open

These boxes are a combination of the standard pull-lever box Model F-2022 in a heavy cast iron weatherproof enclosing case, finished in glossy English vermilion.

In many exposed locations these boxes are extremely desirable. While specifically designed for outside installation, their use is not limited to this class of work, for in many cases interior fire alarm boxes are installed where they are subject to mechanical injury and dampness. These boxes are ideal for places where these conditions exist and are often desirable for installations where it is advantageous to prevent access to the box for the sending of an alarm by other than authorized parties with proper keys.

These boxes are regularly furnished with substantial flush setting brass butts as shown in illustration. Outer doors are furnished as specified, either with Sargent Brass Flat Key Spring Latch or turn-handle brass spring latch without key.

Faraday Weatherproof Boxes are regularly furnished drilled and tapped universal to take ½-inch and ¾-inch conduit, as the work requires.

When so specified, weatherproof boxes will be furnished to receive any size conduit at any location or locations in box special requirements may demand.

Model No.	Description	Price Each
WF-2022	Weatherproof fire alarm box, consisting of standard pull-lever box enclosed in weatherproof case complete, with either Sargent Brass Spring Latch with flat key or turn-handle brass spring latch without key, as specified.....	$30.00
W-2022	Cast iron weatherproof enclosing case only, with either Sargent Brass Spring Latch with flat key, or turn-handle brass spring latch without key, as specified (without F-2022 pull-lever box)	13.50
OF-2022	Pull-lever selective type fire alarm box only (no lever-enclosing door), without weatherproof enclosing case.....	16.50

Send for Special 32-page Bulletin on Faraday Fire Alarm Systems

FIRE EXTINGUISHERS



Pyrene Fire Extinguisher

PYRENE FIRE EXTINGUISHERS

Pyrene Fire Extinguishers are an imperative necessity wherever electricity is used. Being an absolute non-conductor, Pyrene is the only type of extinguisher that is both safe and efficient to use on electrical fires. Pyrene will put out an arc of any voltage instantly without harm to the operator.

Pyrene cannot injure dynamos, batteries, complicated or delicate machinery; but it will kill fire from any cause, and harm nothing.

Pyrene Fire Extinguishers will not freeze, are simple to operate, are always ready and will last forever.

Tested, approved and labeled by the Underwriters' Laboratories.

Trade No.	Description	Price Each
90115	Brass extinguisher, with black bracket	$10.00
90114	Nickel extinguisher, with black bracket	10.50
	Brackets	
79743	Enameled supporting bracket	.50
79744	Brass supporting bracket	.75
79745	Nickel supporting bracket	1.00
	Pyrene Liquid	
130438	Quart can of liquid	1.50
90116	Gallon can of liquid	5.00



J-M Fire Extinguisher

J-M FIRE EXTINGUISHERS

The J-M Fire Extinguishers possess every desirable feature of a one-quart type plus an exclusive two-way method of operation. This method permits discharge either by pumping or by storing sufficient pressure with nozzle closed to discharge contents when nozzle is opened. With the latter method both hands are left free to aim, and operation in cramped quarters is greatly facilitated.

J-M Extinguishers are instant and certain of action, and efficient for all incipient fires including oil, gasoline, kerosene or electric arc. Their use entitles car owners to 15 per cent reduction on auto fire insurance

Examined, approved and labeled by the Underwriters' Laboratories.

Trade No.	Description	Price Each
130439	Brass extinguisher, with black bracket	$10.00
130440	Nickel extinguisher, with black bracket	10.00

J-M Extinguisher Fluid

J-M fluid for recharging is sold in sealed cans or drums. It never deteriorates, is non-corrosive, a non-conductor, and the only fluid recommended for use in the J-M Extinguisher.

79747	Quart can of liquid	1.50
130441	Gallon can of liquid	5.75
130442	50 or 110-gallon drums, per gallon	5.50

COLUMBIA BATTERIES



Regular Columbia Cell Patterson Screw-Top Connection



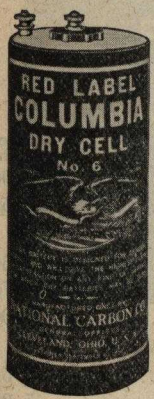
Regular Columbia Cell Projecting Carbon Fahnestock Connection



Columbia Ignitor Cell Patterson Combination Screw-Top and Binding Post Connection



Columbia Ignitor Cell Flush-Top Fahnestock Connection



Red Label



Ignitor



Oval

COLUMBIA RED LABEL BATTERIES

Columbia are open circuit cells especially made for telephones, bells, signals and similar devices. They have the long life and slow drain features so essential in intermittent service. They last longer and give better service and cost least in the end of any dry cell known. They have projecting carbon screw-top connection.

The quality of material and class of workmanship of these cells are the very highest.

The No. 6 is the standard size for bell and telephone work.

Trade No.	Mfrs. No.	Size Inches	Wt., Lbs. per Cell	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
042201	4	1½x4	¾	400	250	$0.60
042202	5	2 x5	1	250	300	.70
077896	6	2½x6	2	125	300	.80
077897	7	3 x7	3½	50	225	1.40
077898	8	3½x8	5	50	315	1.80

COLUMBIA IGNITOR BATTERIES

These cells produce an efficient spark for a remarkably long period. They are particularly adapted to service on automobiles, motor boats and gas engines. Their reliability in severe service is their chief characteristic. They have flush-top binding post connection.

They are made of the best material and by skilled workmen. From their first appearance on the market to the present time they have been very extensively used for reliability, economy, long life and strength.

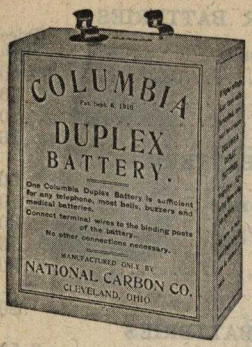
Trade No.	Mfrs. No.	Size Inches	Wt., Lbs. per Cell	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
077899	6	2½x6	2	125	300	$0.80
077900	7	3 x7	3½	50	225	1.50
077901	8	3½x8	5	50	315	1.90

COLUMBIA OVAL BATTERIES

For test sets of all sorts these batteries give complete satisfaction because of their long life and ability to furnish the maximum amount of steady current.

Trade No.	Mfrs. No.	Size Inches	Wt., Oz. per Cell	Wt., Lbs. per 100	Price Each
042210	04	1¼x2¼x4	11¼	80	$0.60

COLUMBIA BATTERIES



DUPLEX BATTERIES

Columbia Duplex is a 2-cell, 3-volt battery in a unit package.

For telephone and household service, particularly, this battery has many advantages. It absolutely does away with connecting cells together. There is no possibility of error in connections. There are only two binding posts.

Columbia Duplex Battery can be installed without instruction, with no chance of injuring the device for which it is used. For telephone companies the battery is particularly valuable, since it can be mailed by parcel post, in this way saving the expense of sending a man to install the cells. The expense of mailing is, of course, small.

Trade No.	No. of Cells	Voltage	Dimens., Inches Width	Thickness	Height	Std. Pkg.	Wt., Lbs. Std. Pkg.	Price Each
44122	2	3	5 1/8	2 5/8	6 3/4	50	240	$1.60
44123	Corrugated individual mailing cartons.....							.06

MULTIPLE IGNITION AND LIGHTING BATTERIES

For Automobiles and Motor Boats



These multiple batteries are waterproof, accident-proof, economical and convenient. They are by far the most satisfactory source of ignition current where freedom from trouble and attention is desired.

Only two connections to make. Once installed, the battery needs no further attention. No charging necessary. No liquid to slop.

A hermetically sealed metal can prevents damage by moisture. There are no connections to work loose. No short circuits possible.

Adaptability

Following is a guide to purchasers of this battery, which will enable them to properly select the size best adapted to their system:

Type 266—For Atwater Kent Device or Delco System or any single spark ignition system.

Type 356—For all ignition systems using standard coils and timers with a battery of 5 or 6 dry cells used in a single series set.

Type 536—For magneto dual system, systems now using 4 volts or 2-cell storage batteries, stationary and motor boat engines equipped with 4, 5 or 6 Edison or closed circuit batteries.

Type 346—For any 4 to 6-volt service.

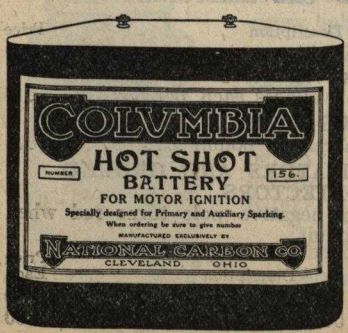
Type 436—For heavy 3 1/2 to 4-volt service.

Type 256—For light 6 to 7-volt service.

Type 246—For light 4 to 6-volt service.

Trade No.	Type	Dimensions, Inches Length	Width	Height	Weight Pounds	Volts	Price Each
042198	266	11	8 1/8	8 3/4	37	9	$11.20
042199	356	13 3/4	8 1/8	8 3/4	50	7 1/2	14.00
042200	536	13 3/4	8 1/8	8 3/4	50	4 1/2	14.00
44116	346	11	8 1/8	8 3/4	37	6	11.20
44117	436	11	8 1/8	8 3/4	37	4 1/2	11.20
44118	256	13 3/4	5 1/2	8 3/4	34	7 1/2	9.40
44119	246	11	5 1/2	8 3/4	25	6	7.50

HOT SHOT MULTIPLE BATTERIES



A battery in different sizes for customers who desire a single ignition unit and wish to get away from the annoyance of loose connections in dry cells.

These batteries consist of a number of dry cells connected together by means of soldered copper strips. That means that the resistance of the connections is practically negligible. The connected dry cells are then surrounded by a moisture-proof carton which holds them firmly in place and binds the whole into a single package.

Short circuits are impossible. There are only two connections to be made. The life of these batteries is long.

Trade No.	Type	Dimensions, Inches Length	Width	Height	Weight Pounds	Volts	Price Each
44120	2462	10 1/2	5 3/8	6 7/8	18	6	$7.00
44121	1562	8	5	7 1/2	11	7 1/2	4.40

BATTERIES AND SUPPLIES



No. 012108



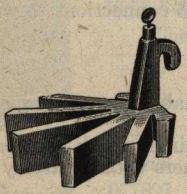
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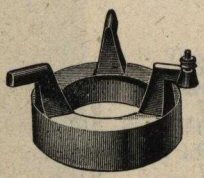
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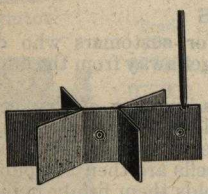
No. 021235



No. 021242



Nos. 021249 and 021251



No. 021254



Polarity Indicator

CARBON CYLINDER BATTERIES

Trade No.	Description	Price Each
012108	Battery complete	$0.60
012109	Carbon cylinder	.30
012110	Glass jar	.20
012111	Zinc	.16

No. 2 SAMSON BATTERIES

012116	Battery complete	2.00
012117	Complete, with 16-oz. zinc	2.10
012118	Carbon vase	1.30
012119	Rubber cover	.16
012120	Cylindrical zinc	.80
012121	Railroad zinc, 16-oz	....
012122	Glass jar	.20

No. 3 SAMSON BATTERIES

012123	Battery complete	2.50
012124	Carbon vase	1.70
012125	Cylindrical zinc only	1.00
012126	Jar only	.40
012127	Rubber cover	.20

GRAVITY BATTERIES

012137	Cell complete, less blue vitrol, 6x8 ins.	3.25
012138	Glass jar	.60
012139	Zinc	2.25
012140	Copper	.40

PENCIL ZINCS

Trade No.	Std. No.	Description	Price Each
021235	14B	Copper thumbscrew connection	$0.10
91901	....	Wing nut connection	.10

Pencil zincs are $\frac{3}{8}$x6$\frac{1}{2}$ inches.

CROWFOOT ZINCS

Trade No.	Std. No.	Size of Jaw Inches	Wt. Lbs.	Price Each
021242	1	6x8	3	$1.65
021243	2	6x8	2$\frac{3}{4}$	1.50
021244	3	6x8	3$\frac{1}{2}$	1.90
021245	4	5x7	1$\frac{3}{4}$	1.20

ROUND ZINCS

Trade No.	Std. No.	Style	Size of Jar Inches	Wt. Lbs.	Price Each
021246	5	Wire connection	6x8	4	$2.50
021247	6	Thumbscrew connection	6x8	4	2.50
021248	7	Thumbscrew connection	6x8	3	2.25
021249	8	Wire connection	6x8	3	2.25
021250	66	Thumb nut connection	6x8	4	2.50
021251	77	Thumb nut connection	6x8	3	2.25

COPPERS

021254	16	2x6 inches	6x8	..	.40
021255	16$\frac{1}{2}$	2x5 inches	5x7	..	.35

Made up of brush copper, No. 32 B. & S. gauge, 13 inches of No. 14 rubber covered wire for connections.

IMPORTED SAL AMMONIAC

Trade No.	Description	Price
021289	Packed in barrels, per pound	....
59101	Packed in strong pasteboard boxes containing 4 ounces each, per box	....

BLUE VITRIOL

021290	Packed in barrel, per pound	....

POLARITY INDICATORS AND GROUND DETECTORS

Liquid adjacent to negative pole turns red when indicator is placed in circuit.

Trade No.	Mfrs. No.	Description	Price Each
065605	4643	For battery work	$1.50
065606	4644	For 50 to 600 volts, D.C.	1.50

EDISON PRIMARY BATTERIES



Type Q

TYPE Q

Capacity, 150 Ampere Hours

With porcelain jar. Size over all, 6x9 inches. Inside dimensions of jar only, 5x7½ inches.

Adapted for stationary gas and gasoline engines, small motors, burglar alarms, bell systems, mine signals, intercommunicating telephone systems, etc.

Trade No.	Type	Description	Price Each
121400	Q	Complete cell	$3.30
121401	Q	Complete renewal	1.50
		Renewal Parts	
121402	Q	One copper-oxide plate	.75
121403	Q	Two zinc plates, each, 30 cents	.60
121404	Q	One can caustic soda	.24
121405	Q	One bottle special battery oil	.09



Type RR

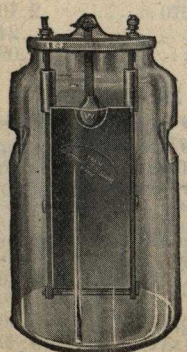
TYPE RR

Capacity, 300 Ampere Hours

With porcelain jar. Size over all, 7½x10¾ inches. Inside dimensions of jar only, 6⅝x8¾ inches.

Adapted for stationary gas engines, mine signals, electro-plating, fire alarms, burglar alarms, small common battery and private branch telephone exchanges, intercommunicating telephone systems, telephone interrupters, supervisory lamps, trunk line relays, etc.

075927	R R	Complete cell	$4.95
075928	R R	Complete renewal	2.85
		Renewal Parts	
075929	R R	One copper-oxide plate	1.25
075930	R R	Two zinc plates, each, 52½ cents	1.05
075931	R R	One can caustic soda	.36
075932	R R	One bottle special battery oil	.09



Type W

TYPE W

Capacity, 600 Ampere Hours

With glass jar. Size over all, 7¾x15 inches. Inside dimensions of jar, 7x13½ inches.

Adapted for battery motors, dental engines, light electric-cautery work, X-ray, wireless telegraph, telephone interrupters, small common battery and private branch exchange telephone switchboards, supervisory lights, trunk line relays, talking circuits, etc.

49001	W	Complete cell	$9.75
021423	W	Complete renewal	4.50
		Renewal Parts	
021424	W	Two copper-oxide plates, each, $1.25	2.50
021425	W	Two zinc plates, each, 75 cents	1.50
021426	W	One can caustic soda	.60
021427	W	One bottle special battery oil	.12

The 200, 250 and 400-ampere-hour types shown on preceding pages are recommended in preference to Types Q and RR because of improved construction, higher efficiency, longer life, greater simplicity, etc.

EDISON PRIMARY BATTERIES



Type 202

TYPE 202
Capacity, 200 Ampere Hours

Furnished with rectangular heat-resisting glass jar. Size over all, 3⅜x6x11 inches. Inside dimensions of jar only, 2⅞x5¼x9 inches.

Adapted for intercommunicating telephone systems, talking and ringing circuits for way station telephones in railway train dispatching systems, stationary gas or gasoline motors, burglar alarms, fire alarms, electric clock systems, small motors, time stamps, mine signal systems, etc.

Use five cells for stationary gas or gasoline motors having make and break ignition and eight cells for jump spark.

Cover is without gasket and is recommended for stationary work only.

Trade No.	Type	Description	Price Each
79991	202	Complete cell	$4.05
79992	200	Complete renewal	2.25
		Renewal Parts	
075922	200	Element, assembled	2.10
075923	200	Can caustic soda	.24
075924	200	Bottle special battery oil	.09



Type 202
Edge View

TYPE 206
Capacity, 200 Ampere Hours

With porcelain jar and hollow rubber gasket ring. Size over all, 5¾x9 inches. Inside dimensions of jar only, 5x7½ inches.

Adapted for motor boats running on salt water. Use five cells for single cylinder make and break engines; six cells for multiple cylinder, high speed, make and break engines; eight cells for jump spark. Cover is fitted with hollow rubber gasket to prevent splashing. Type 206 supersedes old Type VP cell.

075920	206	Complete cell	3.50
075921	200	Complete renewal	2.25
		Renewal Parts	
075922	200	Element, assembled	2.10
075923	200	Can caustic soda	.24
075924	200	Bottle special battery oil	.09



Type 206

TYPE 208
Capacity, 200 Ampere Hours

With porcelain jar. Size over all, 5¾x9 inches. Inside dimensions of jar only, 5x7½ inches.

Adapted for stationary gas or gasoline engines, small motors, burglar alarms, bell systems, program and self-winding clocks, annunciators, electric time stamps, mine signals, intercommunicating telephone systems, etc. Use five cells for stationary engines having make and break ignition, eight cells for stationary engines having jump spark ignition. Cells have flat cover, without gasket, and are recommended for stationary work only.

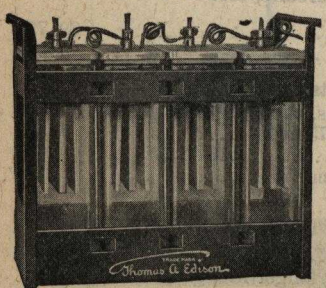
Type 208 supersedes old Type Q cell.

Types 206 and 208 are recommended in preference to the old Types VP and Q respectively, for all purposes. Although the jars are the same size as those used with the old types, the later types have one third greater ampere hour capacity and are correspondingly more efficient.



Type 208

075926	208	Complete cell	3.30
075921	200	Complete renewal	2.25
		Renewal Parts	
075922	200	Element, assembled	2.10
075923	200	Can caustic soda	.24
075924	200	Bottle special battery oil	.09



Tray for Types 202 and 252

TRAYS FOR TYPES 202 AND 252 CELLS

Trays are pressed steel and heavily japanned. They are provided with handles and the sides are cut away for easy inspection of the elements. Types 202 and 252 cells in these trays are attractive and occupy less space than other 200-ampere-hour cells.

Trade No.	Type	For No. of Cells	Size Over All Inches	Price Each
79981	2022	2	6½x 8 x11½	$2.40
79982	2023	3	6½x12 x11½	2.70
79983	2024	4	6½x15½x11½	3.00
79984	2025	5	6½x19¼x11½	3.30
79985	2026	6	6½x23 x11½	3.60

EDISON PRIMARY BATTERIES



Type 252

TYPE 252

Capacity, 250 Ampere Hours

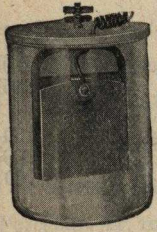
With rectangular heat resisting glass jar. Size over all, 3⅜x6x12 inches. Inside dimensions of jar only, 2⅞x5¼x10 inches.

Type 252 cells are for use where they will not be exposed to low temperature, and for this service are the most desireable of the 250 ampere-hour types, because of the small space occupied and the low first cost. They are designed for stationary work, but when used in trays are semi-portable.

Type 252 cells are particularly adapted for fire alarm service. They meet various state and municipal requirements for industrial fire alarm systems, for which purpose they are in general use.

Trade No.	Type	Description	Price Each
79972	252	Complete cell	$4.25
79973	250	Complete renewal	2.45
		Renewal Parts	
075916	250	Element, assembled	2.30
075917	250	Can caustic soda	.27
075918	250	Bottle special battery oil	.09

Trays for Type 252 cells are listed on another page.


Type 255

TYPE 255

Capacity, 250 Ampere Hours

With rectangular heat-resisting glass jar or porcelain jar. Size over all, 6¾x10¼ inches. Inside dimensions of jar only, 6x8 inches.

Adapted for stationary gas or gasoline engines, burglar alarms, bell systems, program and self-winding clocks, auxiliary and industrial fire alarm systems, etc.

Type 252 cells are recommended for industrial and private fire alarm systems, auxiliary fire alarms, electric time and program clocks; also for telephones, including intercommunicating telephones, private branch exchanges, switchboards, railway telephone train dispatching at busy way stations, and similar service.

075914	255	Complete cell, with heat-resisting glass jar	4.25
075915	250	Complete renewal	1.80
		Renewal Parts	
075916	250	Element, assembled	2.30
075917	250	Can caustic soda	.27
075918	250	Bottle special battery oil	09


Type 401

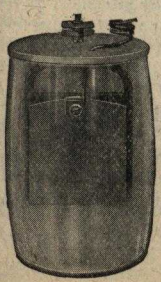
TYPE 401

Capacity, 400 Ampere Hours

With rectangular heat-resisting glass jar or porcelain jar. Size over all, 6¾x12½ inches. Inside dimensions of jar only, 6x10½ inches.

Adapted for railway signals, railway track circuits, battery motors, train dispatchers' telephone talking circuits, intercommunicating telephone circuits, telephone pole changers, telegraph sounder and main line circuits, fire alarms, burglar alarms, program and self-winding clocks, etc. These cells in heat-resisting glass jars will give better service than when used with porcelain jars, especially when the cell is to be subjected to low temperatures.

075903	401	Complete cell, with heat-resisting glass jar	5.70
075904	400	Complete renewal	3.15
		Renewal Parts	
075905	400	Element, assembled	3.00
075906	400	Can caustic soda	.36
075907	400	Bottle special battery oil	.09


Type 404

TYPE 404

Capacity, 400 Ampere Hours

With barrel shaped heat-resisting glass jar. Size over all, 7x11½ inches.

Type 404 cells are suitable for all purposes for which Type 401 is recommended. The jars have greater mechanical strength than glass jars with straight sides.

Types 401 and 404 conform to the specifications of the Railway Signal Association. They are better adapted for low temperature conditions than are the 500-ampere-hour types, but Type 402 cells are better adapted for low temperatures than any other 400-ampere-hour type or the 500-ampere-hour types.

075911	404	Complete cell	5.55
075904	400	Complete renewal	3.15
		Renewal Parts	
075905	400	Element, assembled	3.00
075906	400	Can caustic soda	.36
075907	400	Bottle special battery oil	.09

EDISON PRIMARY BATTERIES



Type 402

TYPE 402

Capacity, 400 Ampere Hours

With rectangular heat-resisting glass jar. Size over all, 5⅜x6⅜x12¼ inches. Inside dimensions of jar only, 5x6x10 inches.

Adapted for railway signal work, including track circuits, crossing bells and lighting; also for railway train dispatchers' telephone talking and ringing circuits, supervisory lamps, private branch exchanges, telephone switchboards, intercommunicating telephones, telegraph sounder and main line circuits, fire alarm systems, burglar alarms, electric clocks, battery motors, etc.

Type 402 jars and covers are the same as those for Type 502.

Type 402 cells are the most convenient of any of the 400-ampere-hour types because of the small space occupied. They are especially recommended for railway signal work, where the cells are housed in signal battery cases or for other outdoor work. Where exposed to low temperature, the Type 402 cells will give better service than any other 400 or 500-ampere-hour types, because the volume and density of the solution are so proportioned to the ampere hour capacity of the elements as to provide the best combination to withstand the effect of the cold.

Trade No.	Type	Description	Price Each
57457	402	Complete cell	$5.70
075904	400	Complete renewal	3.15
		Renewal Parts	
075905	400	Element, assembled	3.00
075906	400	Can caustic soda	.36
075907	400	Bottle special battery oil	.09



Type 501

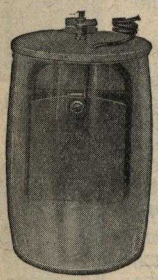
TYPE 501

Capacity, 500 Ampere Hours

With cylindrical heat-resisting glass jar. Size over all, 6¾x12½ inches. Inside dimensions of jar only, 6x10½ inches.

Adapted for railway signals, railway track circuits, low voltage remote control switches, battery motors, telephone train dispatchers' talking circuit, crossing bells, private branch exchange telephone switchboards, telephone pole changers, ringing sets, telegraph local, main line and sounder circuits, intercommunicating telephone systems, fire alarm systems, bungalow camp lighting, electro-plating, wireless telegraph.

57458	501	Complete cell	6.15
57459	500	Complete renewal	3.60
		Renewal Parts	
57460	500	Element, assembled	3.45
57461	500	Can caustic soda	.42
57462	500	Bottle special battery oil	.09


Type 504

TYPE 504

Capacity, 500 Ampere Hours

With barrel shaped heat-resisting glass jar. Size over all, 7x11½ inches.

Type 504 cells are suitable for all of the purposes for which Type 501 are recommended. The jars have a greater mechanical strength than jars with straight sides. Where cells are to be subjected to low temperatures, Types 401, 402 and 404, with glass jars, are recommended in preference to Types 501, 502 and 504, respectively. Types 501 and 504 conform to the specifications of the Railway Signal Association, but have a greater capacity than is called for in these specifications.

57463	504	Complete cell	6.00
57459	500	Complete renewal	3.60

For separate renewal parts see Type 501 above.



Type 502

TYPE 502

Capacity, 500 Ampere Hours

With rectangular heat-resisting glass jar. Size over all, 5⅜x6⅜x12¾ inches. Inside dimensions of jar only, 5x6x10½ inches.

Type 502 cells are suitable for all purposes for which Type 501 are recommended. Type 502, as well as Type 402, is used extensively for railway signal operation, but Type 402 cells are recommended in preference to Type 502 cells when exposed to low temperatures.

57464	502	Complete cell	6.15
57459	500	Complete renewal	3.60

For separate renewal parts see Type 501 above.

EDISON PRIMARY BATTERIES

SUMMARY OF PRICES

	Type 202 Glass	206 Porc.	207 Steel	208 Porc.	252 Glass	255 Glass	401 Glass
Capacity, ampere hours	200	200	200	200	250	250	400
Complete cell	$4.05	$3.50	$5.10	$3.30	$4.25	$4.25	$5.70
Complete renewal	2.25	2.25	2.25	2.25	2.45	2.45	3.15
Renewal Parts							
Zinc-oxide, assembled	2.10	2.10	2.10	2.10	2.30	2.30	3.00
One can caustic soda	.24	.24	.24	.24	.27	.27	.36
One bottle special battery oil	.09	.09	.09	.09	.09	.09	.09
Permanent Parts							
Porcelain jar, round	....	.90	....	.90	....	....	....
Heat-resisting glass jar, round	....	....	....	....	....	1.50	2.25
Heat-resisting glass jar, rectangular	1.40	....	....	....	1.50	....	....
Enameled steel jar, round	....	....	2.10	....	....	....	....
Porcelain cover	.45	.60	.60	.50	.45	.60	.60
Terminal nuts and washers, per cell	.25	.25	.25	.25	.25	.25	.25
Rubber gasket	....	.35	.35	....	....	....	....

SUMMARY OF PRICES

	Type 202 Glass	403 Porc.	404 Glass	501 Glass	502 Glass	504 Glass	505 Glass
Capacity, ampere hours	400	400	400	500	500	500	500
Complete cell	$5.70	$5.40	$5.55	$6.15	$6.15	$6.00	$6.00
Complete renewal	3.15	3.15	3.15	3.60	3.60	3.60	3.60
Renewal Parts							
Zinc-oxide, assembled	3.00	3.00	3.00	3.45	3.45	3.45	3.45
One can caustic soda	.36	.36	.36	.42	.42	.42	.42
One bottle special battery oil	.09	.09	.09	.09	.09	.09	.09
Permanent Parts							
Porcelain jar, round	....	1.80	....	....	....	....	....
Heat-resisting glass jar, round	....	....	....	2.25	....	....	2.30
Heat-resisting glass jar, rectangular	2.40	....	....	....	2.40	....	....
Heat-resisting glass jar, barrel shape	....	....	2.10	....	....	2.10	....
Porcelain cover	.50	.75	.60	.60	.50	.60	.75
Terminal nuts and washers, per cell	.25	.25	.25	.25	.25	.25	.25

Miscellaneous Separate Parts

Large wing nuts, each, 10 cents. Nuts, other sizes, each, 5 cents.
Brass washers, each, 5 cents. Double connectors, each, 15 cents.
Hexagon jamb nuts, each, 5 cents.

Above Type 252 and Type 255 cells were formerly known as Type 302 and 305 respectively. Type 309 is now obsolete, but when recharges are required specify Type 250 renewals.

SUMMARY OF PRICES

All types of batteries listed below, except Types Q, RR and W, are obsolete, but the complete prices are given for convenience in ordering renewals and parts for old cells still in service.

	Type BB Porc.	Z Steel	Q Porc.	V Steel	RR Porc.	AA Steel	A Porc.	SS Porc.	W Glass
Capacity, ampere hours	100	100	150	150	300	300	300	350	600
Complete cell	*	$4.20	$3.30	$5.10	$4.95	$7.20	*	*	$9.75
Complete renewal	1.35	1.35	1.50	1.65	2.55	2.70	2.80	2.85	4.50
Renewal Parts									
1 chg. copper-oxide plate or plates	.60	.60	.75	.75	1.25	1.25	1.50	1.50	2.50
1 chg. zinc plate or plates	.60	.60	.60	.75	1.05	1.20	1.20	1.20	1.50
1 chg. caustic soda	.21	.21	.24	.24	.36	.36	.27	.36	.60
1 chg. special battery oil	.09	.09	.09	.09	.09	.09	.09	.09	.12
Permanent Parts									
Heat-resisting glass jar	....	....	....	....	....	....	....	....	4.50
Porcelain jar	*	....	.90	....	1.50	....	*	*	....
Enameled steel jar	....	1.65	....	2.10	....	3.00	....	....	....
Porcelain cover	.35	.35	.50	.50	.75	.75	.50	.65	50
Copper frame with nuts and insulators	.65	.65	65	.65	.65	.65	.90	.90	1.00
Long brass bolt and nuts for zinc	....	....	.20	....	.20	....	.20	.20	.20
Rubber gasket ring	....	.35	....	.35	....	.35	....	....	....
Brass air vent and nut	....	.15	....	.15	....	.15	....	....	....
Miscellaneous Separate Parts									
Copper frame sides, 2 per cell	.30	.30	.30	.30	.30	.30	.45	45	.60
Copper frame bolts with nuts	.15	.15	.15	.15	.15	.15	.30	.30	.30

Large wing nuts, each, 10 cents. Nuts, other sizes, each, 5 cents. Hard rubber insulators, each 7½ cents.

*Complete cells now obsolete.

EDISON PRIMARY BATTERIES

CONVERTING OLD EDISON CELLS INTO EDISON ASSEMBLED TYPES



Complete Edison Assembled Cell, less Jar

When a battery of Edison Types V, V-P, Q, RR, S, SS, AA or AA-P cells becomes exhausted, it is recommended that the cells be converted into the corresponding type of Edison Assembled Type, as explained below:

Type Q cells can be converted into Edison Type 208 by securing Type 200 renewals with Type 208 covers and nuts, and discarding the old Type Q covers and frames.

Type V cells can be converted into Edison Type 207 by securing Type 200 renewals with Type 207 covers and nuts, and discarding the old Type V covers and frames.

Type V-P cells can be converted into Edison Type 206 by securing Type 200 renewals with Type 206 covers and nuts, and discarding the old Type V covers and frames.

Type RR cells can be converted into Edison Type 403 by securing Type 400 renewals with Type 403 covers and nuts, and discarding the old Type RR covers and frames.

When a cell has been renewed in above manner, it is exactly the same as the corresponding Edison assembled type.

Types AA and AA-P cells, when used for stationary work, may be converted into Edison Type 403 cells by securing Type 400 renewals with Type 403 covers and nuts, and discarding the old covers and frames with the exhausted elements. No liquid-tight covers are made in Edison design, suitable for use with Type AA or AA-P cells.

Types BB, Z and W have no corresponding Edison assembled type, and consequently must be renewed in the regular manner.

It is not absolutely necessary to obtain new Edison covers in order to use Edison assembled renewals in Types V, V-P, AA or AA-P cells. The old covers have a central hole and will answer by closing up one frame hole and threading the connecting wire through the corresponding hole. It makes a better installation, however, to use the new covers, thus making the cells the same as the New Edison assembled types.

PARTS OF CELLS OF DIFFERENT TYPES WHICH ARE IDENTICAL

Renewals are the same for:
- All 500-ampere-hour assembled types
- All 400-ampere-hour assembled types
- All 250-ampere-hour assembled types
- All 200-ampere-hour assembled types
- Types BB and Z
- Types V and V-P
- Types AA and AA-P

Porcelain jars are the same for:
- Types Q, V-P, 206 and 208
- Types RR, AA-P and 403

Heat-resisting glass jars are the same for:
- Types 401 and 501
- Types 402 and 502
- Types 404 and 504

Enameled steel jars are the same for:
- Types V and 207

Porcelain covers are the same for:
- Types 202 and 252
- Types 206 and 207
- Types 255, 401, 404, 501 and 504
- Types 402 and 502
- Types Q, S and W
- Types V and V-P
- Types AA and AA-P

Copper-oxide plates are the same for:
- Types BB and Z
- Types AA, AA-P, RR and W
- Types Q, V, V-P, S and SS

Double zinc plates are the same for:
- Types BB and Z
- Types AA and AA-P
- Types V and V-P

Single zinc plates are the same for:
- Types S and SS

Cans of caustic soda are the same for:
- Types BB and Z
- Types Q, V, V-P, 202, 206, 207, 208 and 212
- Types SS, RR, AA, AA-P and all assembled 400-ampere-hour types
- All 500-ampere-hour types

Bottles of special battery oil are as follows:
- For Type W, 6 ounces
- For all other types, 3 ounces.

Copper frames are the same for:
- Types BB, Z, Q, V and V-P
- Types S and SS
- Types AA, AA-P and RR

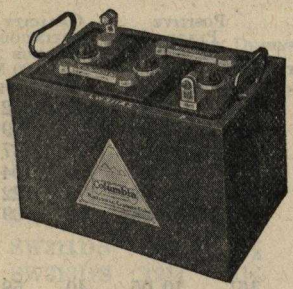
Types BB, Z, V, V-P, AA and AA-P have one copper-oxide plate and one double zinc (two single zincs attached to one hanger).

Types Q and RR each have one copper-oxide plate and two separate zinc plates.

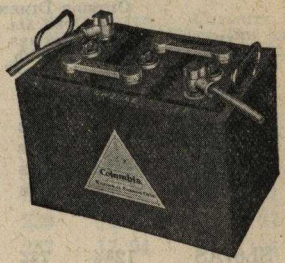
Types S, SS and W each have two copper-oxide plates and two separate zinc plates.

COLUMBIA STORAGE BATTERIES

STARTING AND LIGHTING



Lighting Type



Starting Type

Many improvements are included in the Columbia Storage Battery that should readily place it in the storage battery field where Columbia stands today in the dry battery trade.

Each Columbia Storage Battery is backed by a very definite guarantee, in writing, that is real and positive and is not merely an adjustment affair made for advertising purposes.

LIGHTING BATTERIES

All LW or LH Type batteries listed in table below are intended solely for ignition and lighting service. Such types will not serve for starting purposes and the Columbia guarantee is violated should these types be applied to automobile or other gas engine starting service.

6-VOLT LW TYPE

Trade No.	Type No.	Outside Dimensions Over All, Inches Length	Width	Height	Approx. Wt. Lbs. per Battery Net	Packed	Capacity Ampere Hours Continuous Discharge at 1 Amp.	3 Amp.	5 Amp.	10 Amp.	Positive Plate Volume per Cell Cu. In.	Price Each
70730	LW35AS	4 7/8	7 3/16	9 1/8	23	32	40	30	20	..	5.98	$16.25
70731	LW37AS	6 9/16	7 3/16	9 1/8	28	37	60	45	35	..	8.97	19.50
70732	LW39AS	7 11/16	7 3/16	9 1/8	34	44	80	60	50	40	11.96	23.00
70733	LW311AS	9 1/4	7 3/16	9 1/8	37	49	110	80	70	60	14.95	26.25
70734	LW313AS	10 5/16	7 3/16	9 1/8	45	57	130	110	90	80	17.94	29.50
70735	LW315AS	11 7/16	7 3/16	9 1/8	51	63	150	125	110	100	20.93	32.75
70736	LW319AS	14 9/16	7 3/16	9 1/8	63	84	170	160	150	120	26.91	36.00
70737	LW37AY	14 9/16	7 3/16	9 1/8	33	37	60	45	35	..	8.97	22.00

6-VOLT LH TYPE

70738	LH39AS	7 11/16	5 11/16	10 1/2	34	44	80	60	50	40	11.96	23.00
70739	LH313AS	10 9/16	5 11/16	10 1/2	45	57	130	110	90	80	17.94	29.50
70740	LH315AS	11 11/16	5 11/16	10 1/2	51	63	150	125	110	100	20.93	32.75
70741	LH319AS	14 9/16	5 11/16	10 1/2	63	84	170	160	150	120	26.91	36.00

12-VOLT LW TYPE

70742	LW67AS	12 3/8	6 15/16	9 1/8	52	73	60	45	35	..	8.97	36.00

Ignition Service

Types LW35AS, LW37AS, LW39AS and LH39AS are especially adapted to general ignition service. Capacity for such service is indicated under the column, Capacity, 1 ampere, Types LW35AS and LW37AS having 40 and 60 ampere hours capacity at the 1-ampere rate and Types LW39AS and LH39AS each having 80 ampere hours capacity at that rate. Other batteries are on the market that have a fictitious rating for ignition service, some being rated at the one-half ampere and others at the so-called Ignition Rate, and others at the Intermittent Rate. To intelligently select an ignition battery, the 1-ampere rate of discharge should be determined. All Columbia batteries give 25 to 50 per cent greater capacity when discharged intermittently.

Starting Type batteries are listed on the following pages.

COLUMBIA STORAGE BATTERIES

STARTING BATTERIES

Trade No.	Type No.	Outside Dimensions Over all Inches Length	Width	Height	Approx. Wt., Lbs. per Battery Net	Ship.	Positive Plate per Cell Area Sq. In.	Volume Cu. In.	Capacity Continuous Discharge at 5 Amps. A. H.	20 Min. Amps.	Price Each
12-VOLT SW TYPE											
146377	SW67AS	12 3/8	7 3/16	9 1/8	55	76	144	8.97	35	52	$48.25
146378	SW69AS	14 9/16	7 3/16	9 1/8	67	88	192	11.96	50	69	55.25
146379	SW611AS	17 3/16	7 7/16	9 1/8	79	100	239	14.95	70	87	60.50
146380	SW613AS	19 13/16	7 7/16	9 1/8	90	120	287	17.94	90	104	63.75
146381	SW615AS	22 1/2	7 7/16	9 1/8	107	137	335	20.93	110	122	69.00
146382	SW69ES	19 3/4	5 7/16	9 1/8	67	88	192	11.96	50	69	55.25
12-VOLT SL TYPE											
146383	SL67AS	12 3/8	7 3/16	9 1/8	59	80	161	10.05	40	58	50.00
146384	SL69AS	14 9/16	7 3/16	9 1/8	72	93	214	13.40	65	78	56.25
146385	SL611AS	17 3/16	7 7/16	9 1/8	85	106	268	16.75	85	97	62.25
146386	SL69ES	19 3/4	5 7/16	9 1/8	72	93	214	13.40	65	78	56.25
146387	SL611ES	19 3/4	6 3/8	9 1/8	85	106	268	16.75	85	97	62.25
12-VOLT SE TYPE											
146388	SE67AS	10 5/16	7 3/16	9 1/8	45	57	161	7.56	35	50	43.25
12-VOLT SH TYPE											
146389	SH67AS	12 3/8	5 11/16	10 1/2	55	76	144	8.97	35	52	48.25
146390	SH69AS	14 9/16	5 11/16	10 1/2	67	88	192	11.96	50	69	55.25
146391	SH611AS	17 3/16	5 15/16	10 1/2	79	100	239	14.95	70	87	60.50
146392	SH613AS	19 13/16	5 15/16	10 1/2	90	111	287	17.94	90	104	63.75
146393	SH67ES	15 1/4	4 3/4	10 1/2	55	76	144	8.97	35	52	48.25
146394	SH615ES	15 1/4	8 1/4	10 1/2	107	128	335	20.93	110	122	69.00
146395	SH67GS	10 5/8	6 9/16	10 1/2	55	67	144	8.97	35	52	48.25
146396	SH69GS	10 5/8	8 1/4	10 1/2	67	79	192	11.96	50	69	55.25
12-VOLT SP TYPE											
146397	SP69AS	14 9/16	7 7/16	10 1/2	72	93	269	16.80	90	98	63.00
16-VOLT SW TYPE											
146398	SW87AS	16	7 3/16	9 1/8	73	94	144	8.97	35	52	58.75
146399	SW89AS	19	7 7/16	9 1/8	87	117	192	11.96	50	69	65.75
146400	SW811AS	22 1/2	7 7/16	9 1/8	101	131	239	14.95	70	87	72.50
18-VOLT SH TYPE											
146401	SH97GS	15 1/4	6 3/4	10 1/2	82	103	144	8.97	35	52	62.25
146402	SH99GS	15	7 15/16	10 1/2	98	119	192	11.96	50	69	72.50
146403	SH911GS	15 1/4	9 1/4	10 1/2	117	147	239	14.95	70	87	79.50
24-VOLT SW TYPE											
146404	SW125AS	17 3/16	7 7/16	9 1/8	82	112	96	5.98	20	35	63.75
24-VOLT SE TYPE											
146405	SE127AS	19 1/4	7 3/16	9 1/8	92	113	161	7.56	35	50	74.25
146406	SE127LS	13 9/16	10 1/2	9 1/8	92	122	161	7.56	35	50	74.25
24-VOLT SH TYPE											
146407	SH125HS	10 5/8	8 15/16	10 1/2	82	112	96	5.98	20	35	63.75
146408	SH125HY	10 5/8	8 7/16	10	80	100	96	5.98	20	35	62.25
30-VOLT SW TYPE											
146409	SW155AS	21 3/16	7 7/16	9 1/8	105	126	96	5.98	20	35	70.75

To determine proper type Columbia Storage Battery for a given make and model of car write us for and use the Columbia Auto Equipment List CSL-4.

COLUMBIA STORAGE BATTERIES

STARTING BATTERIES

6-VOLT SW TYPE

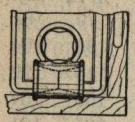
Trade No.	Type No.	Outside Dimensions Over All Inches Length	Width	Height	Approx. Wt., Lbs. per Battery Net	Ship.	Positive Plate per Cell Area Sq. In.	Volume Cu. In.	Capacity Cont. Dis. at 5 Amps. A. H.	20 Min. Amps.	Price Each
146418	SW311AS	9 1/4	7 3/16	9 1/8	40	52	239	14.95	70	87	$34.50
146419	SW313AS	10 5/16	7 3/16	9 1/8	48	60	287	17.94	90	104	38.00
146420	SW315AS	11 7/16	7 3/16	9 1/8	55	67	335	20.93	110	122	43.25
146421	SW319AS	14 9/16	7 3/16	9 1/8	67	88	431	26.91	150	157	50.00
146422	SW323AS	17 3/16	7 7/16	9 1/8	76	97	527	32.89	195	191	57.00
146423	SW311DS	19 3/4	3 11/16	9 1/8	40	61	239	14.95	70	87	34.50
146424	SW313DS	19 3/4	4 1/8	9 1/8	48	72	287	17.94	90	104	38.00
146425	SW315DS	19 3/4	4 1/2	9 1/8	55	76	335	20.93	110	122	43.25
146426	SW323DS	19 3/4	6 3/8	9 1/8	76	97	527	32.89	195	191	57.00
					6-VOLT SL TYPE						
146427	SL311AS	9 1/4	7 3/16	9 1/8	48	60	268	16.75	85	97	38.00
146428	SL313AS	10 5/16	7 3/16	9 1/8	54	65	321	20.10	110	117	43.25
146429	SL315AS	11 7/16	7 3/16	9 1/8	59	71	375	23.45	135	136	48.25
146430	SL311DS	19 3/4	3 11/16	9 1/8	48	69	268	16.75	85	97	38.00
146431	SL313DS	19 3/4	4 1/8	9 1/8	54	75	321	20.10	110	117	43.25
146432	SL315DS	19 3/4	4 1/2	9 1/8	59	80	375	23.45	135	136	48.25
146433	SL311JS	10 5/16	7 3/16	9 1/8	49	61	268	16.75	85	97	38.00
					6-VOLT SE TYPE						
146434	SE313AS	9 1/4	7 3/16	9 1/8	43	55	321	15.12	83	99	34.00
146435	SE315AS	10 5/16	7 3/16	9 1/8	50	62	375	17.64	100	116	37.25
146436	SE315DS	19 3/4	4 1/8	9 1/8	50	71	375	17.64	100	116	37.25
146437	SE319JS	11 3/8	8 7/8	9 1/8	62	68	482	22.88	135	149	43.50
					6-VOLT SH TYPE						
146438	SH311AS	9 1/4	5 11/16	10 1/2	40	52	239	14.95	70	87	34.50
146439	SH313AS	10 9/16	5 11/16	10 1/2	48	60	287	17.94	90	104	38.00
146440	SH315AS	11 11/16	5 11/16	10 1/2	56	68	335	20.93	110	122	43.25
146441	SH319AS	14 9/16	5 11/16	10 1/2	66	87	431	26.91	150	157	50.00
146442	SH313DS	15 1/4	4 1/8	10 1/2	48	69	287	17.94	90	104	38.00
146443	SH315DS	15 1/4	4 1/2	10 1/2	56	77	335	20.93	110	122	43.25
146444	SH319DS	15 1/4	5 7/16	10 1/2	66	87	431	26.91	150	157	50.00
146445	SH311JS	8 3/8	6 3/8	10 1/2	41	53	239	14.95	70	87	34.50
					6-VOLT SP TYPE						
146446	SP311AS	9 1/4	7 7/16	10 1/2	60	72	336	21.00	117	122	44.75
146447	SP315AS	11 7/16	7 7/16	10 1/2	76	88	471	29.40	175	171	55.25
146448	SP313JS	11 7/16	7 7/16	10 1/2	71	86	404	25.20	150	146	50.00
					8-VOLT SH TYPE						
146449	SH415E	10 5/8	8 1/4	10 1/2	76	97	335	20.93	110	112	59.75

Columbia Storage Batteries are positively guaranteed in writing for one year. No adjustment payments by the purchaser to get another battery when the original battery has failed to make good the guarantee.

COLUMBIA STORAGE BATTERIES

TERMINALS

Columbia Storage Batteries listed include price of terminals. None of these terminals are fixed or burned on and they may therefore be readily installed with cable leading off battery at any angle required. In ordering Columbia Storage Batteries, however, it is best to obtain and order from the Columbia Auto Equipment List, available to any dealer or garage on request.



Double Taper Adapter

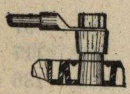
COMBINATION DOUBLE TAPER AND YOKE TERMINAL ADAPTERS

Type ALP—Adapter, Large, Positive.

Type ALN—Adapter, Large, Negative.

Type ASP—Adapter, Small, Positive.

Type ASN—Adapter, Small, Negative.



Flat Lug Adapter

FLAT LUG TERMINAL ADAPTERS

Type AEP—Adapter E, Positive.

Type AEN—Adapter E, Negative.

These are simply sleeves slipped over the posts. The lug shown is not furnished but is already attached to cable on car where this terminal is specified.

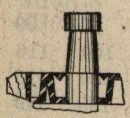
A few types of clamp terminals used fit a straight instead of a tapered post and require sleeve adapters as follows:

SAPL is Sleeve, Adapter, Positive, Large.

SANL is Sleeve, Adapter, Negative, Large.

SAPS is Sleeve, Adapter, Positive, Small.

SANS is Sleeve, Adapter, Negative, Small.



Terminal Post

TERMINAL POSTS ALONE WITH NUT

The plain taper terminal post with clover leaf nut (TNL) is furnished on all standard replacement batteries when no adapters are ordered. When the last letter in a Battery Type number is S (Standard), this type terminal is furnished. It will obviously take the taper clamp terminal as illustrated without any additional part.

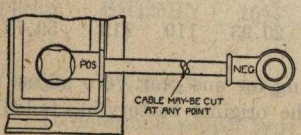


Clamp Terminal

Therefore, when ordering batteries on which no terminals are required, terminating letter S should be specified instead of terminating letter appearing in Battery Type numbers of Auto Equipment List; e. g., SW311AS will be furnished with terminal posts as shown in illustration without terminals.

CLAMP FITTING STANDARD COLUMBIA TERMINAL POSTS

The clamp terminal itself with cable is not furnished with Columbia Batteries. This clamp is used by and already attached to cars where this terminal post is specified.



Bolted Cable Terminal

BOLTED CABLE TERMINALS

Type L is large terminal; Type S is small terminal. These may be furnished with Nos. 2, 4 or 6 cable of proper length.

COLUMBIA STORAGE BATTERIES

REPLACEMENT LIST

Following is the list of individual type of Columbia Storage Battery required for the more popular cars on the market. From this list the proper type of Columbia Battery can readily be ascertained if you know the make, year and model of car. In ordering, besides giving type number of battery indicated herein; also give dimensions of battery, compartment space available and data from name plate of old battery replaced wherever possible.

Abbott

Year	Model of Car	Type Battery	Price Each
1913–14–15	34–40 Touring	SH319AZ	$50.00
1913–14–15	44–50,S Roadster	SW319AZ	50.00
1916	8–80	SH319AY	50.00
1916–17	6–44	SE313AZ	34.00
1916	8–80	SH313AZ	38.00

Alter

1915–16	4–27, C	SL67AZ	50.00
1917	F17, E17	SE313AZ	34.00

Apperson Bros.

1913	4–45, 4–55	SP311AZ	44.75
1914	4–45, 4–55	SW315AZ	43.25
1914	6–60, 6–45	SW313AZ	38.00
1915–16	4–40, 6–48, 6–58, 6–60	SW313AZ	38.00
1917	6–17, 8–17	SW313AZ	38.00

Auburn

1913	40L	SW155AZ	70.75
1913–14	6–45, 4–41, 6–46, 34–L	SW319AZ	50.00
1914	4–40	SW313AZ	38.00
1914–15	4–40, 6–40	SW319AY	50.00
1915–16–17	6–40, 4–38 6–38, 6–39	SL311AP	38.00
1915	6–40	SE315AY	37.25
1916–17	6–40A, 6–44	SL313AZ	43.25

Briscoe

1914–15	14, 15	SW67AX	48.25
1915	15	SH67AZ	48.25
1916	4–38, 8–38	SW67AZ	48.25
1917	4–24	SW313DZ	38.00

Buick

1914–15	B24,B25,B36,B37 B54,B55,C24,C25	SE315DZ	37.25
1915	C36,37,54,C55,C4	SE315AZ	37.25
1916	D44,45,46,47	SE313AZ	34.00
1916	D54, D55	SE315AZ	37.25
1917	All	SE313AS	34.00

Cadillac

1912	1912	SH125HY	62.25
1913	13	SP313JZ	50.00
1914–15–16	14, 51, 53	SH319DZ	50.00
1917	55	SH319DS	50.00

Case

1914	0	SH315AX	50.00
1914	S	SH315AX	43.25
1914–15	R	SH313AX	38.00
1916	T	SH311AZ	34.50
1917	T	SW313AZ	38.00

Chalmers

Year	Model of Car	Type Battery	Price Each
1914–15–16	24, 26, 26B, 29 Mast. 6, & 6–48	SH99GZ	$72.50
1915–16–17	32, Six 40, 35, Six-30	SL311JZ	38.00

Chandler

1913–14–15	14, 15, 16	SH313AY	38.00
1916	17 Series 10000	SW315AZ	38.00
1917	Series 18	SE313AU	34.00

Chevrolet Motor Co.

1914	H4, L6	SH319AZ	50.00
1914–15	H4, L6	SW315AZ	43.25
1916–17	H4, Baby Grand	SW313AZ	38.00
1916–17	490	SL311AT	38.00

Cole

1913	4–40, 4–50, 6–60	SH125HY	62.25
1914–15	9–4, 9–6, Big 6	SH319DZ	50.00
1915	10–4,Std.4,Little 6	SE315AZ	37.25
1916	4–40, 6–66, 8–50	SE315AZ	37.25
1917	8–60	SE315AS	37.25

Comet Automobile Co.

1917	.....	SH315DY	43.25

Crow Elkhart

1913	.....	SW311AZ	34.50
1913–14	.....	SW313AY	38.00
1913–14	.....	SW319AZ	50.00
1914–15	.....	SW313AZ	38.00
1916	CE30	SE67AZ	43.25
1916–17	CE30,CE33,CE35	SE313AZ	34.00

Cunningham

1913–14	.....	SW89AZ	65.75
1915–16–17	V, All 1917	SH315AZ	43.25
1917	V, 2nd Series	SL315DX	48.25

Davis

1913	4, 50	SP311AZ	44.75
1914	Six 50, 35J and K	SW313AZ	38.00
1915	38, A, B and C	SW313AZ	38.00
1916	F, G	SL311AP	38.00
1917	Series 1917,6H,6I	SL311AZ	38.00
1916–17	Series 1917, 6E, 6J, K	SL313AZ	43.25

Detroiter

1912	A2	SH315AY	43.25
1913–14–15	A5, B5, C5, B6	SW315AY	43.25
1916	F	SW315AZ	43.25
1916–17	6–45, 6–46	SL311AZ	38.00

Dodge Bros.

1915–16–17	1915–16–17	SL67AZ	50.00

COLUMBIA STORAGE BATTERIES

REPLACEMENT LIST—Continued

Year	Model of Car	Type Battery	Price Each
Dorris			
1913–14–15	H, I, 1A4	SW313AY	$38.00
1914–15	1, 1A4	SW315AY	43.25
1915–16–17	1A4, 1A6, 1B6	SL313AZ	43.25
Dort			
1915	5	SW67AW	48.25
1916–17	5A, 9	SE313AZ	34.00
Elgin			
1916	Elgin 6	SL311AZ	38.00
1917	Elgin 6, Series 1917	SL313AT	43.25
Emerson			
1917	Four	SL311AR	38.00
Empire			
1913	31	SW315AZ	43.25
1914	31–40	SW69AY	55.25
1915	33	SW69EZ	55.25
1915	40	SW313DZ	38.00
1916–17	45, 60, 70	SW313AZ	38.00
Enger			
1913–14	P	SW87AY	58.75
1914–15	Six 50	SW313AZ	38.00
1916	Twin Six	SL311AT	38.00
1917	4-cyl. & 12-cyl.	SE313AU	34.00
Ford			
1914–15–16	Leece-N&North E	SH125HZ	63.75
1915	Splitdorf	SW67AZ	48.25
1915	Genemotor	SW67AX	48.25
1915–16	Westinghouse	SL67AZ	50.00
1915–16	Gray & Davis	SH311JZ	34.50
1915	Gray & Davis	SL311JZ	38.00
1915	Northeast	SH69AZ	55.25
1916	Northeast	SH69GZ	55.25
1916	Kemco	SW315AZ	43.25
1916	Dyneto	SW67AX	48.25
1916–17	Heinze-Springf'ld	SW313AZ	38.00
1917	Gray & Davis	SL311AU	38.00
1917	Eveready	SW67AX	48.25
1917	Genolite-Lighting	BW35AZ	18.00
1917	Detroit Elec. Weld.	SE313AU	34.00
Franklin			
1913–14	Series 2, 3, 4, 5	SH97GZ	62.25
1914–15–16	Series 6, 7, 8	SH611AZ	60.50
1916–17	Series 9	SL67AZ	50.00
Glide Bartholomew Co.			
1913	36, 42	SW313AY	38.00
1914	30, 36	SW313AZ	38.00
1915–16–17	30, Lt. Six 40	SW313DZ	38.00
Grant			
1916	U	SL311DZ	38.00
1917	K	SE313AZ	34.00
Gray Dort			
1916	5A	SE313AZ	34.00
1917	9	SE313AU	34.00
Haynes			
1912–13	22, 23, 24, 25	SH615EZ	69.00
1914–15	26, 27, 28, 31, 32	SW611AZ	60.50
1915–16	30, 33, 34, 35	SH315AZ	43.25
1916–17	36,37,38,39,40,41	SL315AZ	48.25
Hudson			
1913	37, 54	SH125HY	$62.25
1914–15	6–54	SH319DZ	50.00
1914–15	6–40	SE315AY	37.25
1916	6–40	SE315AZ	37.25
1916–17	Supersix	SE315AS	37.25
Hupmobile			
1914	HA	SW315AZ	43.25
1915	K	SW69AY	55.25
1916–17	N,NL,NQ,NR, NU, Ser. N-1,2,3,4	SL313AZ	43.25
Interstate			
1913–14	40, 45, 50	SW155AZ	70.75
1915	T	SW313AZ	38.00
1916	T	SL311AZ	38.00
1917	T,TC,TD,TR,TR4	SL311AZ	38.00
Jackson			
1914	43, 53	SH319AZ	50.00
1914–15	33, 44, 46	SW315AY	43.25
1915	48	SE315AY	37.25
1916	68	SW315AZ	43.25
1916–17	34, 348, 350	SW313AY	38.00
1917	349	SE313AZ	34.00
Jeffery Nash Motors Co.			
1913	Rambler Cross Country	SE127AZ	74.25
1914–15	Four	SW613AZ	63.75
1914	Six	SE127AZ	74.25
1915	Chestf. 6	SW315AZ	43.25
1916	462, Chestf. 6	SL313AX	43.25
1917	All	SW313AZ	38.00
King			
1913	A	SW311AZ	34.50
1914	B	SH313AY	38.00
1915	C	SW313AZ	38.00
1916–17	D, E	SE313AZ	34.00
Kissel Kar			
1913–14	.....	SW319AY	50.00
1913–14	.....	SE67AY	43.25
1914–15	4–36, 6–42	SW315AZ	43.25
1915	4–36, 6–42	SL313AZ	43.25
1916–17	4–32, 6–42	SL311AZ	38.00
Kline Kar			
1913–14	4–40, 6–50, 6–60	SH319AZ	50.00
1913–14	4–30	SH315AY	43.25
1915	6–42, 6–42A	SH319AZ	50.00
1916	6–36	SL311AZ	38.00
1917	6–38 Series F	SE313AU	34.00
Knox			
1913–14–15	R, S, 35, 36	SW319AZ	50.00
1915	Tractor	SW323AY	57.00
1915–16–17	35, 36	SW323AZ	57.00
Lexington Howard			
1914	H	SW319AZ	50.00
1914–15	H, 4K, 6L, M	SH315AZ	43.25
1916–17	6N, 6P	SL313DZ	43.25
1916–17	O	SL311AZ	38.00
Liberty			
1916–17	10A	SE313AZ	34.00

COLUMBIA STORAGE BATTERIES

REPLACEMENT LIST—Continued

Year	Model of Car	Type Battery	Price Each
Locomobile			
1912–13–14	R2,R3,M3,R4,M4	SH319AZ	$50.00
1915	R5, M5	SH319AY	50.00
1915–16	R5, M5, R6, M6	SH319AW	50.00
1917	R238, M248	SH319AW	50.00
Lozier			
1913	27	SH319AZ	50.00
1913–14	22, 22A, 27	SP311AZ	44.75
1914-15-16-17	30, 32, 34	SW313AZ	38.00
McFarlan			
1915–16–17	All	SW319AY	50.00
McLaughlin			
1913–14	6–50	SP311AZ	44.75
1914–15–16	6–50, 6–19	SP311AY	44.75
1917	All	SE313AS	34.00
Madison			
1915–16–17	T, T7	SL313DZ	43.25
Majestic			
1917	All	SW313AZ	38.00
Marion			
1913–14–15	.....	SW319AZ	50.00
1916–17	K,6–40A,6–60B	SW313AZ	38.00
Marmon (Nordyke & Marmon Co.)			
1912	32	SW311AZ	34.50
1913–14	32, 48, 41	SW89AZ	65.75
1915–16–17	48, 41, 34	SW69AY	55.25
Maxwell			
1913–14	50–6	SP311AZ	44.75
1914	35	SW315AZ	43.25
1914–15	25, Series Nos. 1 to 22000	SW313AT	38.00
1915–16–17	25	SW67AU	48.25
Mercer			
1913–14	35G, H, M	SW319AZ	50.00
1913–14	35K, 350	SH319AZ	50.00
1915	22–70	SH613AZ	63.75
1916	22–72	SL611EZ	62.25
1917	22–73	SL611AZ	62.25
Meteor			
1914	36, 40, 45	SW313AY	38.00
1914	36, 40, 45	SW315AY	43.25
1914	40, 45	SW67AY	48.25
1914	40, 45	SW69AZ	55.25
1915	50	SW313AZ	38.00
1915	50	SW611AZ	60.50
1916–17	75, 80	SL311AP	38.00
Metz			
1913–14	22 Series 1913	SW125AZ	63.75
1914	22 Series 1914	SW67AY	48.25
1914	22 Series 1914	SW69AZ	55.25
1915–16–17	All	SH311JZ	34.50
Mitchell			
1913	2–4, 5–4, 7–4, 2–6, 5–6, 7–6	SH319AZ	50.00
1914	A5–40, A5–50 Sp. 6 De Luxe	SW319AZ	50.00
1915	Lt. 6	SP69AZ	63.00
1915–16	Lt.4, 6 or 16	SP69AZ	56.25
1916	Eight	SW319AY	50.00
1917	C42, 2nd Series 1916	SL313AZ	43.25
1917	D40, 2nd Series 1916	SE313AZ	34.00
Monroe			
1914	M2, M2½	SH319AZ	$50.00
1914–15	M2, M2½	SW315AZ	43.25
1915	M2, M2½	SW313AZ	38.00
1916–17	M2, M3	SW311AY	34.50
Moon			
1913	39 & 48	SW69AZ	55.25
1914–15	4–42, 6–50	SH319DZ	50.00
1915	4–38, 6–40	SE315AY	37.25
1916–17	6–30, 6–44, 6–66, 6–43	SE315AZ	37.25
National			
1913–14	Series V1, V3	SP311AZ	44.75
1914	Series 6W	SW313AZ	38.00
1915	AA, AB	SW315DZ	43.25
1916–17	Highway 6AC,AE,AF	SL313DZ	43.25
1916–17	Highway 12AD,AH,AK	SW315DZ	43.25
Norwalk			
1914	C, D	SW315AY	43.25
1914-15-16-17	C, D, F	SW313AY	38.00
Oakland			
1913	42, 6–60	SH125HY	62.25
1914	48, 62	SP313JY	50.00
1913–14	35	SH319AZ	50.00
1913–14–15	35, 36, 37, 43, 49	SE315AY	37.25
1916	32	SL311AP	38.00
1916	38	SE313AZ	34.00
1916–17	50	SE315AZ	37.25
1917	32	SE313AS	34.00
Oldsmobile			
1913	53	SH125HY	62.25
1914–15	54, 55	SP313JY	50.00
1915	42	SE315AY	37.25
1916	43, 44	SE313AZ	34.00
1917	45	SE313AS	34.00
Olympian			
1917	All	SW311AY	34.50
Overland			
1913	69, 71	SE127AZ	74.25
1913–14	69, 71, 65, 79	SW313AZ	38.00
1915	80, 81, 82	SW313DY	38.00
1916	85, 85–6, 86, 83, 83B, 83 B.O.E.	SW313DY	38.00
1916–17	75,90T,90R,90CC and Delivery	SL311AU	38.00
1917	85–4, 85–6, 86B 88–6	SW313DY	38.00
Packard			
1913	138–348	SP313JZ	50.00
1913	138–348	SH415EZ	59.75
1914–15–16	238, 338, 448, 548, 125, 135	SW319AW	50.00
Paige-Detroit			
1913–14	25	SH67AY	48.25
1913–14–15	36, 25	SP311AZ	44.75
1914–16	36, 6–38, 6–46	SW313AZ	38.00
1917	K-6–17, J-6–17	SL313AZ	43.25
1917	651 & 646	SL313AZ	43.25
Partin Palmer			
1917	.....	SE313AU	34.00

COLUMBIA STORAGE BATTERIES

REPLACEMENT LIST—Continued

Pathfinder

Year	Model of Car	Type Battery	Price Each
1913–14	All–1913,4AC, D, E	SP311AZ	$44.75
1914	6A, B, D, L	SW313AZ	38.00
1915	7A, B, C	SW319AY	50.00
1915–16–17	1B, 1C, 2B, C, D	SW323DZ	57.00
1916	8A, 8B, 8C	SL313DZ	43.25

Peerless

1913	38–6, 48–6, 60–6	SP311AZ	44.75
1914–15	38–6, 48–6, 60–6	SP315AZ	55.25
1915	DD, EE, 54, 55	SW313AZ	38.00
1916	FF	SL313AZ	43.25
1916–17	57, 56, 2nd Series	SL315AZ	48.25

Pierce Arrow

1914	38C2, 48B2	SH313AY	38.00
1914–15–16	66A2,A11,1915–16	SE315AY	37.25
1917	All series, A4, B4, C4	SE319JZ	43.50

Pilot

1913–14	40	SP311AZ	44.75
1913–14	60	SW313AY	38.00
1914–15	75	SW313AZ	38.00
1915	55	SW315AY	43.25
1916–17	6–45	SL311AZ	38.00

Premier

1913	6–40, 6–60	SW67AY	48.25
1913–14–15	6–40, 6–49, A Weidley,6–50,6–51	SH319AY	50.00
1917	6B	SL313DZ	43.25

Pullman

1915–16	Pullman Jr.	SH69AY	55.25
1917	424	SL311AU	38.00

Regal

1914	LN, LT, LC	SW315AZ	43.25
1915	R. & D.	SW313AZ	38.00
1916	Lt. 4, Std. 4, Regal 8	SW67AX	48.25
1917	J, 4–32	SL311AZ	38.00

Reo

1913–14–15	R, S, M, F	SP311AZ	44.75
1916–17	R, S, M, N, F	SL313AZ	43.25

Saxon

1915	A	SW311AZ	34.50
1915	Six	SW313AZ	38.00
1915–16	S, S2	SL311AZ	38.00
1917	S4, B5, B14	SE313AS	34.00

Scripp-Booth

1915	C	SW67AY	48.25
1916–17	C4, D6, D8	SE313AZ	34.00
1917	C4	SL311AU	38.00

Standard Steel Car

Year	Model of Car	Type Battery	Price Each
1913	6	SW319AZ	50.00
1914	6	SW315AY	43.25
1915	6	SW313AZ	38.00
1916–17	8, F	SW313DZ	38.00
1917	E	SW315DZ	43.25

Stearns

1912–13	SK-4	SW311AZ	34.50
1913	SK-6	SP315AZ	55.25
1913–14–15	SK-4	SP311AY	44.75
1913–14–15	SK-6	SP315AY	55.25
1915	SK-L4	SW313DZ	38.00
1915	SK-L4	SL69EZ	56.25
1916–17	SK-L4	SL69EY	56.25
1916–17	SK-8	SL611EZ	62.25

Studebaker

1913	E-AA	SW69AX	55.25
1914–15	EB, SC, EC, SD	SW315AZ	43.25
1916–17	ED, SF, 7 Series 1917	SE315AZ	37.25

Stutz

1913	.....	SW315AY	43.25
1914–15	.....	SH319AY	50.00
1914–15–16–17	E, F, C, R4	SW319AZ	50.00

Velie

1913–14–15	9, 10, 11, 12, 14, 15	SW313AZ	38.00
1914	R & 6	SP311AZ	44.75
1914	R & 6	SP311AY	44.75
1915–16	15 Series 15	SW313AZ	38.00
1915–16	22 Series 22	SL311AZ	38.00
1916–17	Biltwell–27 Series	SW313AZ	38.00
1916–17	Biltwell–28 Series	SL311AZ	38.00

Westcott

1913–14	6–60	SW319AZ	50.00
1913–14	4–40	SW87AZ	58.75
1914	0–30	SW313AY	38.00
1915	0–35, U–50	SE315AY	37.25
1916–17	41, 42, 51, S–17	SL313AZ	43.25

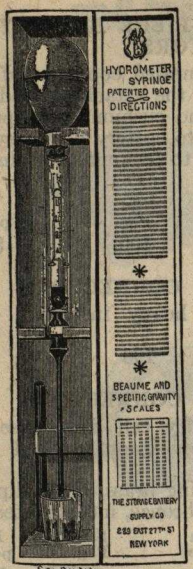
White

1913–14–15–16	40 & 60 H. P.	SH911GZ	79.50
1913–14–15–16	30 H. P.	SH97GZ	62.25
1917	GM Series 1917	SL69EY	56.25

Winton

1915–16–17	21, 22	SH319DY	50.00
1915–16–17	21A, 22A	SH315DZ	43.25

BATTERY SUPPLIES



No. 1

HYDROMETER SYRINGES

Designed for testing the specific gravity of a liquid without pouring it into another vessel. Can be used also for filling storage batteries and regulating the quantity of acid above the plates. Are also adapted for testing the fluid of any kind of battery, or any bottled or barreled liquid.

No. 1

Equipped with the best quality 6-oz. rubber bulb and guiding points on the hydrometer float with buffers at each end to prevent breakage. The hydrometer is graduated in both Baumé 10° to 40° and specific gravity 1050 to 1400.

Furnished complete in polished oak case, ready to be hung on the wall, with plain hard rubber nozzle and special hard rubber nozzle for filling cells with the proper amount of electrolyte above the plates and drip cup in bottom of box. Length of instrument, 19 inches; oak box, 21 inches long by 3½ inches square. Weight, packed for shipment, 3 pounds.

Trade No.	Mfrs. No.	Description	Price Each
094121	151	Complete, as described	$10.80
094122	152	Same as above, in plain box, 15 inches long by 3½ inches square. Weight, 2½ pounds	8.10
094123	156	Extra hydrometers	1.80
094124	153	Extra rubber bulbs	1.80
094125	154	Extra glass tubes	.45
094126	155	Extra nozzles	.72



No. 2 No. 3

No. 2

Storometer or battery meter, a cheaper style without guiding points on hydrometer, or special nozzle. Hydrometer graduated 1150 to 1325 specific gravity only. Length, 14 inches; packed plain box 14x3½ inches. Weight, 12 ounces.

094127	161	Complete, as described	5.40
094128	164	Extra hydrometers	1.80
094129	162	Extra rubber bulbs	1.35
094130	163	Extra glass tubes	1.35
094145	165	Nozzle and plug	.45

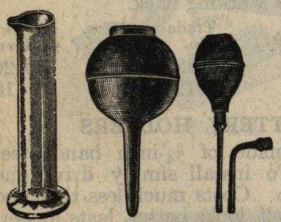
No. 3

Same as No. 2 but smaller bulb and hydrometer. Hydrometer graduated Baumé 15° to 35° and specific gravity 1100 to 1300. Length, 12 inches; packed in plain box. Weight, 8 ounces.

094131	171	Complete as described	2.70
094132	174	Extra hydrometers	.90
094133	172	Extra rubber bulbs	.90
094134	173	Extra glass tubes	.90
094146	175	Nozzle and plug	.45

HYDROMETER JARS

021261	104	6x1 inch	.54
021262	131	12x2 inches	1.62



Nos. 104-131 Nos. 190-192 No. 105

ACID SYRINGES, ONE PIECE, PURE GUM

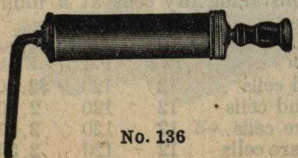
094138	190	Weight, 1 oz.; diam., 1¾ in.; length, 3½ in	.45
094139	191	Weight, 3 oz.; diam., 2½ in.; length, 5 in.	1.08
094140	192	Weight, 6 oz.; diam., 3 in.; length, 6 in.	1.80

BULB SYRINGES

021263	105	Capacity, 8 ounces	2.70
021264	132	Extra bulbs, with fittings	1.80
021265	133	Extra nozzle	1.08

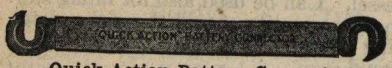
HARD RUBBER BATTERY SYRINGES

021266	136	Syringe, capacity 12 oz	7.20
094141	137	Extra nozzle, 6 in. long	1.08
094142	138	Syringe, capacity 32 oz	21.60
094143	139	Extra nozzle, 9 in. long	1.80
094144	140	Extra nozzle, 24 in	4.05



No. 136

BATTERY SUPPLIES



Quick Action Battery Connector



Flexible Battery Connector



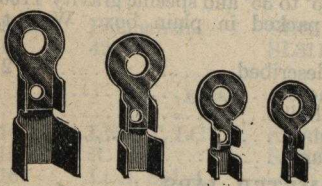
Bulldog Battery Connector



Fahnestock Battery Connector

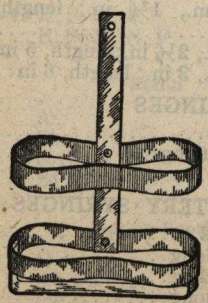


Sta-There Battery Connector



No. 3 No. 2 No. 1 No. 0

Copper Wire Terminals



Economy Battery Holder

QUICK ACTION ONE-PIECE BATTERY CONNECTORS

Made of one piece of annealed copper, perfectly and permanently insulated; the attaching ends are ribbed to provide stiffness and cushion; the opening is a slot, making attachment to battery post easy and quick; the point is turned up to prevent the complete disconnection if nut backs off.

Trade No.	Length Inches	Std. Pkg.	Price per 100
052838	3½	100	$1.50

FLEXIBLE BATTERY CONNECTORS

Terminals are made of heavy insulated cord. Each terminal soldered.

052837	4¼	100	2.50

BULLDOG BATTERY CONNECTORS

Grip the terminals of a dry cell like a vise and never work loose. Easily applied or renewed with thumb and finger.

No. 1025 is made of spring brass, brass dipped; No. 1026 is made of phosphor-bronze, nickel-plated.

Trade No.	Mfrs. No.	Length Inches	Std. Pkg.	Price per 100
107123	1025	4½	10	$4.50
107122	1026	4½	10	5.00

FAHNESTOCK BATTERY CONNECTORS

Slip this connector over any type of screw binding post. It grips like a vise.

107121	....	4⅝	100	8.00

STA-THERE BATTERY CONNECTORS

Placed in position by pressing the spring clips together and placing them over the binding screws. The tension of the spring is sufficient to maintain a perfect contact even if the nuts should work loose and become lost. The spring contacts are of phosphor-bronze and are securely fastened to the conductor cord.

107124	....	....	....	6.00

COPPER WIRE TERMINALS

Terminals can be easily attached with or without solder. The short wings are designed to clamp the bare strands of wire and the long wings clamp the insulation and prevent its working back.

Trade No.	Mfrs. No.	Price per Doz.	Trade No.	Mfrs. No.	Price per Doz.
107125	3	$0.30	56127	1	$0.20
107126	2	.25	56128	0	.10

ECONOMY BATTERY HOLDERS

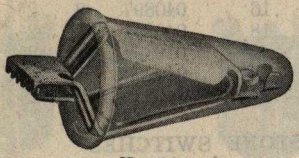
A skeleton holder made of ¾-inch band steel thoroughly enameled. To install simply drive one nail or screw and hang up. Costs much less than the wooden battery box or shelf, looks better, lasts longer, collects no dirt and furnishes a neat, light, durable and efficient means of installing dry cells at a minimum cost.

Trade No.	Description	Unit Pkg.	Std. Pkg.	Price Each
107129	For two round cells..	12	120	$2.00
107130	For three round cells	12	120	2.50
107131	For two square cells.	12	120	2.00
107132	For three square cells	12	120	2.50

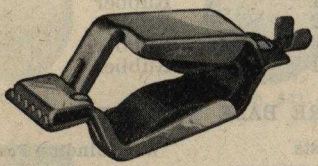
UNIVERSAL CLIPS



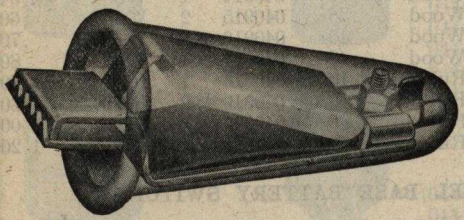
No. 8



No. 14



No. 21



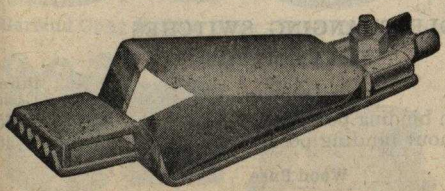
No. 12



No. 13A



No. 21A



No. 11A

TEST CLIPS

Universal Test Clips are time savers in any electrical work requiring quick temporary connections.

They may be used over and over again. Suggested for use with test sets, with volt-meters, on shop testing devices, by telephone linemen, as a helix clip, by meter departments, by railway signal inspectors, in college and commercial laboratories, on motor and transformer test floors and in motion picture projection work.

Trade No.	Mfrs. No.	Description	Price Each
90239	8	Clip only, 10-amp., soldered connection; spread of jaws, 11/16 in	$0.30
90240	9	Clip with insulator, 10-amp., soldered connection; spread of jaws, 11/16 in	.40
90241	4	Insulator only, for 10-amp. size	.15
122095	13	Clip only, 20-amp., screw connection; spread of jaws, 3/4 in	.30
122097	14	Clip with insulator, 20-amp., screw connection; spread of jaws, 3/4 in	.40
122099	15	Insulator only, for 20-amp. size	.15
90017	21	Clip only, 50-amp., screw connection; spread of jaws, 1 1/2 in	.70
90018	22	Clip with insulator, 50-amp., screw connection; spread of jaws, 1 1/2 inch	.90
90019	23	Insulator only, for 50-amp. size	.30
122100	11	Clip only, 100-amp., cleat connection; spread of jaws, 1 in	1.10
122102	12	Clip with insulator, 100-amp., cleat connection; spread of jaws, 1 in	1.30
90238	7	Insulator only, for 100-amp. size	.30

Nos. 8 and 9 are especially intended for telephone and signal work.

The 20, 50 and 100-amp. sizes are intended for work requiring current carrying capacity.

BATTERY CHARGING CLIPS

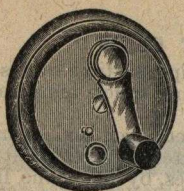
Battery charging clips are for use as a quick and ready means of connecting portable storage batteries for charging. They are lead-plated to resist acid fumes.

They enable one to charge lighting and starter batteries without disconnecting them from the car. Do not stop to clean dirty terminals; the teeth bite through the corrosion and make a good contact.

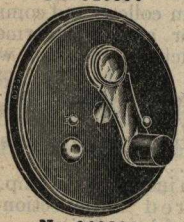
122096	13A	15-amp. screw connection, spread of jaws, 3/4 in	.30
90020	21A	Clip only, 35-amp., screw connection; spread of jaws, 1 1/2 in	.40
122101	11A	Clip only, 100-amp., cleat connection; spread of jaws, 1 in	1.20

Illustrations are Half Actual Size

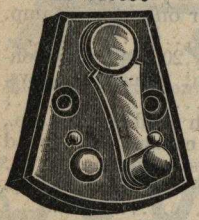
BATTERY SWITCHES



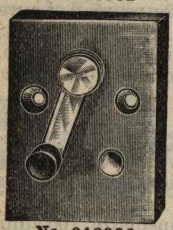
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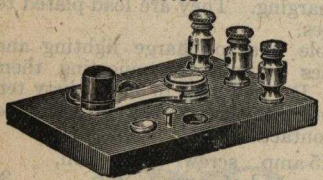
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No. 086748



No. 086751



No. 04091b



No. 040922

ROUND SWITCHES

Wood Base				Rubber Base			
Trade No.	No. of Points	Diam. Inches	Price Each	Trade No.	No. of Points	Diam. Inches	Price Each
040890	1	2¼	$0.14	040896	1	2⅝	$0.32
040891	2	2¼	.16	040897	2	2⅝	.36
040892	3	2¼	.18	040898	3	2⅝	.46
040893	4	2¼	.20	040899	4	2⅝	.50
040894	5	2¼	.28	040900	5	2⅝	.60
040895	6	2¼	.30	040901	6	2⅝	.64

KEYSTONE SWITCHES

Trade No.	No. of Points	Style Base	Price Each
040902	1	Rubber	$0.32
040903	2	Rubber	.36
040904	3	Rubber	.46
040905	4	Rubber	.70

SQUARE BASE SWITCHES

Without Binding Posts				With Binding Posts			
Trade No.	No. of Points	Style Base	Price Each	Trade No.	No. of Points	Style Base	Price Each
040906	1	Wood	$0.36	040914	1	Wood	$0.54
040907	2	Wood	.38	040915	2	Wood	.60
040908	3	Wood	.40	040916	3	Wood	.70
040909	4	Wood	.48	040917	4	Wood	.80
040910	1	Rubber	.40	040918	1	Rubber	.70
040911	2	Rubber	.50	040919	2	Rubber	.80
040912	3	Rubber	.60	040920	3	Rubber	1.00
040913	4	Rubber	.70	040921	4	Rubber	1.20

STEEL BASE BATTERY SWITCHES

Jefferson Steel Base Battery Switches embody all the essentials of a perfect design, electrically and mechanically. Suitable for all classes of low voltage work. Their rugged construction makes this type of switch particularly adaptable for ignition circuits on marine, stationary, tractor and portable engines.

A steel base switch eliminates the danger of warping and breaking; features which have always been objectionable to the composition base switch. Heat or the elements have no effect on the Jefferson Metal Base Switch. For this reason they can be mounted on the waterjacket, cylinder head or any other convenient place.

Single Throw

Trade No.	Mfrs. No.	Description	Price Each
086748	1	Plain handle	$0.15
086749	1	Insulated handle	.25

Double Throw

086750	2	Plain handle	.25
086751	2	Insulated handle	.30

POLE CHANGING SWITCHES

Hard Rubber Base

Trade No.	Description	Price Each
040922	With binding posts	$1.65
040923	Without binding posts	1.40

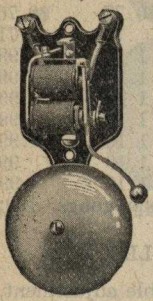
Wood Base

040924	With binding posts	1.05
040925	Without binding posts	.80

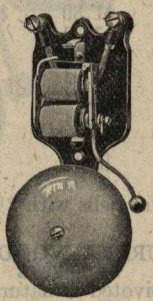
ANSONIA IRON BOX BELLS AND BUZZERS







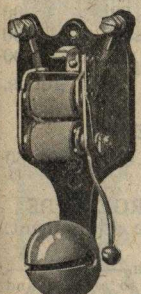
No. 631



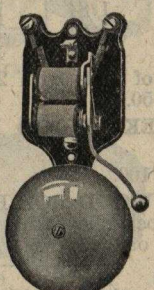
No. 641







No. 641
with Sleigh Gong



No. 659



Cow Gong



Dome Gong



Tea Gong



Garland Gong



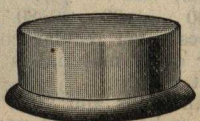
Mikado Gong



Swiss Gong



Iron Box Buzzer



Nutmeg Buzzer

No. 631 ACME IRON BOX BELLS

Class A

These bells have pivoted armature, double adjustment and high resistance, stamped base and cover.

Trade No.	Style Gong	Price, Each: Less than 10	10 to 99	100 to 499	500 and Over
044471	2½-inch	$0.85	$0.62	$0.47	$0.43
044472	3-inch	.87	.64	.48	.44
044473	4-inch	1.16	.84	.63	.58
044474	Sleigh	1.43	1.04	.77	.72
044475	Cow	1.43	1.04	.77	.72
044476	Dome	1.43	1.04	.77	.72
044446	Tea	1.43	1.04	.77	.72
044447	Garland	1.43	1.04	.77	.72
044448	Mikado	1.43	1.04	.77	.72
90701	Swiss	1.43	1.04	.77	.72

No. 641 EUREKA IRON BOX BELLS

Class B

These bells have pivoted armature, double adjustment, stamped base and cover. Works are mounted on soft stamped frame, japanned finish.

044449	2½-inch	.73	.53	.40	.37
044450	3-inch	.77	.57	.42	.39
044451	4-inch	1.05	.76	.57	.52
044452	Sleigh	1.28	.93	.70	.64
044453	Cow	1.28	.93	.70	.64
044454	Dome	1.28	.93	.70	.64
044455	Tea	1.28	.93	.70	.64
044456	Garland	1.28	.93	.70	.64
044457	Mikado	1.28	.93	.70	.64
90702	Swiss	1.28	.93	.70	.64

No. 659 WIZARD IRON BOX BELLS

Class C, Non-adjustable Type

044458	2½-inch	.66	.48	.36	.32
044459	3-inch	.72	.51	.38	.35
044460	4-inch	.94	.72	.54	.49
044461	Sleigh	1.21	.88	.66	.60
044462	Cow	1.21	.88	.66	.60
044463	Dome	1.21	.88	.66	.60
044464	Tea	1.21	.88	.66	.60
044465	Garland	1.21	.88	.66	.60
044466	Mikado	1.21	.88	.66	.60
90703	Swiss	1.21	.88	.66	.60

IRON BOX BUZZERS

044467	Acme	.81	.59	.43	.40
044468	Eureka	.70	.51	.38	.35
044469	Wizard	.65	.47	.35	.31

The above will be wound to special resistance, if desired, at reasonable additional charge.

No. 666 NUTMEG WATCHCASE BUZZERS

The works of the Nutmeg Watchcase Buzzer are built along the lines of the Eureka Bell on a smaller scale; the binding posts, which are brass heavily plated, are concealed. The cover springs on over a raised flange on the base, and is thereby held firmly in position without the aid of springs or screws. It is easily removed and as easily replaced.

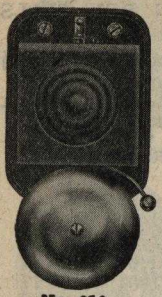
This buzzer is designed for use where a loud noise is objectionable and neatness is desired.

Base and cap are of sheet bronze or brass.

Trade No.	Wt., Lbs. Std. Pkg.	Less than 10	10 to 99	100 and Over
044470	25	$0.58	$0.44	$0.39

Standard package quantity of buzzers, bells with 2½ and 3-inch gongs and sleigh gongs is 100; with fancy and 4-inch gongs, 50.

ANSONIA WOOD BOX BELLS AND BUZZERS



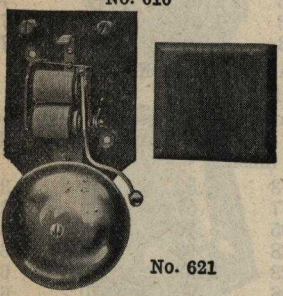
No. 610

No. 610 EUREKA ROSETTE WOOD BOX BELLS

These bells have pivoted armature and double adjustment. Box regularly furnished in oak, ash or maple. Other woods furnished to order at an additional charge.

Trade No.	Style Gong	Price, Each: Less than 10	10 to 99	100 to 499	500 and Over
044429	2½-inch	$1.39	$1.00	$0.77	$0.70
044430	3-inch	1.41	1.02	.78	.71
044432	Sleigh	1.94	1.44	1.10	.99
044433	Cow	1.94	1.44	1.10	.99
044435	Tea	1.94	1.44	1.10	.99
044434	Dome	1.94	1.44	1.10	.99
044436	Garland	1.94	1.44	1.10	.99
044437	Mikado	1.94	1.44	1.10	.99
102081	Swiss	1.94	1.44	1.10	.99

Standard package of bells with 2½ and 3-inch gongs, 100; with fancy gongs, 50.



No. 621

No. 621 EUREKA WOOD BOX BELLS

CLASS B

These bells have pivoted armature and double adjustment. Box regularly furnished in oak, ash or maple. Other woods furnished to order at an additional charge.

044443	2½-inch	1.27	.92	.70	.62
044444	3-inch	1.29	.94	.71	.63
044445	4-inch	1.55	1.13	.86	.76
044422	Sleigh	1.84	1.34	1.02	.90
044423	Cow	1.84	1.34	1.02	.90
044425	Tea	1.84	1.34	1.02	.90
044424	Dome	1.84	1.34	1.02	.90
044426	Garland	1.84	1.34	1.02	.90
044427	Mikado	1.84	1.34	1.02	.90
102082	Swiss	1.84	1.34	1.02	.90

Standard package of bells with 2½, 3 and 4-inch gongs, 100; with fancy gongs, 50.

No. 621 EUREKA WOOD BOX BUZZERS

044428	Buzzer	1.22	.89	.68	.60

Standard package, 100.



No. 621L

No. 621L EUREKA WOOD BOX BELLS, LARGE TYPE

These bells have rocker armature and double adjustment. Wood box is quartered oak.

Trade No.	Size Inches	Standard Package	Price, Each: Less than 6	6 to 24	25 to 49	50 and Over
044440	4	50	$3.00	$2.70	$2.30	$2.00
044441	5	25	3.50	3.00	2.70	2.40
044442	6	25	4.00	3.50	3.00	2.75



No. 658

No. 658 EUREKA MONITOR BELLS

These bells have pivoted armature and double adjustment. Base in japanned finish; nickel-plated gong; outside diameter, 3½ inches.

Trade No.	Size Inches	Standard Package	Price, Each: Less than 10	10 to 99	100 and over
044438	3	100	$0.84	$0.63	$0.56

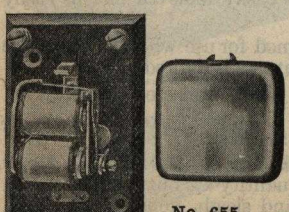


No. 661

No. 661 MONITOR BELLS

These bells have single adjustment. Outside diameter of base, 3½ inches. Base black japanned finish. Gong nickel-plated.

102083	3	100	.84	.63	.56



No. 655

No. 655 METAL CAP WOOD BASE BUZZERS

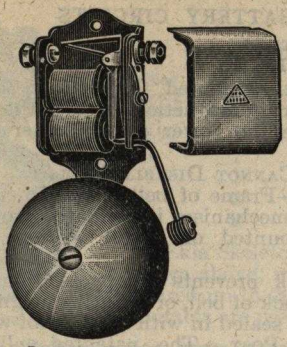
Trade No.	Size Inches	Standard Package	Price, Each: Less than 6	6 to 24	25 to 99	100 to 299	300 and Over
044439	..	100	.90	.80	.75	.70	.68

The above prices cover regular coin silver contacts only. When platinum or other material is required, prices will be furnished on request.

Assortment of all kinds and sizes of iron and wood box bells and buzzers to make standard package quantity allowed.

Fancy gongs are illustrated on the preceding page.

BELLS, BUZZERS AND CIRCUIT CLOSING DEVICES



Lungen Bell

LUNGEN BELLS

No. 13—3 Ohms

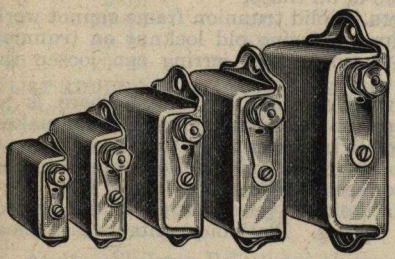
Cover and base formed steel; unit hammer rod and armature; pivoted armature; small hammer rod channel; heavy spring nut adjustment; brass gong heavily nickeled; ribbed edges, spring cover. Compact, positive acting, durable. insect-proof.

Trade No.	Mfrs. No.	Size Inches	Std. Pkg.	Price Each
094351	13	1	6	$1.00
094352	13	1¾	6	.90
094353	13	2	6	.92
094354	13	2½	12	.70
094355	13	3	12	.75
094356	13	4	12	1.00

Fancy gongs may be used on the 2½-inch size; price, complete bell, each, $1.08.

FINISH.—1-inch size, all nickel; other sizes, enameled base, nickel gong and cover.

Special finishes. Prices on application.



Lungen Buzzers

LUNGEN BUZZERS

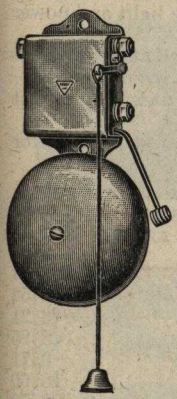
No. 15—3 Ohms

Cover and base formed sheet steel; pivoted armature; spring nut adjustment; ribbed edge spring cover. Positively dust and insect-proof.

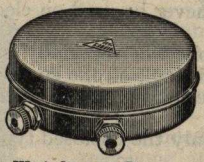
Trade No.	Size No.	Std. Pkg.	Price Each	Trade No.	Size No.	Std. Pkg.	Price Each
094364	0	12	$0.90	094367	3	12	$0.85
094365	1	25	.65	094368	4	12	.90
094366	2	12	.80	.....	..	..	....

FINISH.—No. 0, full nickel; larger sizes, japanned base, nickel cover.

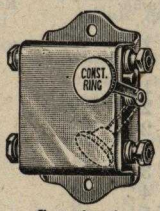
Special finishes. Prices on application.



Constant Ringing Bell



Watchcase Buzzer



Constant Ringing Drop

BRONX BUZZERS

Watchcase, No. 750—3 Ohms

A brass case, heavily nickel-plated; phosphor-bronze springs; silver contacts. Packed one in a paper box, 25 boxes in a carton. Dust, rust and insect-proof. Specially convenient to carry in pocket for testing. The smallest round buzzer made.

Trade No.	Mfrs. No.	Size, Inches Ht.	Diam.	Price, Each Less than 10	10–99	100 or more
094369	750	⅝	1¾	$0.58	$0.44	$0.39

CIRCUIT CLOSING DEVICES

Constant Ringing Bell, No. 27—4 Ohms

When circuit closes, lever drops and bell rings until circuit is broken by raising lever. Cover, lever and binding posts, nickel; japanned base.

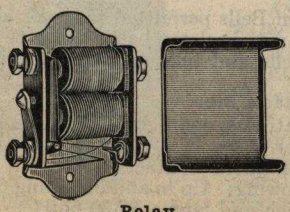
Trade No.	Size Inches	Price Each	Trade No.	Size Inches	Price Each
091725	2½	$1.70	091728	5	$4.00
091726	3	1.80	091729	6	6.00
091727	4	2.00	.....	..	....

Constant Ringing Drop, No. 26—4 Ohms

Used on main line. Operation same as No. 27.

Trade No.	Mfrs. No.	Description	Std. Pkg.	Price Each
091730	26B	For battery.....	6	$1.25
091731	26M	For magneto, 80 ohms	6	1.75
091732	26X	Indicating buzzer....	6	1.75

Assortment permitted to make standard package.



Relay

Relay, No. 112—10 Ohms

Used for closing external or secondary circuits.

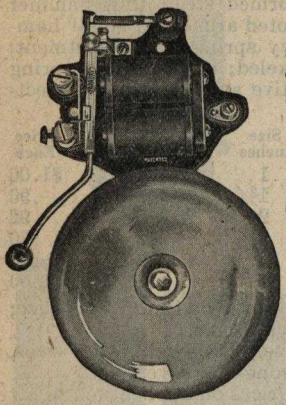
091733	112	Nickel finish, jap. base	6	1.50

FARADAY SKELETON BELLS

MODEL O, VIBRATING TYPE FOR BATTERY CIRCUITS

Cannot be used on A. C. Circuits

DECISIVE POINTS OF SUPERIORITY



HIGH-POWER ARMATURE.—Patented high-power armature allows the keeping of armature in magnetic field up to the moment of striking the gong—twice the power of any other skeleton mechanism made.

BREAKAGE OF SPRINGS CANNOT DISABLE BELL.

INSULATED MECHANISM.—Frame of bell carries no current at any time, as entire electrical mechanism is insulated from frame casting. Bells may be mounted on metal without fear of grounding.

SOLID BACK.—Solid back prevents dampness from getting into insulation washers on back of bell, or affecting magnet windings. All insulation washers sealed in with waterproof wax.

LOCKING SIDE-CONTACT POST.—The patented split-section side-contact post compresses both sections against thread of contact screw and positively locks with cone cap piece having taper thread; no injuring of screw thread, and adjusting to a thousandth of inch assured at all times.

SOLID TRUNNION FRAME.—Solid trunnion frame cannot work loose or move in any direction. Improved split section, replacing old locknut on trunnion frame, compresses against upper trunnion screw, and no amount of jarring can loosen the upper bearing.

CYLINDRICAL TRUNNION BEARINGS, EXTRA HEAVY CYLINDRICAL TYPE.—There is no possibility of armature breaking away from either upper or lower bearing, as in other makes; construction utilizes full strength of both upper and lower trunnion frame casting.

NON-TURNING CONTACT AND BINDING POSTS.—Non-turning and non-loosening binding posts equipped with split steel lock-washers prevent connections from ever jarring loose.

CONTACT POINTS.—Contact points are made of platinoid or pure platinum, as specified, and are always plainly marked on both screw and spring. Platinoid contacts furnished, unless otherwise specified.

Skeleton Faraday Bells, listed below, are designed to operate on battery circuits only. For bell-ringing transformer circuits, transformer skeleton Faraday bells, transformer enclosed-type single-gong bells, transformer enclosed-type double-gong bells, or transformer underdome gongs are recommended. Transformer skeleton bells should never be used on electric light and power circuits.

Skeleton Faraday Bells will be furnished single-stroke when specially ordered at 50 cents net additional, but for important single-stroke work, special single-stroke gongs are recommended.

Skeleton Faraday Bells will be wound to any special resistance desired at standard list additions shown elsewhere.

NOTE.—The Underwriters' Laboratories approve only the enclosed-type Faraday gongs for signal systems coming under their supervision.

Trade No.	Mfrs. No.	Size, Gong Inches	Frame No.	Resistance in Ohms	Price Each
071001	O- 2½	2½	1	1.5	$2.50
071002	O- 3	3	1	1.5	2.68
071003	O- 4	4	1	1.5	3.04
071004	O- 5	5	2	2.1	5.52
071005	O- 6	6	2	2.1	6.21
071006	O- 7	7	3	3.	8.85
071007	O- 8	8	3	3.	9.71
071008	O-10	10	4	5.2	16.60
071009	O-12	12	X-5	5.2	20.73
071010	O-14	14	X-5	5.2	41.44
071011	O-15	15	X-5	5.2	53.87
071012	OL-15	15	6	8.	78.32
071013	O-16	16	6	8.	82.71
071014	O-18	18	6	8.	95.73

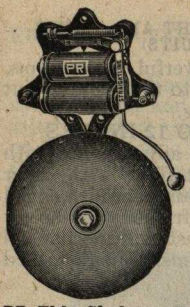
Assortment of all sizes Faraday and Competition Skeleton Bells permitted to make up list value, but enclosed-type gongs or buzzers cannot be included with skeleton bells; list price additions for special resistance windings may be included with bells and buzzers to make up list value.

Net Additions for Platinum, Triplex Contacts, Etc.

PLATINUM CONTACTS.—Add to above prices for pure platinum contacts 60 cents net for bells up to and including 6-inch; $1.00 net for 7-inch and larger.

TRIPLEX CONTACTS.—Add to above prices for triplex platinoid contacts $2.00 net. For triplex pure platinum contacts add to the above prices the following: Up to and including 6-inch $3.00 net; 8 and 10-inch, $4.00 net; 12 and 14-inch, $5.00; 15-inch and larger, $7.50 net.

EKLA SKELETON BELLS AND FARADAY BUZZERS



PR Ekla Skeleton Bell

P R EKLA SKELETON BELLS

Bells with Regular Round Gongs, 2½ to 12 Inches

Size Gong Inches	Frame No.	Resistance Ohms	Price Each	Size Gong Inches	Frame No.	Resistance Ohms	Price Each
2½	1	1.5	$2.29	7	2	3	$7.77
3	1	1.5	2.32	8	3	3	8.61
4	1	1.5	2.47	10	3	5.2	14.24
5	2	2.1	4.49	12	3	5.2	15.86
6	2	2.1	4.75	..	..	...	.....

Ekla Skeleton Bells are regularly furnished in standard resistances shown above; when ordered they will be wound to any special resistance desired up to 2000 ohms at standard list additions shown below. Silver contacts are used.

OHMS RESISTANCE FOR OPERATION OF EKLA, AND MARLO VIBRATING BELLS ON DIRECT CURRENT VOLTAGES WITHOUT EXCESSIVE SPARKING AT CONTACTS

Ohms per Bell	Voltage	Ohms per Bell	Voltage	Ohms per Bell	Voltage	Ohms per Bell	Voltage
5	6–10	100	25–30	300	55– 65	500	105–110
10	10–15	150	30–35	350	65– 80	550	110–120
20	15–20	200	35–45	400	80– 95	1000	120–130
50	20–25	250	45–55	450	95–105	2000	220–240

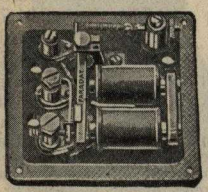
LIST ADDITIONS FOR SPECIAL RESISTANCE EKLA AND GIANT STEEL-CLAD MARLO BELLS

Size, Gong Inches	Ohms Resistance 0-10	11-20	21-50	51-100	101-150	151-200	201-300	301-500	501-1000	1001-2000
2½, 3, 3½ & 4	$1.20	$1.80	$2.30	$3.20	$3.50	$3.70	$3.80	$3.90	$4.90	$5 60
5 and 6	2.50	3.50	3.65	3.80	4.00	4.20	4.40	5.10	5.80	6.80
7 and 8	3.50	4.70	5.60	6.10	6.30	6.50	7.10	7.20	7.30	8.10
10	4.75	5.25	5.75	7.40	7.60	7.80	8.00	8.20	8.40	8.80
12, 14 & 15	4.75	5.25	5.75	7.40	7.60	7.80	8.00	8.20	8.40	8.80

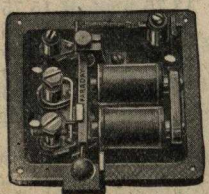
NOTE.—Skeleton Bells listed above are designed to operate on battery circuits only. Bell for ringing on transformer circuits and 110-volt A C light and power circuits Transformer Marlo Giant Gongs or Faraday Transformer Enclosed Type Gongs are recommended.



Nos. 93, 99 and 101 Buzzers, Cover in Position



Nos. 89, 91, 93, 99 and 101 Buzzers, Cover Removed



No. 94 Buzzer Cover Removed

FARADAY ENCLOSED TYPE BUZZERS

The Standard Nos. 89, 91, 93, 99 and 101 have the Faraday High-power Armature; No. 94 extra loud, in addition to the high-power armature, has a heavy steel ball at the end of armature rod—makes the signal three times as powerful as the No. 99 or No. 101.

Nos. 89 and 91 are the same as No. 101 mechanism. They are intended for interior mounting in annunciators, switchboards, telephone apparatus, etc.; No. 93 is the same mechanism, with standard cover complete with rubber gasket, etc.

Side contact adjustment is of patented micrometer lock type; all working parts are heavily copper-plated against dampness. Magnet coils are waterproof; soft rubber gasket between frame and cover guards against outside moisture. Triplex contacts will be furnished when specially ordered.

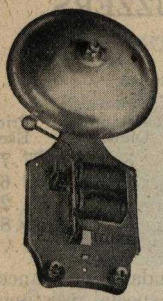
Model No.	Style	No. of Frame	Resistance Ohms	Size Inches	Price Each	Add for Conduit Patterns*
89	No cover	00	1.4	1 15/16 x 1 13/16 x 1 1/8	$2.75	Not made
93	Enclosed	00	1.4	2 1/8 x 2 1/8 x 1 3/16	3.00	Not made
91	No cover	00	1.4	2 7/16 x 2 7/16 x 1 1/8	2.75	Not made
99	Enclosed	0	1.4	3 1/8 x 3 1/8 x 1 3/8	3.50	3.50
101	Enclosed	1	1.5	4 1/4 x 4 x 2 1/16	4.00	4.50
94	Enclosed	1	1.5	4 1/4 x 4 x 2 1/16	4.25	4.50

*For conduit patterns add the letter P to Model No.

Add to above prices for pure platinum contacts 60 cents net.

Add to above prices of buzzers for triplex platinoid contacts $2.00 net; for triplex pure platinum contacts $3.00 net. Triplex contacts not furnished on Nos. 89, 91 and 93 buzzers.

Ekla Skeleton Bells listed above may be combined with Faraday Skeleton Bells to make up list value. Faraday buzzers listed above may be combined with Enclosed Type Faraday Gongs and PR Marlo Giant Steel-clad Bells to make up list value, but Skeleton and Enclosed cannot be combined to make up list value. List price additions for special resistance windings may be included with respective class of bells to make up list value.



P R Eclipse Giant Steel-clad Gong Cover Removed

P R GIANT STEEL-CLAD GONGS

Patented

VIBRATING—FOR BATTERY AND 100-125-VOLT D. C. LIGHT AND POWER CIRCUITS (CANNOT BE USED ON A. C. CIRCUITS)

P R Giant Steel-clad Gongs have special large powerful mechanisms. Marlo Gongs are particularly recommended as preferable to the Eclipse, but either will give good results under severe service conditions.

P R ECLIPSE GIANT STEEL-CLAD GONGS, 5 TO 12 INCHES

Eclipse Gongs have substantial back-tension spring adjustments with patented lock; patented adjustable double screw contact posts with silver contact points; armatures and hammer rod in one piece; hammer rods wedged to a spring temper; extra heavy drawn steel unbreakable frames with heavy drawn steel covers protecting entire mechanism from dust and mechanical injury; all connections soldered. Standard resistance, 5 ohms. Not furnished in special resistance.

Size Gong Inches	No. of Dry Cells Required	Operative Voltage	Approx. Watt Consumption per Gong	Regular Resistance Ohms	Price Each
5	4	4	.8	5	$4.49
6	4	4	.8	5	4.75
7	5	5	1.25	5	7.77
8	5	5	1.25	5	8.61
10	6	6	1.68	5	14.24
12	6	6	1.68	5	15.86



P R Marlo Giant Steel-clad Gong with Cover

P R MARLO GIANT STEEL-CLAD GONGS, 5 TO 12 INCHES

P R Marlo Giant Steel-clad Gongs are high grade in every detail. They have rugged, substantial trunnions of heavy pressed steel; insulated mechanisms; magnets wound with enameled wire with all connections soldered; patented adjustable double screw contact posts; substantial back adjustments; armatures and hammer rod in one piece; hammer rod swedged to a spring temper; double sets of binding posts provided for concealed or exposed wiring; laminated cores guarantee ideal magnetic conditions; renewable carbon contacts.

Regularly wound for battery circuits to a resistance of 5 ohms; when specially ordered they will be wound to any resistance desired up to 1000 ohms at standard list additions shown in price list on page listing Skeleton Bells.

Marlo Gongs are listed below both for interior use and also in weatherproof non-guarded and half-grid guarded gong patterns for installations in places exposed to dampness and extreme mechanical injury.

Marlo Gongs for 100–125-volt D. C. circuits listed below, are approved by Underwriters' Laboratories.



P R Marlo Giant Steel-clad Gong Cover Removed

To Operate on Battery (Gongs to be Wired in Multiple)

Size Gong Inches	No. of Dry Cells Required	Operative Voltage	Approx., Watt. Consumption per Gong	Regular Resistance Ohms	Price, Each: Non-guarded Gongs for Interior Use	Price, Each: Non-guarded Gongs for Outside Use	Price, Each: Half-grid Guarded Gongs for Outside Use
5	4	4	.8	5	$5.52	$8.52	$10.52
6	4	4	.8	5	6.21	9.21	11.21
7	5	5	1.25	5	8.85	11.85	13.85
8	5	5	1.25	5	9.71	12.71	14.71
10	6	6	1.68	5	16.60	19.60	21.60
12	6	6	1.68	5	20.73	23.73	25.73

Above prices are for platinoid contact points. For pure platinum contacts add 60 cents *net* for bells up to and including 6-inch; $1.00 net for 7-inch and larger.



P R Marlo Giant Steel-clad W. P. Gong for Outside Use

For 100—125-volt D. C. Light and Power Circuits (No External Resistance Required)

Size Gong Inches	Resistance Ohms	Contact Points	Price, Each: Non-guarded Gongs for Interior Use	Price, Each: Non-guarded Gongs for Outside Use	Price, Each: Half-grid Guarded Gongs for Outside Use
5	500	Carbon	$ 9.60	$12.60	$14.60
6	500	Carbon	10.75	13.75	15.75
7	500	Carbon	12.25	15.25	17.25
8	500	Carbon	13.55	16.55	18.55
10	500	Carbon	24.00	27.00	29.00
12	500	Carbon	33.60	36.60	38.60

These gongs regularly furnished with nickel-plated bell metal gongs; bases and covers finished in dull black enamel.

Assortment of all sizes of P R Giant Steel-clad and Faraday Enclosed Type Gongs and Buzzers may be combined to make up list value, but Skeleton Gongs cannot be included. List price additions for special resistance windings can be included with gongs to make up list value.

Send for Special Bulletin 18516 on Faraday and P R Signal Gongs

FARADAY SIGNAL GONGS

NATIONAL ELECTRICAL CODE STANDARD

ENCLOSED-TYPE, VIBRATING, WEATHERPROOF, FOR BATTERY AND D. C. CIRCUITS

Cannot be Used on A. C. Circuits

Faraday Enclosed-type Signal Gongs A, B and C are far superior to the ordinary open-type skeleton bell and are recommended for installations exposed to dust, dampness or mechanical injury. They are designed to operate on battery and, when ordered wound to proper resistance, on D. C. electric light and power circuits from 100 to 600 volts. For A. C. circuits, both bell-ringing transformer and 100–240-volt A. C. circuits, transformer enclosed-type single-gong, transformer enclosed-type double-gong or transformer underdome gongs are recommended.

These gongs will be furnished single-stroke when specially ordered at 50 cents net additional. They will be furnished wound to any special resistance at standard list additions.



Model A



Model B



Model C

Model A Non-guarded Gongs, 1¾ to 18 Inches

Model No.	Size In.	Frame No.	To Operate on Battery (Gongs to be Wired in Multiple) No. of Dry Cells Req'd	Operative Voltage	Approx. Watts per Gong	Regular Resistance Ohms	Price Each	100 to 125-v. D. C. *Price Each	220 to 250-v. D. C. †Price Each
A-1¾	1¾	00	2	2	1.5	1.4	$3.92	$6.22	Not Made
A-2	2	00	2	2	1.5	1.4	4.21	6.51	Not Made
A-2½	2½	0	2	2	1.1	1.4	4.49	6.79	Not Made
A-3	3	0	2	2	1.1	1.4	5.16	7.46	Not Made
A-3½	3½	1	3	3	1.8	1.5	6.29	8.85	$12.98
A-4	4	1	3	3	1.8	1.5	6.44	9.20	13.50
A-5	5	2	4	4	2.2	2.1	10.53	14.60	19.50
A-6	6	2	4	4	2.2	2.1	11.92	15.75	20.75
A-7	7	3	5	5	2.5	3.	13.37	17.25	22.25
A-8	8	3	5	5	2.5	3.	14.72	18.55	23.50
A-9	9	4	6	6	2.55	5.2	20.20	24.45	29.95
A-10	10	4	6	6	2.55	5.2	24.69	29.00	34.50
A-12	12	X-5	6	6	2.55	5.2	33.36	38.60	44.50
A-14	14	X-5	6	6	2.55	5.2	41.15	46.00	52.00
A-15	15	6	8	8	4.	8.	82.49	88.49	93.75
A-16	16	6	8	8	4.	8.	86.41	92.41	102.00
A-18	18	6	8	8	4.	8.	98.21	106.21	116.00

Model B Half Grid Guarded Gongs, 3½ to 14 Inches

B-3½	3½	1	3	3	1.8	1.5	7.29	9.85	13.98
B-4	4	1	3	3	1.8	1.5	7.44	10.20	14.50
B-5	5	2	4	4	2.2	2.1	12.03	16.10	21.00
B-6	6	2	4	4	2.2	2.1	13.42	17.25	22.25
B-7	7	3	5	5	2.5	3.	15.87	19.75	24.75
B-8	8	3	5	5	2.5	3.	17.22	21.05	26.00
B-9	9	4	6	6	2.55	5.2	23.20	27.45	32.95
B-10	10	4	6	6	2.55	5.2	27.69	32.00	37.50
B-12	12	X-5	6	6	2.55	5.2	37.68	42.60	48.50
B-14	14	X-5	6	6	2.55	5.2	45.15	50.00	56.00

Model C Full Grid Guarded Gongs, 5 to 12 Inches

C-5	5	2	4	4	2.2	2.1	19.53	23.60	28.50
C-6	6	2	4	4	2.2	2.1	20.92	24.75	29.75
C-7	7	3	5	5	2.5	3.	26.87	30.75	35.75
C-8	8	3	5	5	2.5	3.	28.22	32.05	37.00
C-9	9	4	6	6	2.55	5.2	40.20	44.45	49.95
C-10	10	4	6	6	2.55	5.2	44.69	49.00	54.50
C-12	12	X-5	6	6	2.55	5.2	59.68	64.60	70.50

*To operate on 100–125-v. D. C. circuits, resistance 500 ohms.

†To operate on 220–250-v. D. C. circuits, resistance 2000 ohms.

In ordering specify Model No. and voltage.

Assortment of all sizes enclosed-type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with enclosed-type gongs or buzzers. List price additions for special resistance windings may be included with bells to make up list value.

PLATINUM CONTACTS.—Add to above prices for pure platinum contacts 60 cents net for bells up to and including 6-inch; $1.00 net for 7-inch and larger.

TRIPLEX CONTACTS.—Add to above prices for triplex platinoid contacts $2.00 net; for triplex pure platinum contacts, add to above prices the following: Up to and including 6-inch, $3.00 net; 8 and 10-inch, $4.00 net; 12 and 14-inch, $5.00 net; 15-inch and larger, $7.50 net.

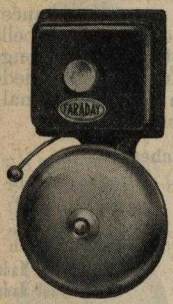
All gongs full polished nickel unless otherwise specified.

FARADAY INSPECTORS' PATTERN SIGNAL GONGS

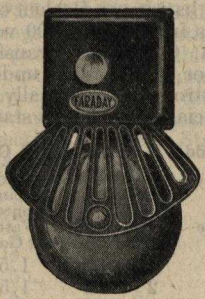
NATIONAL ELECTRICAL CODE STANDARD

ENCLOSED TYPE, VIBRATING, WEATHERPROOF, FOR BATTERY AND D. C. CIRCUITS

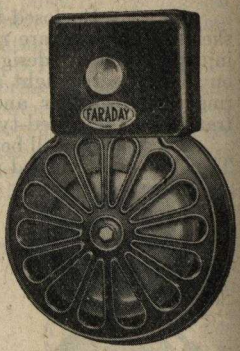
Cannot be used on A. C. Circuits



Model AI



Model BI



Model CI

Faraday Inspectors' Type Gongs Models AI, BI and CI are especially designed to permit regular and frequent inspection of signal equipment.

For A. C. circuits (both bell ringing transformer and 100–240-volt A. C. circuits) transformer enclosed type single-gong, transformer enclosed type double-gong or transformer under-dome gongs are recommended.

These gongs will be furnished single-stroke when specially ordered at 50 cents net additional. They will be furnished wound to any special resistance desired at standard list additions.

Model AI Non-guarded Gongs 3½ to 18 inches

Model No.	Size In.	Frame No.	To Operate on Battery (Gongs to be Wired in Multiple) No. of Dry Cells Req'd	Op'tive Voltage	Approx. Watts p. Gong	Regular Resistance Ohms	Regular Price Each	To Operate on 100-125 V. D. C. Circuits Resistance Ohms	100-125 V. D. C. Circuits Price Each	To Operate on 220-250 V. D. C. Circuits Resistance Ohms	220-250 V. D. C. Circuits Price Each	Add for Conduit Pattern*
AI- 3½	3½	1	3	3	1.8	1.5	8.29	500	10.85	2000	14.98	4.50
AI- 4	4	1	3	3	1.8	1.5	8.44	500	11.20	2000	15.50	4.50
AI- 5	5	2	4	4	2.2	2.1	13.03	500	17.10	2000	22.00	4.68
AI- 6	6	2	4	4	2.2	2.1	14.42	500	18.25	2000	23.25	4.68
AI- 7	7	3	5	5	2.5	3	16.37	500	20.25	2000	25.25	5.04
AI- 8	8	3	5	5	2.5	3	17.72	500	21.55	2000	26.50	5.04
AI- 9	9	4	6	6	2.55	5.2	23.70	500	27.95	2000	33.45	5.40
AI-10	10	4	6	6	2.55	5.2	28.19	500	32.50	2000	38.00	5.40
AI-12	12	X-5	6	6	2.55	5.2	36.86	500	42.10	2000	48.00	5.40
AI-14	14	X-5	6	6	2.55	5.2	44.65	500	49.50	2000	55.50	5.40
AI-15	15	6	8	8	4	6	88.49	500	94.49	2000	99.75	7.20
AI-16	16	6	8	8	4	6	92.41	500	98.41	2000	108.00	7.20
AI-18	18	6	8	8	4	6	104.21	500	112.21	2000	122.00	7.20
Model BI Half-grid Guarded Gongs, 3½ to 14 Inches												
BI- 3½	3½	1	3	3	1.8	1.5	9.29	500	11.85	2000	15.98	4.50
BI- 4	4	1	3	3	1.8	1.5	9.44	500	12.20	2000	16.50	4.50
BI- 5	5	2	4	4	2.2	2.1	14.53	500	18.60	2000	23.50	4.68
BI- 6	6	2	4	4	2.2	2.1	15.92	500	19.75	2000	24.75	4.68
BI- 7	7	3	5	5	2.5	3	18.87	500	22.75	2000	27.75	5.04
BI- 8	8	3	5	5	2.5	3	20.22	500	24.05	2000	29.00	5.04
BI- 9	9	4	6	6	2.55	5.2	26.70	500	30.95	2000	36.45	5.40
BI-10	10	4	6	6	2.55	5.2	31.19	500	35.50	2000	41.00	5.40
BI-12	12	X-5	6	6	2.55	5.2	41.18	500	46.10	2000	52.00	5.40
BI-14	14	X-5	6	6	2.55	5.2	48.65	500	53.50	2000	59.50	5.40
Model CI Full-grid Guarded Gongs, 5 to 12 Inches												
CI- 5	5	2	4	4	2.2	2.1	22.03	500	26.10	2000	31.00	4.68
CI- 6	6	2	4	4	2.2	2.1	23.42	500	27.25	2000	32.25	4.68
CI- 7	7	3	5	5	2.5	3	29.87	500	33.75	2000	38.75	5.04
CI- 8	8	3	5	5	2.5	3	31.22	500	35.05	2000	40.00	5.04
CI- 9	9	4	6	6	2.55	5.2	43.70	500	47.95	2000	53.45	5.40
CI-10	10	4	6	6	2.55	5.2	48.19	500	52.50	2000	58.00	5.40
CI-12	12	X-5	6	6	2.55	5.2	63.18	500	68.10	2000	74.00	5.40

*For conduit pattern add the letter P to Model No. and add to lists in previous columns.

In ordering specify Model No. and voltage at which to operate.

All gongs full polished nickel unless otherwise specified.

Additions for platinum and triplex contacts given in footnote on preceding page.

FARADAY CONDUIT PATTERN SIGNAL GONGS

NATIONAL ELECTRICAL CODE STANDARD

ENCLOSED-TYPE, VIBRATING, WEATHERPROOF, FOR BATTERY AND D. C. CIRCUITS

Cannot Be Used on A. C. Circuits

Faraday Conduit Pattern Signal Gongs Models AP, BP and CP are furnished with heavy pressed steel outlet box backs. Combination ½ inch and ¾-inch knockouts are provided on the four sides of the box as well as in the center of the back, readily affording conduit connections to it. They are designed to meet requirements of exposed or concealed work.

They are designed to operate on battery and when ordered wound to proper resistance, on D. C. electric light and power circuits from 100 to 600 volts. For A. C. circuits, both bell ringing transformer and 100–240-volt A. C. circuits, transformer enclosed-type single-gong, transformer enclosed-type double-gong or transformer underdome gongs are recommended.

These gongs will be furnished single-stroke when specially ordered at 50 cents net additional. They will be furnished wound to any special resistance at standard list additions.



Model AP



Model BP



Model CP

Model AP Non-guarded Gongs, 3½ to 18 Inches

Model No.	Size In.	Frame No.	To Operate on Battery (Gongs to Be Wired in Multiple) No. of Dry Cells Required	Operative Voltage	Approx. Watts per Gong	Regular Resistance Ohms	Price Each	100 to 125 V. D. C. Price Each*	220 to 250 V. D. C. Price Each†
AP-3½	3½	1	3	3	1.8	1.5	$10.79	$13.35	$17.48
AP-4	4	1	3	3	1.8	1.5	10.94	13.70	18.00
AP-5	5	2	4	4	2.2	2.1	15.21	19.28	24.18
AP-6	6	2	4	4	2.2	2.1	16.60	20.43	25.43
AP-7	7	3	5	5	2.5	3.	18.41	22.29	27.29
AP-8	8	3	5	5	2.5	3.	19.76	23.59	28.54
AP-9	9	4	6	6	2.55	5.2	25.60	29.85	35.35
AP-10	10	4	6	6	2.55	5.2	30.09	34.40	39.90
AP-12	12	X-5	6	6	2.55	5.2	38.76	44.00	49.90
AP-14	14	X-5	6	6	2.55	5.2	46.55	51.40	57.40
AP-15	15	6	8	8	4.	6.	89.69	95.69	100.95
AP-16	16	6	8	8	4.	6.	93.61	99.61	109.20
AP-18	18	6	8	8	4.	6.	105.41	113.41	123.20

Model BP Half Grid Guarded Gongs, 3½ to 14 Inches

BP-3½	3½	1	3	3	1.8	1.5	11.79	14.35	18.48
BP-4	4	1	3	3	1.8	1.5	11.94	14.70	19.00
BP-5	5	2	4	4	2.2	2.1	16.71	20.78	25.68
BP-6	6	2	4	4	2.2	2.1	18.10	21.93	26.93
BP-7	7	3	5	5	2.5	3.	20.91	24.79	29.79
BP-8	8	3	5	5	2.5	3.	22.26	26.09	31.04
BP-9	9	4	6	6	2.55	5.2	28.60	32.85	38.35
BP-10	10	4	6	6	2.55	5.2	33.09	37.40	42.90
BP-12	12	X-5	6	6	2.55	5.2	43.08	48.00	53.90
BP-14	14	X-5	6	6	2.55	5.2	50.55	55.40	61.40

Model CP Full Grid Guarded Gongs, 5 to 12 Inches

CP-5	5	2	4	4	2.2	2.1	24.21	28.28	33.18
CP-6	6	2	4	4	2.2	2.1	25.60	29.43	34.43
CP-7	7	3	5	5	2.5	3.	31.91	35.79	40.79
CP-8	8	3	5	5	2.5	3.	33.26	37.09	42.04
CP-9	9	4	6	6	2.55	5.2	45.60	49.85	55.35
CP-10	10	4	6	6	2.55	5.2	50.09	54.40	59.90
CP-12	12	X-5	6	6	2.55	5.2	65.08	70.00	75.90

*To operate on 100–125 V. D. C. circuits, resistance 500 ohms.

†To operate on 220–250 V. D. C. circuits, resistance 2000 ohms.

In ordering specify Model No. and voltage at which to operate.

Assortment of all sizes enclosed-type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with enclosed-type gongs or buzzers. List price additions for special resistance windings may be included with bells to make up list value.

PLATINUM CONTACTS.—Add to above prices for pure platinum contacts 60 cents net for bells up to and including 6-inch; $1.00 net for 7-inch and larger.

TRIPLEX CONTACTS.—Add to above prices for triplex platinoid contacts $2.00 net; for triplex pure platinum contacts, add to above prices the following: Up to and including 6-inch, $3.00 net; 8 and 10-inch, $4.00 net; 12 and 14-inch, $5.00 net; 15 inch and larger, $7.50 net.

FARADAY SCREEN GUARDED GONGS

NATIONAL ELECTRICAL CODE STANDARD

ENCLOSED TYPE, VIBRATING, WEATHERPROOF, FOR BATTERY AND D. C. CIRCUITS

Cannot be used on A. C. Circuits



Model CW
Regular Pattern



Model CWP
Conduit Pattern

Screen Guarded Enclosed Type Gongs Models CW and CWP are preferable to the cast grid type housing of Models C and CP in some cases, where mechanism, gong, hammer rod and ball must be protected against external injury, boys throwing stones and nesting of birds.

These gongs have high power armatures, making it possible to keep the armature in magnetic field up to the moment hammer rod ball strikes gong in place of opening at contact points at beginning of stroke as all other mechanisms do; breakage of springs cannot disable gong; frame casting carries no current at any time and as the entire mechanism is insulated from the frame, these gongs may be mounted on metal, metal lathing and damp walls without fear of grounding.

They are designed to operate on battery and, when ordered wound to proper resistance, on D. C. electric light and power circuits from 100 to 600 volts. For A. C. circuits, both bell ringing transformer and 100–240 A. C. circuits, transformer enclosed-type single-gong, transformer enclosed-type double-gong or transformer under-dome gongs are recommended.

These gongs will be furnished single stroke when specially ordered at 50 cents net additional. For important single-stroke work, the special single-stroke Faraday Gongs shown on other pages are recommended, and the slight advance in cost found more than justified.

These gongs will be wound to any special resistance desired at standard list additions shown elsewhere.

The Underwriters' Laboratories approve enclosed type Faraday Gongs, Models CW and CWP for signal systems coming under their supervision.

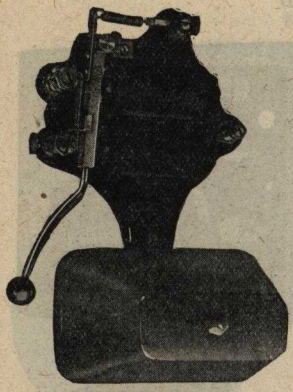
			Model CW Regular Pattern		Model CWP For Conduit Work	
Size, Gong Inches	Frame No.	Resistance Ohms	Model No.	Price Each	Model No.	Price Each
5	2	2.1	CW-5	$19.53	CWP-5	$24.21
6	2	2.1	CW-6	20.92	CWP-6	25.60
7	3	3	CW-7	26.87	CWP-7	31.91
8	3	3	CW-8	28.22	CWP-8	33.26
9	4	5.2	CW-9	40.20	CWP-9	45.60
10	4	5.2	CW-10	44.69	CWP-10	50.09
12	X-5	5.2	CW-12	59.68	CWP-12	65.08

Assortment of all sizes enclosed-type gongs and buzzers permitted to make up list value, for Faraday and Competition Skeleton Bells cannot be included with enclosed type gongs or buzzers. List price additions for special resistance windings may be included with bells to make up list value.

PLATINUM CONTACTS.—Add to above prices for pure platinum contacts 60 cents net for bells up to and including 6-inch; $1.00 net for 7-inch and larger.

TRIPLEX CONTACTS.—Add to above prices for triplex platinoid contacts $2.00 net. For triplex pure platinum contacts add to above prices the following: Up to and including 6-inch, $3.00 net; 8 and 10-inch, $4.00 net; 12-inch, $5.00 net.

FARADAY BELLS WITH FANCY GONGS



Skeleton Bell with Cow Gong



Enclosed Type Bell with Cow Gong



Open, Breakfast, Tea or House Gong



Garland Gong



Sleigh Gong



Rectangular or Cow Gong

SKELETON AND ENCLOSED TYPES

Both Faraday Skeleton and Faraday Enclosed Type Bells will be furnished with what is termed "fancy gongs" in place of standard round gongs.

Fancy gong equipment is desirable where a different sounding gong is wanted or where a particularly penetrating sound is needed, such as in noisy factory buildings, etc. The rectangular or cow gong being the most penetrating.

These gongs have high power armatures, making it possible to keep the armature in magnetic field up to the moment hammer rod ball strikes gong in place of opening at contact points at beginning of stroke as all other mechanisms do. Breakage of springs cannot disable gong. Frame casting carries no current at any time and as the entire mechanism is insulated from the frame, these gongs may be mounted on metal, metal lathing and damp walls without fear of grounding.

These gongs are designed to operate on battery circuits. They will be furnished single stroke when specially ordered at 50 cents net additional, but for important single-stroke work, the single-stroke gongs shown on other pages are recommended.

These gongs will be furnished wound to any special resistance desired at standard list additions shown elsewhere.

NOTE.—The Underwriters' Laboratories approve enclosed type gongs for signal systems coming under their supervision.

FARADAY SKELETON BELLS, WITH FANCY GONGS

Size, Gong Inches	Frame No.	Resis. Ohms.	Price Each	Size, Gong Inches	Frame No.	Resis. Ohms.	Price Each
With Rectangular or Cow Gongs							
1¾x2½	1	1.5	$ 5.52	3⅛x5	2	2.1	$ 9.71
2 x3	1	1.5	6.21	4¼x6	3	3	21.73
With Sleigh Gongs							
1½x2½	1	1.5	5.52	.....	.	...	.....
With Garland Gongs							
2 x2¼	1	1.5	5.40	.....	.	...	.....
With Open, Breakfast, Tea or House Gongs							
2½x1¾	1	1.5	5.40	.....	.	...	.....

FARADAY ENCLOSED TYPE BELLS, WITH FANCY GONGS

With Rectangular or Cow Gongs							
1¾x2½	0	1.4	7.08	2 x3	1	1.5	10.15
2 x3	0	1.4	7.23	3⅛x5	2	2.1	15.46
1¾x2½	1	1.5	10.00	4¼x6	3	3	27.09
With Sleigh Gongs							
1½x1½	0	1.4	7.08	1½x1½	1	1.5	10.00
With Garland Gongs							
2 x2¼	0	1.4	6.88	2 x2¼	1	1.5	9.48
With Open, Breakfast, Tea or House Gongs							
2 x2¼	0	1.4	6.88	2 x2¼	1	1.5	9.48

Skeleton fancy gong bells listed above may be combined with regular pattern skeleton bells to make up list value. Enclosed type fancy gong bells likewise may be combined with regular pattern enclosed type bells and buzzers to make up list value, but skeleton and enclosed cannot be combined to make up list value. List price additions for special resistance windings may be included with respective class of bells to make up list value.

All above bells except skeleton types furnished with outlet box backs for conduit work at same list additions as shown on page of Inspectors' Pattern Gongs for respective Frame Nos.

PLATINUM CONTACTS.—Add to above prices for pure platinum contacts 60 cents net for bells up to and including No. 2 Frame; $1.00 net for No. 3 Frame.

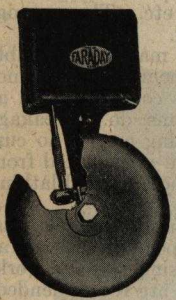
TRIPLEX CONTACTS.—Add to above prices for triplex platinoid contacts $2.00 net; for triplex pure platinum contacts, add to above prices the following: up to and including No. 2 Frame, $3.00 net; No. 3 Frame, $4.00 net.

FARADAY HAMMER-BLOW SIGNAL GONGS

NATIONAL ELECTRICAL CODE STANDARD

ENCLOSED AND SKELETON TYPE HIGH POWER GONGS, FOR BATTERY AND D. C. CIRCUITS

Cannot be Used on A. C. Circuits



Model AH
Regular Pattern
Model AHP
For Conduit Work



Model BH
Regular Pattern
Model BHP
For Conduit Work



Model CH
Regular Pattern
Model CHP
For Conduit Work



Showing Mechanism of Hammer-blow Faraday Gong

Faraday Hammer-blow High Power Signal Gongs Models AH, BH and CH have mechanisms that give a long, slow, hammer-blow movement, very similar to a powerful electro-mechanical gong, but having no clockwork mechanism, of course requires no winding up, as does the electro-mechanical type; should be operated on battery sets of not less than 50-ampere capacity.

The long, slow, powerful movement in this mechanism is obtained by means of the Faraday multiple-gear between armature and hammer rod, a feature that, with a ⅜-inch movement of armature, permits, for example, in a 10-inch size gong a 3-inch movement of the hammer ball.

Semi-flexible re-coil type hammer rod guarantees a clear, unmuffled blow on the gong, a most valuable advantage over the usual hammer rod construction of other makes.

No other type of gong can be operated with the long, powerful, hammer-blow feature, for without the patented Faraday high-power armature construction, this type of gong would be impossible. With this patented feature in Models AH, BH and CH gongs, the armature is held in the magnetic field with current on coils up to the moment the hammer rod ball strikes the gong. This design gong gives twice the power of any other make of gong because in the Faraday construction contact points do not open with the forward movement of the armature to cut off the current, but current is allowed to stay on the field coils until the end of stroke.

Breakage of springs cannot disable this model gong, whereas with every other make of gong, a broken spring means the failure of the signal.

Waterproof magnet coil windings, micrometer pattern contact posts, non-turning and non-loosening binding posts, bell metal gongs, rubber gasketed weather-proof and dust-proof casings, sealed-in back connections, no exposed terminals, lock washers on all binding posts, etc.,—all enclosed type Faraday gong standards are embodied in these models.

			Enclosed Type						Skeleton Type	
			Model AH Non-Guarded Gong		Model BH Half-Guarded Gong		Model CH Full Guarded Gong		Model OH	
Size Gong Inches	Frame No.	Resistance Ohms	Model No.	Price Each	Model No.	Price Each	Model No.	Price Each	Model No.	Price Each
4	1	1.5	AH-4	$ 8.44	BH-4	$ 9.44	.....	.....	OH-4	$5.04
5	2	2.1	AH-5	13.03	BH-5	14.53	CH-5	$22.03	OH-5	8.02
6	2	2.1	AH-6	14.42	BH-6	15.92	CH-6	23.42	OH-6	8.71
7	3	3	AH-7	16.37	BH-7	18.87	CH-7	29.87	....	.....
8	3	3	AH-8	17.72	BH-8	20.22	CH-8	31.22	OH-8	12.71
9	4	5.2	AH-9	24.20	BH-9	27.20	CH-9	44.20	....	.....
10	4	5.2	AH-10	28.69	BH-10	31.69	CH-10	48.69	OH-10	20.40
12	X-5	5.2	AH-12	37.36	BH-12	41.36	CH-12	63.36	OH-12	24.73
14	X-5	5.2	AH-14	45.15	BH-14	49.15	.....	.....	OH-14	45.44
15	6	8	AH-15	97.49	.....	.....	.....	.....	.....	.....
16	6	8	AH-16	101.41	.....	.....	.....	.....	.....	.....
18	6	8	AH-18	113.21	.....	.....	.....	.....	.....	.....

All above bells except Skeleton types are furnished with outlet box backs for conduit work at same list additions as shown on page of Inspectors Pattern Gongs for respective "Frame Nos."

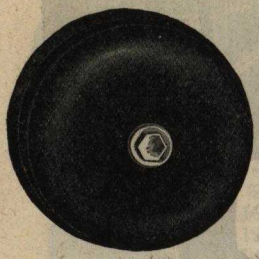
Skeleton Hammer-blow Bells listed above, may be combined with regular pattern Skeleton Bells to make up list value. Enclosed type hammer-blow bells likewise may be combined with regular pattern enclosed type bells and buzzers to make up list value. List price additions for special resistance windings may be included with respective class of bells to make up list value.

FARADAY UNDER-DOME GONGS

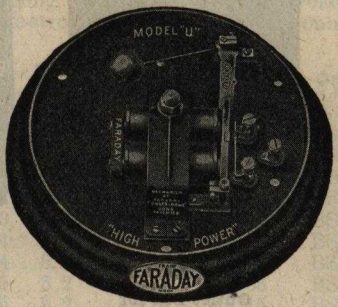
NATIONAL ELECTRICAL CODE STANDARD

ENCLOSED-TYPE, VIBRATING, WEATHERPROOF, FOR BATTERY AND D. C. CIRCUITS

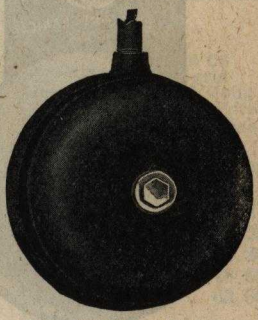
Cannot be Used on A. C. Circuits



Model U



Showing Mechanism of Under-dome Bell



Models UP and UFP

Faraday Under-dome Gongs are admittedly superior to the projecting neck type of gong heretofore almost universally used. In the under-dome type gong, the entire mechanism, including hammer rod and ball, are within the gong itself, completely housed and protected from mechanical injury. This type of gong lends itself to the requirements of high class building work, i. e., that gongs shall not in any way mar the general building lines, for the design harmonizes with interior surroundings to a degree never possible to obtain with the conventional projecting-neck type of gong.

Under-dome gongs are regularly furnished in bauer-barff finish. When specially ordered, will be furnished at slight additional cost in any color to match walls or decorations.

Under-dome gongs have the following advantages in mechanism detail:

(a) Patented high-power armature allows the keeping of armature in magnetic field up to the moment of striking the gong—twice the power of any other mechanism made, because contact-points do not open or cut off current until end of stroke.

(b) Bronze-steel power-multiplying gears between armature and hammer-rod.

(c) No springs can break to stop operation of gong.

(d) Frame casting carries no current at any time and as the entire mechanism is insulated from the frame, under-dome gongs may be mounted on metal, metal lathing and damp walls without fear of grounding.

Under-dome gongs Models U, UP and UFP are designed to operate best on battery not less than 50 amp. capacity and, when ordered wound to proper resistance, on D. C. electric light and power circuits from 100 to 600 volts. For A. C. circuits, both bell ringing transformer and 100–240-volt A. C. circuits, transformer under-dome gongs are recommended.

Under-dome gongs will be furnished single-stroke when specially ordered at $0.50 net additional.

These gongs will be furnished wound to any resistance desired at standard list additions shown elsewhere.

NOTE.— The Underwriters' Laboratories approve under-dome gongs Models U, UP and UFP for signal systems coming under their supervision.

Model No.	Size Gong Inches	No. of Frame	Resistance Ohms	Price Each
Model U, No Conduit Box Back				
U-8	8	3	3	$17.72
U-10	10	4	5.2	28.69
Model UP, with Cast Outlet Box Back for Surface Conduit Work				
UP-8	.8	3	3	27.72
UP-10	10	4	5.2	40.69
Model UFP, with Pressed Steel Outlet Box Back for Concealed Conduit Work				
UFP-8	8	3	3	22.76
UFP-10	10	4	5.2	34.09

Assortment of all sizes of enclosed type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with under-dome gongs or buzzers. List price additions for special resistance windings may be included with bells to make up list value.

PLATINUM CONTACTS.— Add to above prices for pure platinum contacts, $1.00 net.

TRIPLEX CONTACTS.— Add to above prices for triplex platinoid contacts, $2.00 net; for triplex pure platinum contacts, add to above prices $4.00 net.

FARADAY ELECTRO-MECHANICAL SIGNAL GONGS

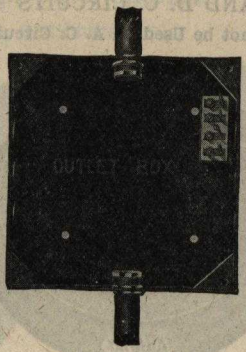
NATIONAL ELECTRICAL CODE STANDARD

ENCLOSED TYPE, VIBRATING AND SINGLE STROKE

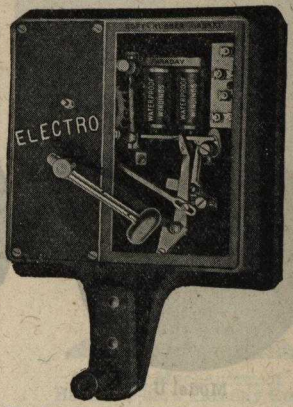
Open and Closed Circuit Types for Battery, D. C. and A. C. Light and Power Circuits



Model E, Regular Pattern
Model EP, for Conduit Work



Outlet Box for
Pipe Entrance



Mechanism, Model E

Electro-Mechanical gongs are designed to give a very loud, powerful signal, with a minimum of current. The blow itself on the gong is struck by a heavy ball on the end of a lever, released by the electric current, but operated by a powerful clock spring. The powerful steel clock spring operating the main shaft is securely housed on the under side of the mounting plate, entirely separate from the gear and lever compartment. Heavy felt gaskets prevent dust and dampness from getting into the mechanism.

Faraday Electro-Mechanical Gongs give approximately 700 blows with one winding and at $5.00 net additional per gong they will be furnished, when specially ordered, with reliable rewind signal contactor to which may be connected a tell-tale bell to give notification whenever a gong needs rewinding. It will also give warning if, from any cause, the main spring of the mechanism should break.

For even open work wiring without conduit, Models EP and EFP are strongly recommended, because their design affords the simplest and most convenient method of installation. In these models the terminals for connections to circuit wires are mounted in the outlet box backs so that when the mechanism of the gong is put up, the operation is easy and convenient.

Regularly furnished with knockouts for ½ or ¾-inch conduit as specified in four sides of the box.

Standard finish: dull black enamel with gunmetal gongs. Cases, when specially ordered, will be furnished without additional charge, in English vermilion finish.

The following types of mechanism are made. Type must be specified:

1. Single stroke, for open circuit work.
2. Single stroke, for closed circuit work.
3. Continuous ringing, for open circuit work.
4. Continuous ringing, for closed circuit work.
5. To ring continuously until run down, for open circuit work ($5.00 net additional).
6. To ring continuously until run down, for closed circuit work ($5.00 net additional).

Size Gong Inches	Regular Resistance Ohms	Model E For Regular Installations Without Conduit Model No.	Model E For Regular Installations Without Conduit Price Each	Model EP With Conduit Box Back For Exposed Conduit Model No.	Model EP With Conduit Box Back For Exposed Conduit Price Each	Model EFP With Conduit Box Back and Wall Escutcheon For Flush Conduit Model No.	Model EFP With Conduit Box Back and Wall Escutcheon For Flush Conduit Price Each
6	20	E- 6	$39.80	EP- 6	$49.80	EFP- 6	$54.80
8	20	E- 8	52.00	EP- 8	62.00	EFP- 8	67.00
10	20	E-10	58.40	EP-10	68.40	EFP-10	73.40
12	20	E-12	62.66	EP-12	72.66	EFP-12	77.66
14	20	E-14	73.33	EP-14	83.33	EFP-14	88.33
15	20	E-15	97.60	EP-15	107.60	EFP-15	112.60
16	20	E-16	103.20	EP-16	113.20	EFP-16	118.20
18	20	E-18	111.00	EP-18	121.00	EFP-18	126.00

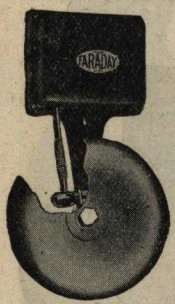
These gongs will be furnished wound to any special resistance desired at standard list additions for No. 3 frame.

Assortment of all sizes Electro-Mechanical, Enclosed Type Gongs and Buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with Electro-Mechanical, Enclosed Type Gongs or Buzzers. List price additions for special resistance windings may be included with bells to make up list value.

FARADAY SINGLE-STROKE SIGNAL GONGS

ENCLOSED AND SKELETON TYPES, FOR BATTERY AND D. C. CIRCUITS

Cannot Be Used on A. C. Circuits



Model AS

SINGLE-STROKE GONGS—ENCLOSED TYPE

Single-stroke enclosed type gongs Models AS, BS and CS are the most powerful and longest movement single-stroke gongs made.

Semi-flexible recoil type hammer rod guarantees a clear, unmuffled blow on gong with never a double stroke possible.

Single-stroke gongs operate best connected in series.

Size Gong In.	Frame No.	Resistance Ohms	Model AS Non-guarded Gong Model No.	Model AS Non-guarded Gong Price Each	Model BS Half-grid Guarded Gong Model No.	Model BS Half-grid Guarded Gong Price Each	Model CS Full-grid Guarded Gong Model No.	Model CS Full-grid Guarded Gong Price Each
4	1	1.5	AS- 4	$ 8.44	BS- 4	$ 9.44	....	....
5	2	2.1	AS- 5	13.03	BS- 5	14.53	CS- 5	$22.03
6	2	2.1	AS- 6	14.42	BS- 6	15.92	CS- 6	23.42
7	3	3	AS- 7	16.37	BS- 7	18.87	CS- 7	29.87
8	3	3	AS- 8	17.72	BS- 8	20.22	CS- 8	31.22
9	4	5.2	AS- 9	24.20	BS- 9	27.20	CS- 9	44.20
10	4	5.2	AS-10	28.69	BS-10	31.69	CS-10	48.69
12	X-5	5.2	AS-12	37.36	BS-12	41.68	CS-12	63.68
14	X-5	5.2	AS-14	45.15	BS-14	49.15	....	....
15	6	8	AS-15	97.49	....	....	....	....
16	6	8	AS-16	101.41	....	....	....	....
18	6	8	AS-18	113.21	....	....	....	....



Model BS

TWO-SIGNAL COMBINATION SINGLE-STROKE AND VIBRATING GONGS

Two-signal gongs Models AVS, BVS and CVS are combination mechanisms and should be connected to a 3-wire circuit in multiple. When so connected, these gongs will give:(a) a powerful vibrating; (b) a clean, powerful single-stroke signal.

Size Gong In.	Frame No.	Resistance Ohms	Model AVS Non-guarded Gong Model No.	Model AVS Non-guarded Gong Price Each	Model BVS Half-grid Guarded Gong Model No.	Model BVS Half-grid Guarded Gong Price Each	Model CVS Full-grid Guarded Gong Model No.	Model CVS Full-grid Guarded Gong Price Each
4	1	1.5	AVS- 4	$ 9.44	BVS- 4	$10.44	....	....
5	2	2.1	AVS- 5	14.53	BVS- 5	16.03	CVS- 5	$23.53
6	2	2.1	AVS- 6	15.92	BVS- 6	17.42	CVS- 6	24.92
7	3	3	AVS- 7	17.87	BVS- 7	20.37	CVS- 7	31.37
8	3	3	AVS- 8	19.72	BVS- 8	22.22	CVS- 8	33.22
9	4	5.2	AVS- 9	26.70	BVS- 9	29.70	CVS- 9	46.70
10	4	5.2	AVS-10	31.19	BVS-10	34.19	CVS-10	51.19
12	X-5	5.2	AVS-12	39.86	BVS-12	44.18	CVS-12	66.18
14	X-5	5.2	AVS-14	47.65	BVS-14	51.65	....	....
15	6	8	AVS-15	102.49	....	....	....	....
16	6	8	AVS-16	106.41	....	....	....	....
18	6	8	AVS-18	118.21	....	....	....	....

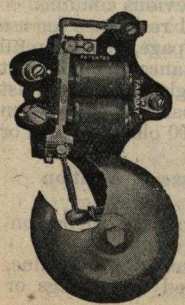


Model CS

SINGLE-STROKE GONGS—SKELETON TYPE

Single-stroke skeleton type gongs Model OS are not recommended except where limitation of expense is controlling factor.

Model No.	Size Gong In.	Frame No.	Resistance Ohms	Price Each	Model No.	Size Gong In.	Frame No.	Resistance Ohms	Price Each
OS-4	4	1	1.5	$5.04	OS-10	10	4	5.2	$20.60
OS-5	5	2	2.1	8.02	OS-12	12	X-5	5.2	24.73
OS-6	6	2	2.1	8.71	OS-14	14	X-5	5.2	41.44
OS-8	8	3	3	12.71	....	....	....	....	....



Model OS

All above bells except skeleton types furnished with outlet box backs for conduit work at same list additions as shown on page listing Inspectors' pattern gongs for respective Frame No.

Skeleton single-stroke bells listed above may be combined with regular pattern skeleton bells to make up list value. Enclosed type single-stroke bells likewise may be combined with regular pattern enclosed type bells and buzzers to make up list value. List price additions for special resistance windings may be included with respective class of bells to make up list value.

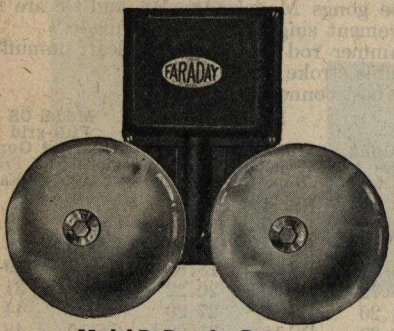
Gongs shown on this page cannot be used on A. C. circuits. For code signaling on A. C. circuits, electro-mechanical gongs or high-speed vibrating transformer gongs are the only types available. Either of the latter patterns will give good results for code signaling on A. C. circuits.

FARADAY DOUBLE-GONG BELLS

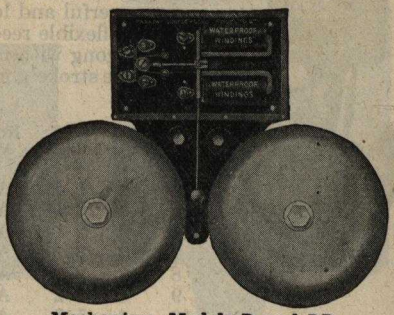
NATIONAL ELECTRICAL CODE STANDARD

ENCLOSED TYPE, VIBRATING, WEATHERPROOF, FOR BATTERY AND D. C. CIRCUITS

Cannot Be Used on A. C. Circuits



Model D, Regular Pattern
Model DP, for Conduit Work



Mechanism, Models D and DP

These bells are designed for five different D. C. service conditions, they should be connected direct on line without external resistance of any sort; but there are two distinctly different types of bells, viz: Multiple type and Series type.

Multiple type gongs for 100–125 and 220–250 volts, and battery circuits of all voltages should always be connected in multiple, like an incandescent lamp is connected to circuit. Multiple type gongs must never be connected in series.

Series type gongs, while requiring no external resistance, may be connected either in multiple or in series, the latter being particularly advantageous, however, under some conditions when lines are long and size copper small; series type gong, in operation, never opens the circuit, minimizing sparking at contacts, etc.; the operation of any one or more gongs in the series may be stopped without interfering with the working of other gongs in circuit.

These bells are entirely different from any double-gong bells on the market because of the new patented quick-break pole-reversing commutator device, which automatically reverses the pull on the armature at extreme position and keeps pull on the armature till it is up against the core; all other double-gong bells reverse the current when armature is in the middle position, causing the magnets to pull the armature in the opposite direction before the end of the stroke.

			Multiple Type, D. C.						Series Type, D. C.				
Model No.	Size Each Gong In.	Frame No.	*100-125 Volts †Resis. Ohms	Price Each	*220-250 Volts †Resis. Ohms	Price Each	*Battery †Resis. Ohms	Price Each	*100-125 Volts †Resis. Ohms	Price Each	*220-250 Volts †Resis. Ohms	Price Each	Add for Conduit Pattern‡
D- 3	3	1	1000	$12.90	2000	$13.60	3	$8.00	1000	$12.90	2000	$13.60	$4.50
D- 4	4	1	1000	13.50	2000	14.20	3	8.60	1000	13.50	2000	14.20	4.50
D- 5	5	1	1000	16.15	2000	16.85	3	11.25	1000	16.15	2000	16.85	4.50
D- 6	6	3	1000	20.05	2000	20.85	6	12.75	1000	20.05	2000	20.85	5.04
D- 7	7	3	1000	21.55	2000	22.35	6	14.25	1000	21.55	2000	22.35	5.04
D- 8	8	3	1000	23.05	2000	23.85	6	15.75	1000	23.05	2000	23.85	5.04
D-10	10	4	1000	33.15	2000	33.55	10	24.75	1000	33.15	2000	33.55	5.40
D-12	12	4	1000	42.15	2000	42.55	10	33.75	1000	42.15	2000	42.55	5.40
D-14	14	4	1000	54.65	2000	55.05	20	41.25	1000	54.65	2000	55.05	5.40
D-16	16	4	1000	68.65	2000	69.15	20	60.25	1000	68.65	2000	69.15	5.40
D-18	18	4	1000	83.65	2000	84.05	20	75.25	1000	83.65	2000	84.05	5.40

*To operate direct on line without external resistance.

†Ohms resistance per pair coils.

‡For conduit pattern add the letter P to Model No. and add to lists in previous columns.

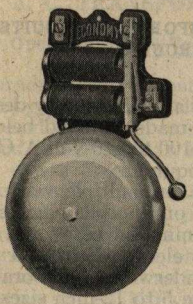
Double-gong bells, above described, will be wound to any desired special resistance for use on D. C. circuits. For prices for such winding, see special listing on another page, being careful to note that double-gong bells always have to be wound to maximum resistance per coil, not per pair as single-gong bells; therefore, prices of double the resistance of single-gong bells must be figured. For example, a single-gong bell to operate without excessive sparking on a given D. C. voltage might be wound to 500 ohms, but a double-gong for same use 500 ohms per coil or 1000 ohms per pair.

In Ordering, be Sure to Specify which of the Five Types is Required and Voltage, in Addition to giving Model Number

When series type gongs are required, order must state: (a) How many gongs are to be connected in each series, (b) voltage of circuit, (c) length of line (both legs) and size of wire.

Assortment of all sizes of enclosed type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with enclosed type gongs or buzzers.

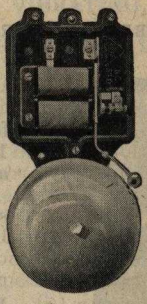
EDWARDS BELLS



No. 17



No. 510



No. 510
(Cover Removed)

ECONOMY SKELETON BELLS—No. 17

For Battery Current—Standard Winding 6 Volts

An intensified and powerful stroke with great economy of current is obtained as follows: The armature, contact spring and their support form a single unit. The spring serves the double purpose of holding the contact points and supplying the spring tension for the armature action. The portion of the spring beyond the contact point is bent at right angles and passes through an opening in the armature, and has a return bend so that the end of the spring passes between the magnet head and the armature.

When the magnets are energized they attract the armature but the contact points do not separate until the armature has practically completed its stroke. The pull of the magnet is effective during the entire stroke, which is long and powerful. As the armature nears the magnet it engages the return bend of the contact spring, drawing the spring away from the contact screw and opening the circuit.

This method of opening the circuit (which is patented) provides a longer and more powerful stroke than can be obtained in any other way. It insures the highest efficiency because it brings the armature into the densest magnetic field before the circuit is broken. The separation of the contact parts is not left to chance but the circuit is mechanically opened. The action is positive; the design is simple and effective.

New Code Binding Posts, as approved by the National Board of Fire Underwriters, are supplied on these bells. Wires may be quickly connected. After the screws are set down, it is impossible for wires to spread or loosen.

Trade No.	Size Inches	Price Each	Trade No.	Size Inches	Price Each
147296	3	$2.00	147300	7	$5.00
147297	4	2.20	147301	8	6.00
147298	5	3.15	147302	10	9.50
147299	6	3.25	147303	12	12.00

TRANSFORMER BELLS—No. 510

Standard Winding, 6-18 Volts, 60 Cycles, A. C.

Designed for use in schools, industrial plants, institutions, and wherever reliable signals are required. Any number of bells may be operated from one transformer. Owing to the methods of armature suspension, the laminated field and cores, and other details of construction, a powerful blow is obtained which produces the greatest volume of sound with a remarkably small current consumption. These bells are of the protected type and, where specified, are furnished with gaskets making them weatherproof. An ingenious and very desirable feature is that two entrances for wires are provided both of which are sealed with wax which can be "knocked off" of the one to be used. These are placed one at the top for use with surface wiring and the other on the back for concealed wiring. New Code binding posts are furnished.

	REGULAR		WEATHERPROOF					
			Without Grid		With Full Grid		With Part Grid	
Size In.	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
5	147304	$9.60	147310	$12.60	147316	$16.60	147322	$14.60
6	147305	10.60	147311	13.60	147317	17.60	147323	15.60
7	147306	12.20	147312	15.20	147318	19.20	147324	17.20
8	147307	13.20	147313	16.20	147319	20.20	147325	18.20
10	147308	23.60	147314	26.60	147320	30.60	147326	28.60
12	147309	29.50	147315	32.50	147321	36.50	147327	34.50

Other voltages and frequencies can be furnished.

P R MARLO TRANSFORMER GONGS

Patented

VIBRATING—FOR 12-VOLT, 60-CYCLE A. C. BELL RINGING TRANSFORMER CIRCUITS AND 110-VOLT, 60-CYCLE A. C. LIGHT AND POWER CIRCUITS



P R Marlo Transformer Bell Cover Removed

25, 30, 40 and 50-cycle to Order.

P R Marlo Transformer Steel-clad A. C. Gongs are all specially designed for operation on transformer circuits. They are made as listed below for 12-volt bell ringing transformer circuits, also for 100 to 110-volt A. C. light and power circuits. No external resistance is required.

P R Marlo Transformer Gongs are designed for multiple work. For series work, Transformer Faraday Gongs, listed on another page, should be used. Transformer gongs are made with laminated cores and every detail of mechanism is of the same standard as electric light and power circuit apparatus—always to full standard of Underwriters' Laboratories, who approve Transformer Marlo Gongs from the 5 to 12-inch sizes.

They have unbreakable drawn steel frames and rugged, substantial trunnions of heavy pressed steel; insulated mechanisms; frame of gong carries no current at any time; magnets wound with enameled wire with all connections soldered; patented adjustable double screw contact posts; substantial back adjustments; armatures and hammer rods in one piece; hammer rods swedged to a spring temper, retaining their resiliency under all conditions; double sets of binding posts provided for concealed or exposed wiring; laminated cores guarantee ideal magnetic conditions. Transformer A. C. Gongs are favorably known throughout the electrical trade from their satisfactory record.

Marlo Giant Steel-clad Gongs are regularly furnished with nickel-plated bell metal gongs. Bases and covers finished in dull black enamel.



P R Marlo Transformer Bell with Cover

P R MARLO TRANSFORMER STEEL-CLAD GONGS, 2½ TO 4 INCHES

For Use in Multiple on 12-volt, 60-cycle A. C. Bell Ringing Transformer Circuits

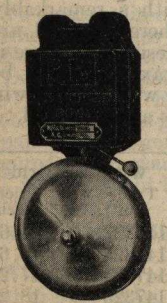
Size Gong Inches	Price Each	Size Gong Inches	Price Each
2½	$1.80	Fancy gongs (see illustrations	$2.10
3	1.90	on previous page).....	
4	2.05	Buzzers	2.20

P R MARLO TRANSFORMER GIANT STEEL-CLAD GONGS, 5 TO 12 INCHES

National Electrical Code Standard

For Use in Multiple on 12-volt, 60-cycle A. C. Bell Ringing Transformer Circuits

Size Gong Inches	Price, Each: Non-guarded Gongs for Interior Use	Non-guarded Gongs for Outside Use	Half-grid-guarded Gongs for Outside Use
5	$ 9.58	$12.58	$14.58
6	10.57	13.57	15.57
7	12.21	15.21	17.21
8	13.21	16.21	18.21
10	23.62	26.62	28.62
12	29.53	32.53	34.53
For Use in Multiple on 110-volt, 60-cycle A. C. Light and Power Circuits (No External Resistance Required)			
5	13.65	16.65	18.65
6	14.40	17.40	19.40
7	16.04	19.04	21.04
8	17.04	20.04	22.04
10	27.51	30.51	32.51
12	34.77	37.77	39.77



P R Marlo Weatherproof Transformer Bell for Outside Use

All gongs installed on light or power circuits should be installed in accordance with the Underwriters' rules applying to 110 or 220-volt lamps, and should be protected by a one-ampere or a two-ampere fuse.

Assortment of all sizes of P R Marlo Giant Steel-clad, Faraday Enclosed Type Gongs and Faraday Buzzers may be combined to make up list value, but *Skeleton* Gongs cannot be included. List price additions for special resistance windings can be included with gongs to make up list value.

Send for Special Bulletin 18516 on Faraday and PR Signal Gongs.

FARADAY SIGNAL GONGS

NATIONAL ELECTRICAL CODE STANDARD

A. C. TRANSFORMER SINGLE-GONG ENCLOSED TYPE, VIBRATING, WEATHERPROOF

For Operation on 18 Volt A. C. Bell Ringing Transformer Circuits and 100-220 Volt A. C. Light and Power Circuits, 25-60 Cycles

Faraday Transformer Enclosed Type Signal Gongs listed below are made in non-guarded, half-grid-guarded and full-grid-guarded gong designs. The mechanism is entirely different in design and operation from the ordinary type of signal gongs. They have no contacts, can be operated in series or in multiple with absolutely no sparking, and may be safely installed in places where presence of gas, inflammable vapors and dust have hitherto made the use of electric signaling apparatus dangerous, if not actually impossible. The extreme rapidity of vibration gives a sound just as satisfactory for code signaling as a single stroke gong.

Transformer gongs are regularly furnished to operate direct in multiple without external resistance on 18 volt, 110 volt and 220 volt circuits. When specially ordered, they will be furnished to operate as follows: (a) In series (any number as may be specified not exceeding 10 gongs) on 100-110 volt A. C. light and power circuits, 25-60 cycles. (b) In series (any number as may be specified not exceeding 20 gongs) on 220 volt A. C. light and power circuits, 25-60 cycles.

Even when as many as twenty gongs are connected in series on a 220 volt circuit or 10 on 110 volt circuit, the current consumption of all gongs is no greater than that required by one gong, an important desideratum in satisfactory operation and life of circuit closing devices.

Magnet cores are of latest type laminated construction, windings are of enameled wire and every detail of the mechanism is of the same standard as light and power circuit apparatus.

When used on bell ringing transformers it is very important that the transformer be of sufficient capacity or satisfactory gong operation is impossible. Ample size copper in line between transformers and gongs is also an absolute essential.



Model AT



Model BT



Model CT

Model AT Non-guarded Gongs, 3½ to 12 Inches

Model No.	Size In.	Frame No.	To Operate On: A. C. 18 Volt Transformer Circuits	100-120 Volt A. C. Circuits	220-250 Volt A. C. Circuits	Add for Conduit Pattern*
AT- 3½	3½	1	$8.29	$10.85	$14.98	$4.50
AT- 4	4	1	8.44	11.20	15.50	4.50
AT- 5	5	2	13.03	17.10	22.00	4.68
AT- 6	6	2	14.42	18.25	23.25	4.68
AT- 7	7	3	16.37	20.25	25.25	5.04
AT- 8	8	3	17.72	21.55	26.50	5.04
AT- 9	9	4	23.70	27.95	33.45	5.40
AT-10	10	4	28.19	32.50	38.00	5.40
AT-12	12	X-5	36.86	42.10	48.00	5.40
Model BT Half-grid-guarded Gongs, 3½ to 12 Inches						
BT- 3½	3½	1	9.29	11.85	15.98	4.50
BT- 4	4	1	9.44	12.20	16.50	4.50
BT- 5	5	2	14.53	18.60	23.50	4.68
BT- 6	6	2	15.92	19.75	24.75	4.68
BT- 7	7	3	18.87	22.75	27.75	5.04
BT- 8	8	3	20.22	24.05	29.00	5.04
BT- 9	9	4	26.70	30.95	36.45	5.40
BT-10	10	4	31.19	35.50	41.00	5.40
BT-12	12	X-5	41.18	46.10	52.00	5.40
Model CT Full-grid-guarded Gongs, 5 to 12 Inches						
CT- 5	5	2	22.03	26.10	31.00	4.68
CT- 6	6	2	23.42	27.25	32.25	4.68
CT- 7	7	3	29.87	33.75	38.75	5.04
CT- 8	8	3	31.22	35.05	40.00	5.04
CT- 9	9	4	43.70	47.95	53.45	5.40
CT-10	10	4	48.19	52.50	58.00	5.40
CT-12	12	X-5	63.18	68.10	74.00	5.40

*For conduit patterns add the letter P to Model No. and add to lists in previous columns, amounts shown in right hand column.

Above gongs are to operate in multiple, no external resistance required.

In ordering specify Model No. and voltage.

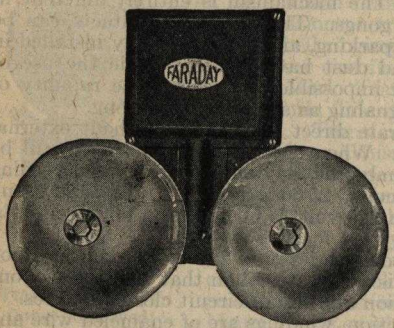
Assortment of all sizes enclosed-type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with enclosed-type gongs or buzzers. List price additions for special resistance windings may be included with bells to make up list value.

All gongs full polished nickel unless otherwise specified.

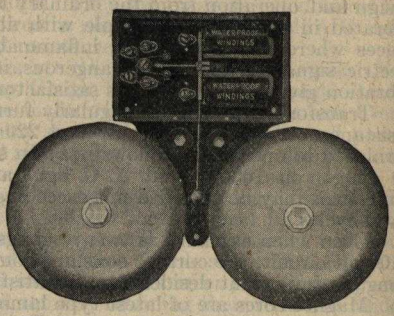
FARADAY TRANSFORMER DOUBLE-GONG BELLS

NATIONAL ELECTRICAL CODE STANDARD

ENCLOSED TYPE, VIBRATING, WEATHERPROOF, FOR 18-VOLT A. C. BELL RINGING TRANSFORMER CIRCUITS AND 100-220-VOLT A. C. LIGHT AND POWER CIRCUITS, 25-60 CYCLES



Model DT, Regular Pattern
Model DTP, For Conduit Work



Mechanism, Models DT and DTP

These bells are designed for five different A. C. service conditions; they should be connected direct on line without external resistance of any sort; there are two distinctly different types of bells, viz: Multiple type and Series type.

Multiple type gongs for 100 to 220-volt A. C. circuits should always be connected in multiple, like an incandescent lamp is connected to circuit. Multiple type gongs must never be connected in series.

Series type gongs, while requiring no external resistance, may be connected either in multiple or in series, the latter being particularly advantageous, however, under some conditions when lines are long and size copper small. The series type gong, in operation, never opens the circuit, minimizing sparking at contacts, etc.; the operation of any one or more gongs in the series may be stopped without interfering with the working of other gongs in circuit.

These bells are entirely different from any A. C. gongs on the market, because of the new patented quick-break pole-reversing commutator device, which automatically reverses the pull on the armature at extreme position, and keeps pull on the armature till it is up against the core. All other double-gong bells reverse the current when armature is in the middle position, causing the magnets to pull the armature in the opposite direction before the end of the stroke.

			Multiple Type, A. C.				Series Type, A. C.						
	Size Each		*100–110 Volts		*220 Volts		*100–110 Volts		*220 Volts		*18 Volts		Add for
Model No.	Gong In.	Frame No.	†Resis. Ohms	Price Each	†Resis. Ohms	Price Each	†Resis. Ohms	Price Each	†Resis. Ohms	Price Each	†Resis. Ohms	Price Each	Conduit Pattern‡
DT- 3	3	1	400	$11.90	800	$12.90	1000	$12.90	2000	$13.60	30	$ 9.80	$4.50
DT- 4	4	1	400	12.50	800	13.50	1000	13.50	2000	14.20	30	10.40	4.50
DT- 5	5	1	400	15.15	800	16.15	1000	16.15	2000	16.85	30	13.05	4.50
DT- 6	6	3	30	18.35	600	19.95	1000	20.05	2000	20.85	30	17.45	5.04
DT- 7	7	3	30	19.85	600	21.45	1000	21.55	2000	22.35	30	18.95	5.04
DT- 8	8	3	30	21.35	600	22.95	1000	23.05	2000	23.85	30	20.45	5.04
DT-10	10	4	24	30.50	500	32.95	1000	33.15	2000	33.55	30	30.00	5.40
DT-12	12	4	24	39.50	500	41.95	1000	42.15	2000	42.55	30	39.00	5.40
DT-14	14	4	24	52.00	500	54.45	1000	54.65	2000	55.05	30	51.50	5.40
DT-16	16	4	24	66.00	500	68.45	1000	68.65	2000	69.15	30	65.50	5.40
DT-18	18	4	24	81.00	500	83.45	1000	83.65	2000	84.05	30	80.50	5.40

*To operate direct on line without external resistance.

†Resistance in ohms is the resistance of both coils combined. The actual resistance in circuit is only one-half that shown above, but it will of course be understood that each coil is wound to take the entire line-voltage, not the pair as in single-gong bells.

‡For conduit pattern add the letter P to Model No. and add to lists in previous columns.

In Ordering, be Sure to Specify which of the Five Types is Required, Voltage and Cycles, in Addition to giving Model Number

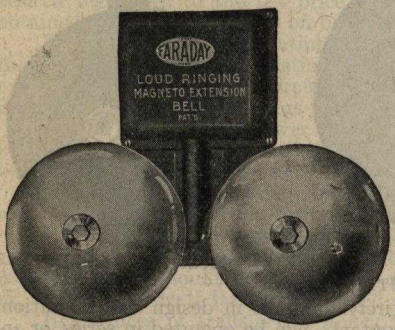
When series type gongs are required, order must state: (a) How many gongs are to be connected in each series, (b) voltage and cycles of circuit, (c) length of line (both legs) and size of wire.

Assortment of all sizes enclosed type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with enclosed type gongs or buzzers.

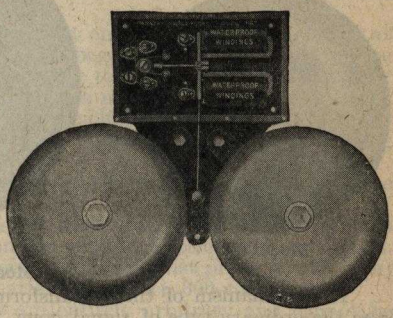
FARADAY DOUBLE-GONG BELLS

NATIONAL ELECTRICAL CODE STANDARD

LOUD-RINGING MAGNETO-EXTENSION VIBRATING TYPE, WEATHERPROOF, FOR A. C. MAGNETO GENERATOR CIRCUITS OF 16⅔ CYCLES ENCLOSED TYPE



Model M, Regular Pattern
Model MP, for Conduit Work



Mechanism, Models M and MP

Mechanisms of Model M loud-ringing magneto-extension bells are of polarized type with permanent magnets, entirely different in principle from the standard double-gong bell. These bells are made in three sizes, viz.: 6-inch, 8-inch and 10-inch. They cannot be furnished in larger sizes.

Under certain line conditions, the operation of Model M bells is improved by use of condensers which are listed in two capacities at bottom of page. Prices of bells do not include condensers and in all cases where condensers are wanted, specific order for them must be given, as Model M bells are regularly furnished without condensers.

Size Gong Inches	Frame No.	Resistance Ohms per Pair Magnets	Model M Regular Pattern Model No.	Model M Regular Pattern Price Each	Model MP for Conduit Work Model No.	Model MP for Conduit Work Price Each
6	3	80	M-680	$18.85	MP-680	$23.89
6	3	160	M-6160	19.25	MP-6160	24.29
6	3	300	M-6300	19.85	MP-6300	24.89
6	3	500	M-6500	19.95	MP-6500	24.99
6	3	1000	M-61000	20.05	MP-61000	25.09
6	3	1200	M-61200	20.85	MP-61200	25.89
6	3	1600	M-61600	20.85	MP-61600	25.89
8	3	80	M-880	21.85	MP-880	26.89
8	3	160	M-8160	22.25	MP-8160	27.29
8	3	300	M-8300	22.85	MP-8300	27.89
8	3	500	M-8500	22.95	MP-8500	27.99
8	3	1000	M-81000	23.05	MP-81000	28.09
8	3	1200	M-81200	23.85	MP-81200	28.89
8	3	1600	M-81600	23.85	MP-81600	28.89
10	3	80	M-1080	30.85	MP-1080	35.89
10	3	160	M-10160	31.25	MP-10160	36.29
10	3	300	M-10300	31.85	MP-10300	36.89
10	3	500	M-10500	31.95	MP-10500	36.99
10	3	1000	M-101000	32.05	MP-101000	37.09
10	3	1200	M-101200	33.55	MP-101200	38.59
10	3	1600	M-101600	33.55	MP-101600	38.59

CONDENSERS

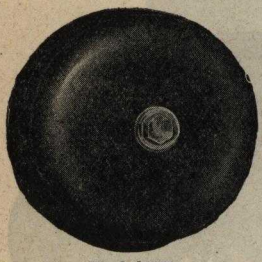
Mfrs. No.	Capacity	Price Each
CMF-2	2MF	$2.00
CMF-4	4MF	3.80

Assortment of all sizes enclosed type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with enclosed type gongs or buzzers.

FARADAY TRANSFORMER UNDERDOME SIGNAL GONGS

NATIONAL ELECTRICAL CODE STANDARD

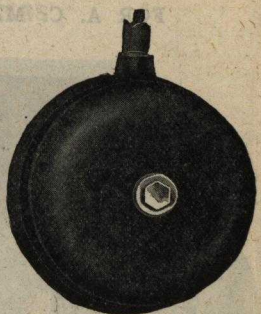
ENCLOSED TYPE, VIBRATING, WEATHERPROOF, FOR 18-VOLT A. C. BELL RINGING TRANSFORMER CIRCUITS AND 100–220-VOLT A. C. LIGHT AND POWER CIRCUITS, 25–60 CYCLES



Model UT



Mechanism
Models UT, UTP and UTFP



Models UTP and UTFP

The mechanism of these transformer gongs is entirely different in design and operation from the ordinary type of signal gong. They have no contacts, can be operated in series or in multiple with absolutely no sparking and may be safely installed in places where presence of gas, inflammable vapors and dust have hitherto made the use of electric signalling apparatus dangerous, if not actually impossible.

The extreme rapidity of vibration gives a sound just as satisfactory for code signalling as a single-stroke gong. They are regularly furnished to operate direct in multiple without external resistance on 18-volt, 110-volt and 220-volt circuits. When specially ordered, they will be furnished to operate as follows, viz.: (a) In series (any number as may be specified not exceeding 10 gongs) on 100–110 volts A. C. light and power circuits, 25–60 cycles. (b) In series (any number as may be specified not exceeding 20 gongs) on 220 volts A. C. light and power circuits, 25–60 cycles.

Even when as many as 20 transformer gongs are connected in series on a 220-volt circuit or 10 on 110-volt circuit, the current consumption of all gongs is no greater than that required by one gong, an important desideratum in satisfactory operation and life of circuit closing devices.

Magnet cores are of latest type laminated construction; windings are of enameled wire, and every detail of the mechanism is of the same standard as light and power circuit apparatus.

When used on bell ringing transformers, it is very important that the transformer be of sufficient capacity or satisfactory gong operation is impossible. Ample size copper in line between transformers and gongs is also an absolute essential.

Model UT (no outlet box back), UTP and UTFP (with outlet box backs) fill a long felt want, providing as they do, an absolutely non-sparking mechanism for operation on A. C. circuits.

Size Gong Inches	Frame No.	Model UT for Regular Work Model No.	Price Each	Model UTP for Exposed Conduit Work Model No.	Price Each	Model UTFP for Flush Conduit Work Model No.	Price Each
For Use Direct in Multiple on 18-volt 25–60-cycle A. C. Bell Ringing Transformer Circuits							
8	3	UT-8	$24.05	UTP-8	$33.05	UTFP-8	$29.09
10	4	UT-10	34.15	UTP-10	44.15	UTFP-10	39.15
For Use Direct in Multiple on 100–110-volt 25–60-cycle A. C. Light and Power Circuits							
8	3	UT-8	23.05	UTP-8	32.05	UTFP-8	28.09
10	4	UT-10	33.15	UTP-10	43.15	UTFP-10	38.15
For Use Direct in Multiple on 200–220-volt 25–60-cycle A. C. Light and Power Circuits							
8	3	UT-8	23.85	UTP-8	32.85	UTFP-8	28.89
10	4	UT-10	33.15	UTP-10	43.95	UTFP-10	38.55
For Use in Series (Any Number as May be Specified not Exceeding 10 Gongs) on 100–110-volt 25–60-cycle A. C. Light and Power Circuits							
8*	3	UT-8	24.05	UTP-8	33.05	UTFP-8	29.09
10*	4	UT-10	34.15	UTP-10	44.15	UTFP-10	39.15
For Use in Series (Any Number as May be Specified not Exceeding 20 Gongs) on 200–220-volt 25–60-cycle A. C. Light and Power Circuits							
8*	3	UT-8	24.05	UTP-8	33.05	UTFP-8	29.09
10*	4	UT-10	34.15	UTP-10	44.15	UTFP-10	39.15

*When series gongs are ordered, specify the number to be connected in series together with voltage and cycles of circuit.

Transformers must always be of sufficient capacity or gong operation is impossible. Ample size copper conductors between transformers and gongs is also very necessary.

Assortment of all sizes of enclosed type gongs and buzzers permitted to make up list value but Faraday and Competition Skeleton Bells cannot be included with under-dome gongs or buzzers.

FARADAY SPECIAL RESISTANCE WINDINGS

FOR FARADAY AND COMPETITION SKELETON AND ENCLOSED TYPE BELLS AND BUZZERS

List additions shown below apply to Faraday Skeleton, Competition Skeleton, Faraday Enclosed-type Gongs, Faraday Under-dome Gongs, Faraday Double-gong Bells, Faraday Electro-mechanical Gongs and Faraday Buzzers for use on battery and D. C. circuits. They do not apply to A. C.

To obtain the list price of special resistance bells, add the list prices shown below for the desired resistance to the list price of the regular resistance bells. To the combined figure thus obtained, standard discounts on bells apply.

Regular resistance vibrating bells will operate satisfactorily on battery and D. C. circuits at the voltage shown in tables listing various types of bells on other pages, but where gongs are to be operated on higher voltage circuits or where a number of gongs are to be operated simultaneously in multiple on a circuit, gongs wound to proper higher resistance must be used.

For D. C. light and power circuits, as well as lower D. C. voltages, data given in table at bottom of page should be used, this table showing approximate ohms resistance for vibrating bells for various D. C. voltages.

To operate on low voltage battery, single-stroke gongs are best wired in multiple. Figure resistance by the following formula: $R = E^2 \div 20$.

Faraday Enclosed-type Vibrating Gongs will be furnished, when ordered, wound to 150 ohms to operate direct in multiple with an external resistance on 600 volts D. C. street railway circuits. 600-volt gongs should be used either with Faraday Resistance Panels (list price, $13.00 each) or, with five 60-watt lamps, connected as per blue print attached to each 600-volt gong.

Resistances of transformer gongs for A. C. circuits are entirely arbitrary and cannot be figured on the same basis as shown below for D. C. circuits.

For A. C. circuits, transformer single-gong bells, transformer under-dome gongs or transformer double-gong bells should invariably be used. All Faraday Transformer Gongs, single-gong pattern, are of the no-contact non-sparking type. They may be connected in series (when wound to proper resistance for this work) and when so connected, the total number of gongs on the circuit requires no more current than one gong would require in multiple. Particular attention is called to this advantage over other transformer gongs, for the reduced current demand for the operation of the number of gongs makes possible the use of any first class contact key of standard design.

Triplex contacts will be furnished, when specially ordered, at slight additional cost on all Faraday Vibrating Gongs and Buzzers, except the smallest size on No. 00 frames. Triplex contacts are a guarantee against the failure of a signal gong, for with three independent sets of contacts, one set may break down or even two sets without causing the failure of the gong.

Pure platinum is the most dependable for gong contacts, but where price of platinum seems prohibitive, platinoid will be found satisfactory.

Single-stroke and electro-mechanical gongs have no contacts.

Resistance of single-stroke gongs is approximately one-fourth that of vibrating gongs when designed for operation on similar voltages.

List additions for special resistance windings of skeleton bells may be combined with list prices of skeleton bells and likewise list additions for special resistance windings of enclosed type bells (including under-dome gongs, double-gong bells, electro-mechanical gongs and buzzers) may be combined with list prices of these bells to obtain list values determining discounts. However, list additions for enclosed type bells cannot be combined with skeleton bells to make up list values.

OHMS RESISTANCE FOR OPERATION OF FARADAY VIBRATING GONGS ON DIRECT CURRENT VOLTAGES WITHOUT EXCESSIVE SPARKING AT CONTACTS

Ohms Resistance per Bell	Adapted to Operate on Following Voltages	Ohms Resistance per Bell	Adapted to Operate on Following Direct Current Voltages
5	6–10	350	65– 80
10	10–15	400	80– 95
20	15–20	450	95–105
50	20–25	500	105–110
100	25–30	550	110–120
150	30–35	1000	120–130
200	35–45	2000	220–240
250	45–55	150*	500–600
300	55–65	....	.....

*To operate with resistance panel or bank of five 60-watt lamps.

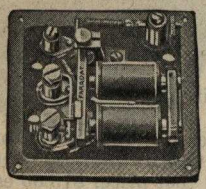
SPECIAL RESISTANCE WINDING LIST, ADDITIONS PER GONG

Size, Gong, Inches		Frame	Resistance, Ohms									
Skeleton	Enclosed Type	No.	0–10	11–20	21–50	51–100	101–150	151–200	201–300	301–500	501–1000	1001–2000
Not Made	1¾ and 2	00	$1.00	$1.50	$2.00	$2.80	$3.00	$3.30	$3.40	....	....	....
Not Made	2½ and 3	0	1.00	1.50	2.00	2.80	3.00	3.30	3.40	....	....	....
2½, 3, 3½, 4	4	1	1.20	1.80	2.30	3.20	3.50	3.70	3.80	3.90	4.90	5.60
5 and 6	5 and 6	2	2.50	3.50	3.65	3.80	4.00	4.20	4.40	5.10	5.80	6.80
7 and 8	7 and 8	3	3.50	4.70	5.60	6.10	6.30	6.50	7.10	7.20	7.30	8.10
9 and 10	9 and 10	4	4.75	5.25	5.75	7.40	7.60	7.80	8.00	8.20	8.40	8.80
12, 14, 15	12 and 14	X-5	4.75	5.25	5.75	7.40	7.60	7.80	8.00	8.20	8.40	8.80
15, 16, 18	15, 16, 18	6	12.10	18.30	25.20	26.00	26.80	27.60	28.30	29.20	29.90	30.90

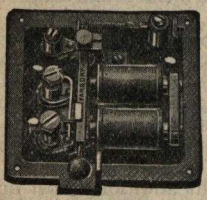
FARADAY LOW VOLTAGE CAR SIGNAL OUTFITS



Model 95 Buzzer
Standard Lettered Cover



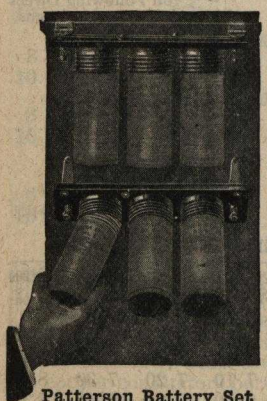
Model 95 Buzzer
Cover Removed



Model 94 Buzzer
Cover Removed



Patterson Battery Set
Box Type BB



Patterson Battery Set
Strip Type B
Mounted Under Car Seat
Lower Strip Shows No. 1 Hinge
Upper Strip Shows No. 2 Hinge

WEATHERPROOF

Low voltage Faraday Car Signal Outfits are standard the country over because they absolutely do away with maintenance expense and interrupted service.

These outfits consist of either the Model 95 or Model 94 Faraday Car Signal Buzzer with Patterson Battery Sets either of the Strip Type B or the Steel Box Type BB.

Two (2) types of car signal buzzers are made, viz.:

No. 95 Standard.

No. 94 Extra Loud.

The No. 95 Standard has the Faraday "High Power" Armature and gives twice as loud a sound as competitive makes; the No. 94 Extra Loud shown in third illustration on this page has, in addition to the "High Power" armature, a heavy steel ball at end of armature rod—this steel ball striking on extension of the base frame casting with such force and rapidity as to make the signal three times as powerful as the No. 95.

We recommend the steel box type battery set for use on these car signal outfits in place of the open strip type, but of course either battery holder may be used with perfectly satisfactory results.

Four-cell battery sets are recommended for car signal work with 5-ohm Faraday Buzzers as giving most satisfactory results; when 5-ohm buzzers are required same must be specially ordered, for otherwise standard 1.5-ohm buzzers will be furnished.

Both Nos. 94 and 95 Faraday Car Signal Buzzers will be furnished in lots of 100 or more with name of railway company cast on the cover and brought out in gilt, without extra charge. Special resistance buzzers furnished to order. Prices same as for No. 1 frame enclosed type bells. See another page. Triplex Pure Platinum Contacts, $3.00 net, per buzzer, extra.

Model B Strip Type Battery Holders (see lower illustration) are furnished with two types of hinge brackets.

(a) No. 1 hinge, for mounting on upright surface.

(b) No. 2 hinge, for mounting on horizontal surface.

Both of the above permit the lifting of holder, so that renewal of cell is the easiest possible operation.

Trade No.	Description	Price Each
42876	Faraday Car Signal Buzzer, No. 95 Standard	$4.00
42877	Faraday Car Signal Buzzer, No. 94 Extra Loud	4.25
42878	Box type Patterson Battery Set, street railway Type BB–2 (2-cell size), complete, with steel case and padlock (no cells)	6.00
42879	Same as above, except 3-cell size	7.80
42880	Same as above, except 4-cell size	9.60
42881	Strip type Patterson Battery Set, street railway type B (2-cell size), no cells	3.00
42882	Same as above, except 3-cell size	4.50
42883	Same as above, except 4-cell size	6.00

NOTE.—Buzzers for operation on 4-cell outfits should be ordered wound to 5 ohms resistance. No extra charge for this.

No battery cells are included in the above prices. For Patterson Columbia Cells, add 1 cent per cell to barrel lot of old style binding post cell.

FARADAY HIGH VOLTAGE CAR SIGNAL SYSTEMS



No. 19402 Resistance Panel



No. 19403 High Voltage Buzzer



No. 19405 Surface Type Push Button

The Faraday Car High Voltage Signal System provides a dependable and economical means of operating car push button signal systems direct from the trolley circuit of 500 to 600 volts.

Standard complete outfits consist of two car signal buzzers, one 600-volt resistance panel with enclosed fuse and the necessary number of push buttons. Single stroke or vibrating bells may be substituted in place of buzzers if desired.

The buzzers are wound to a resistance of 1000 ohms and are insulated with hard rubber and mica. Heavy contacts and micrometer lock adjustments are used which cannot possibly change, from car vibration. The frame castings and covers are insulated from the mechanism, and a soft rubber gasket makes the enclosure waterproof under all conditions.

The resistance panels are mounted on Monson slate bases and contained in cast iron covers. The resistance units are supplied in cartridge form with terminal clips so that they may be readily removed and replaced. Connections for a special $\frac{3}{10}$-ampere enclosed fuse are also included.

The push buttons are designed specially for this service, being double break and actuated by a spiral spring. The leads consist of 20 inches of stranded, rubber covered braided wire which are carried into the molded composition base of the button and all parts are permanently attached, making the buttons absolutely tamper proof.



No. 19591 Flush Type Push Button

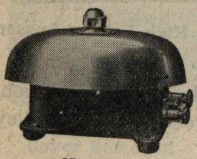
The listing below covers standard high voltage car signal system outfit, although single stroke or vibrating bells or extra loud buzzers may be substituted at an additional charge.

Mfrs. No.		Price Each
19588	Faraday standard high voltage car signal system, outfit consisting of No. 19402 resistance panel with resistance unit and enclosed fuse, two No. 19403 car signal buzzers and twenty No. 19405 high voltage push buttons	$33.00
	PUSH BUTTONS	
19405	Faraday surface type high voltage push button, $2\frac{1}{8}$x$1\frac{1}{4}$ inches	.75
19590	Faraday flush type high voltage push button, $3\frac{5}{16}$x$1\frac{3}{16}$ inches	1.60
19591	Faraday flush type high voltage push button, $2\frac{3}{4}$x$1\frac{1}{8}$ inches	1.50

EDWARDS RECTI BELLS



No. 100


No. 219



No. 100 A. C.



No. 220



No. 78815



No. 78826

No. 100

It is weatherproof and is designed for fire alarms, automobiles, factories, signal systems, mine or marine use. Heavy cast japanned box, with oil-soaked felt gasket, enclosing mechanism; direct-acting straight line hammer rod; magnets impregnated with moisture-resisting compound; contacts extra heavy.

Trade No.	Size In.	Volts, Direct Current: Up to 6	7 to 25	26 to 50	51 to 100	110 to 120	150 to 220
086442	3	$6.10	$7.10	$7.85	$9.10	$8.85	$13.00
086443	4	6.44	7.44	8.19	9.44	9.20	13.50
086444	5	10.53	11.78	12.88	14.83	14.60	19.50
086445	6	11.92	13.17	14.27	16.00	15.75	20.75
086446	7	13.37	14.62	15.72	17.50	17.25	22.25
086447	8	14.72	15.97	17.07	18.80	18.55	23.50
086449	10	24.69	26.44	28.00	29.20	29.00	34.50
086450	12	33.68	35.36	37.36	38.85	38.60	44.50
086451	14	41.15	43.15	45.15	46.65	46.00	52.00
086452	15	82.49	85.49	88.99	90.49	85.75	93.75
086453	16	86.41	89.41	93.41	97.90	92.41	102.00
086454	18	98.21	101.21	105.21	109.70	106.21	116.00

Prices for special resistance bells quoted on application.
For carbon contacts in sizes 3 and 4-inch, add to list, 50 cents.

RECTI-UNDERDOME BELLS, No. 219

Furnished at same prices as No. 100 standard bells, listed above.

ALTERNATING CURRENT TYPE, No. 100 A. C.

18 to 110 Volts, Single-Phase, 25, 40 or 60 Cycles—Carbon Contacts

An adaptation of the Recti Bell, retaining all of the desirable features of this well-known type, with an assurance of positive and vigorous operation on alternating current.

Trade No.	Size Inches	Volts	Price Each	Trade No.	Size Inches	Volts	Price Each
086462	4	18-110	$11.66	086466	8	110	$24.94
086463	5	30-110	19.37	086467	9	110	34.18
086464	6	30-110	21.25	086468	10	110	40.12
086465	7	110	23.08	78832	12	110	53.67

Also furnished for 220 volts. Prices special.

BUZZERS, No. 220—3 OHMS

Construction and specifications similar to the Recti No. 100, shown above

Trade No.	Style	Dimensions, Inches: Height	Width	Depth	Price Each
086470	A, without carbon contacts	4½	3⅛	2⅛	$5.29
086471	B, with carbon contacts...	6	4¼	2¾	7:96

If Style A is wanted with carbon contacts, add to list, 50 cents.
For alternating current, add for Style A, $10.00; Style B, $12.93.

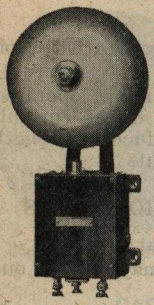
GRIDS FOR RECTI BELLS

It is sometimes considered necessary to have additional protection for bells to prevent the maliciously inclined from tampering with or breaking the gong or so deaden the sound that it would not be heard. For this purpose the part grid or full grid is furnished. Any Recti type bell, except No. 219, can be supplied with grids.

In ordering, add to manufacturers' number the letters P. G. for part grid or F. G. for full grid.

Size Inches	Part Grid: Trade No.	Part Grid: Price Each	Full Grid: Trade No.	Full Grid: Price Each
4	78815	$1.00	.....	.....
5	78816	1.50	78826	9.00
6	78817	1.50	78827	9.00
7	78818	2.50	78828	13.50
8	78819	2.50	78829	13.50
10	78820	3.00	78830	20.00
12	78821	4.00	78831	26.50
14	78822	4.00	.....	.....
15	78823	8.33	.....	.....
16	78824	10.83	.....	.....
18	78825	17.91	.....	.....

EDWARDS RECTI BELLS



No. 217

No. 217 HIGH VOLTAGE TYPE

Long, quick-break contacts, slate base mounting, operates gong up only. Designed for intermittent service; not weatherproof. Suitable for use directly on the line without external resistance.

Trade No.	Size Inches	Volts, Direct Current Up to 299	300 to 499	500 to 600
086455	6	$31.00	$38.00	$41.50
086456	8	34.50	42.00	44.50
086457	10	45.50	51.50	55.50
086458	12	56.00	62.00	65.00
086459	14	70.00	76.50	79.50
086460	16	108.00	114.60	117.50
086461	18	129.00	135.50	138.25



No. 100U

No. 100U FOR SPRINKLER SYSTEMS

Approved by National Board of Fire Underwriters for sprinkler systems and on all voltages up to 250 volts. A new type of the Recti Bell, which includes the many exceptionally desirable features of the other types of the same bell. Binding posts are not used; instead flexible wire leads are brought from the case through insulating bushings to which line wires can be properly connected. This is a method preferred by the Underwriters' Laboratory and many engineers as superior to a friction contact.

Standard Up to 6 Volts

Trade No.	Size Inches	Price Each	Trade No.	Size Inches	Price Each
78781	3	$6.10	78788	10	$24.69
78782	4	6.44	78789	12	33.68
78783	5	10.53	78790	14	41.15
78784	6	11.92	78791	15	82.49
78785	7	13.37	78792	16	86.41
78786	8	14.72	78793	18	98.21

Prices for other voltages or special resistance same as No. 100 Recti Bell.



No. 100A

No. 100A AUTOMOBILE TYPE

The mechanism is positively dust and mud-proof, and may be placed on the outside of vehicle without being encased. Operates on a direct current from either primary or storage batteries. In ordering, always state voltage of battery they are to work on.

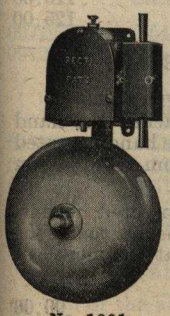
Standard up to 88 Volts

Trade No.	Size Inches	Price Each	Trade No.	Size Inches	Price Each
78794	5	$10.53	78797	8	$14.72
78795	6	11.92	78798	10	24.68
78796	7	13.37	78799	12	33.68

No. 1001 WITH CONDUIT ATTACHMENT

Direct Current

Trade No.	Size Inches	Volts Up to 6	7 to 25	26 to 50	51 to 100	110 to 120	150 to 220
78800	6	$15.92	$17.17	$18.25	$20.00	$19.75	$24.75
78801	8	18.72	19.97	21.07	22.80	22.55	27.50
78802	10	28.19	29.94	31.50	32.70	32.50	38.00
78803	12	36.86	38.86	40.86	42.35	42.10	38.00
78804	14	44.40	46.40	48.40	49.90	49.00	55.25



No. 1001

25, 40, 60 CYCLES

Alternating Current

Trade No.	Size Inches	Volts	Price Each	Trade No.	Size Inches	Volts	Price Each
78805	4	18–110	$14.58	78812	7	220	$33.22
78806	4	220	19.33	78813	8	110	28.95
78807	5	30–110	23.33	78814	8	220	34.56
78808	5	220	29.00	135503	10	110	44.16
78809	6	30–110	25.41	135504	10	220	49.95
78810	6	220	30.91	135505	12	110	57.70
78811	7	110	27.70	135506	12	220	64.20

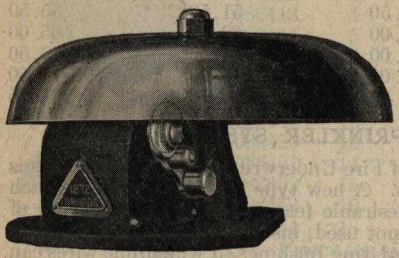
EDWARDS RIOT BELLS

MOTOR-DRIVEN

An absolutely new principle—very powerful, quick responding, loud-ringing, weatherproof, revolving stroke bells; bells that obtain all the sound the gongs can produce.

A smooth running, high efficiency motor, specially constructed for the purpose, operated by battery circuit of 6 volts or higher, or lighting circuits, alternating or direct current.

The momentum obtained by complete revolution in rapid succession produces a strength of blow never before obtained. No adjustment is needed; no parts to wear out.



No. 300 General Alarm Type

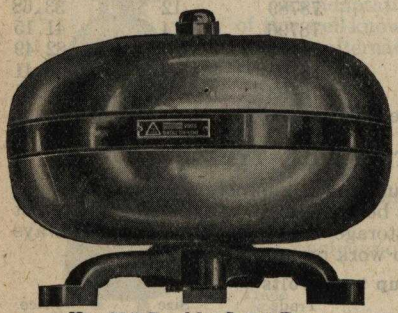
No. 300 GENERAL SIGNAL RIOT BELLS

A Loud Ringing Alarm or Signal Bell

The bells are weatherproof and may be used out of doors.

Made in sizes 10 to 18-inch, for all voltages and cycles. Furnished for 6-volt battery where not otherwise specified.

Trade No.	Size Inches	Voltage	Price Each
71756	10	6—Battery	$ 82.50
71757	10	110—A. C. or D. C.	102.50
71758	12	6—Battery	85.00
71759	12	110—A. C. or D. C.	105.00
71760	14	6—Battery	90.00
71761	14	110—A. C. or D. C.	110.00
71762	15	6—Battery	100.00
71763	15	110—A. C. or D. C.	120.00
71764	16	6—Battery	105.00
71765	16	110—A. C. or D. C.	125.00
71766	18	6—Battery	115.00
71767	18	110—A. C. or D. C.	135.00



No. 310 Double Gong Type

No. 310 DOUBLE GONG RIOT BELLS

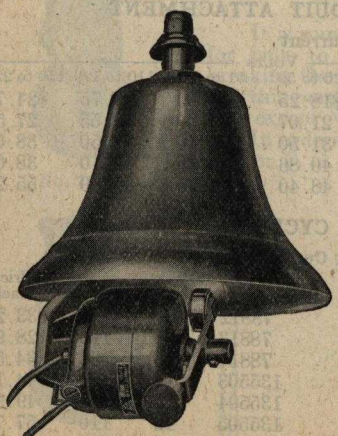
For Fire Engines and Ambulances

The only signals sufficiently different and clamorous enough to meet the urgent necessity of fire vehicles or ambulances.

They operate on a 6-volt battery by the steering wheel push and produce a far-reaching, effective, entirely different warning of the approach, a rigorous, emphatic demand for the right of way, in a tone loud enough and strong enough to be heard at a distance, enabling pedestrians or traffic to keep the way open.

An adaptation of the riot bell, using two gongs and a double striker. The gongs are struck alternately. As the gongs are of different tones the volume of sound is greatly intensified.

71768	12	6—Battery	90.00
71769	14	6—Battery	100.00
71770	15	6—Battery	105.00
71771	16	6—Battery	110.00
71772	18	6—Battery	125.00



No. 320 Liberty Type

No. 320 LIBERTY RIOT BELLS

Adapted to Liberty or Engine Type Gongs

Particularly for fire vehicles replacing the hand operated gong. A better signal than the hand-operated gong and controlled by the driver from a button on the steering wheel.

Where this type of gong, hand-operated, is now used, the riot attachment can be furnished to fit the gong. By sending gong to factory attachment can be applied to best effect.

71773	10	6—Battery	90.00
71774	Attachment only	6—Battery	70.00

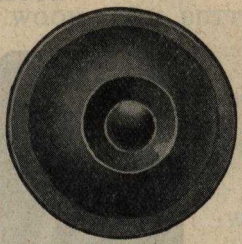
PUSH BUTTONS



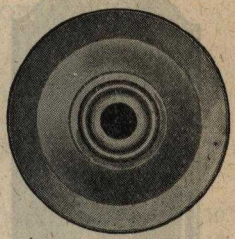
Nos. 508 and 508B



Nos. 510 and 510B



No. 511



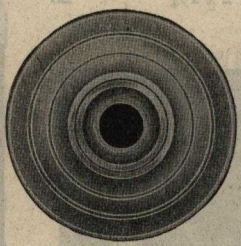
No. 512

CAST BRONZE—GERMAN SILVER CONTACTS—SCREW CAPS

Trade No.	Mfrs. No.	Diameter Inches	Finish	Std. Pkg.	Carton	Price per Doz.
097209	508	2 5/8	Polished bronze	100	10	$7.20
097210	508B	2 5/8	Black inlaid	100	10	7.20
097211	510	2 3/4	Polished bronze	100	10	7.20
097212	510B	2 3/4	Black inlaid	100	10	7.20
097213	511	1 5/8	Polished bronze	200	50	4.20
097214	511	1 5/8	Antique copper	200	50	4.20
097215	511	1 5/8	Brush brass	200	50	4.20
097216	511	1 5/8	Dead black	200	50	4.20
097217	512	2 3/8	Polished bronze	100	25	7.20
097218	512	2 3/8	Antique copper	100	25	7.20
097219	512	2 3/8	Brush brass	100	25	7.20



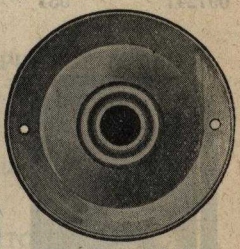
Nos. 570 and 570B



No. 550



Nos. 540 and 540B



Nos. 514 and 515

CAST BRONZE—GERMAN SILVER CONTACTS—SCREW CAPS

097222	570	2 1/8	Polished bronze	100	25	4.80
097223	570B	2 1/8	Black inlaid	100	25	4.80
097224	550	2 1/8	Polished bronze	100	25	5.40
097225	550	2 1/8	Antique copper	100	25	5.40
097226	550	2 1/8	Brush brass	100	25	5.40

CAST BRONZE—GERMAN SILVER CONTACTS—LOOSE BACK

097220	540	2 1/8	Polished bronze	100	25	3.60
097221	540B	2 1/8	Black inlaid	100	25	3.60

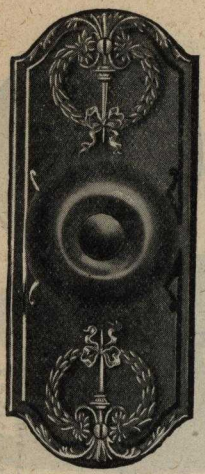
WROUGHT BRONZE—GERMAN SILVER CONTACTS—LOOSE BACK

097227	514	1 1/2	Polished bronze	200	50	1.80
097228	514	1 1/2	Polished brass	200	50	1.80
097229	514	1 1/2	Brush brass	200	50	1.80
097230	514	1 1/2	Antique copper	200	50	1.80
097231	515	2 1/4	Polished bronze	100	50	2.40
097232	515	2 1/4	Antique copper	100	50	2.40
097233	515	2 1/4	Brush brass	100	50	2.40

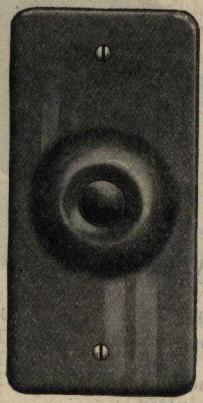
All of the above pushes are packed in individual boxes, with screws, properly labeled and placed in cartons of 10, 25 or 50, as noted above.

PUSH BUTTONS

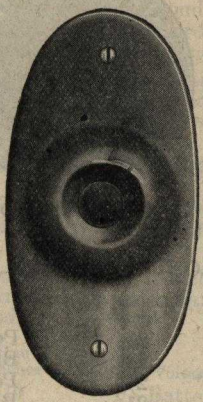
LOOSE BACK



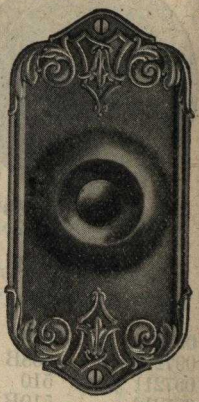
No. 528



No. 529

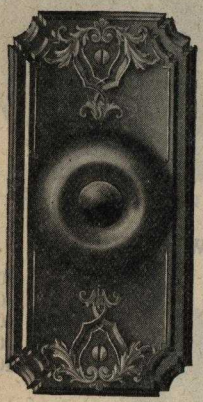


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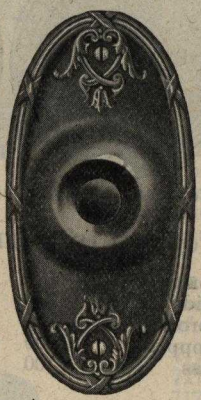


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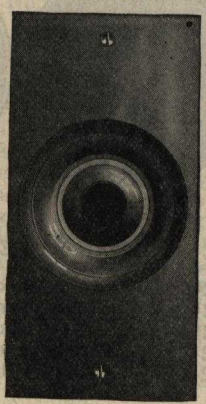
Trade No.	Mfrs. No.	Brush Brass Finish	Size Inches	Carton	Std. Pkg.	Price per Doz.
097244	528	Wrought	2 x 4¾	25	150	$6.00
097245	529	Wrought	2 x 4	25	150	6.00
097246	530	Wrought	2 x 4	25	150	6.00
097247	531	Wrought	2 x 4¼	25	150	6.00



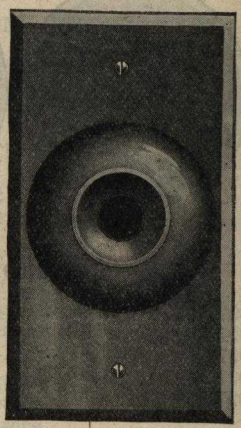
No. 532



No. 534



No. 536



No. 538

Trade No.	Mfrs. No.	Brush Brass Finish	Size Inches	Carton	Std. Pkg.	Price per Doz.
097248	532	Wrought	2 x 4	25	150	$6.00
097249	534	Wrought	2 x 4	25	150	6.00
097250	536	Wrought	2 x 4	25	150	7.20
097251	538	Wrought	2⅜ x 4¼	10	150	7.80

Polished bronze, oxidized copper and polished brass will be furnished at same prices. German silver contacts.

All the above pushes are packed in individual boxes with screws, properly labeled and placed in cartons of 10 or 25, as noted above.

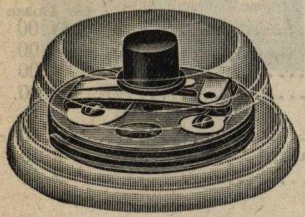
PUSH BUTTONS



No. 040868



No. 040870



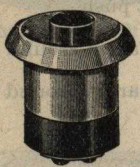
No. 040879



No. 040881



No. 063859



No. 090286



No. 090287

WOOD PUSH BUTTONS

Small

Trade No.	Diam. Inches	Finish	Price Each
040868	1¼	Ash	$0.16
040869	1¼	Walnut	.16

Standard

040870	2⅛	Walnut	.10
040871	2⅛	Ash	.10
040872	2⅛	Stained cherry	.10
040873	2⅛	Antique oak	.10
040874	2⅛	Oak	.10
040875	2⅛	Mahogany	.10

DOUBLE CONTACT OR RETURN CALL PUSH BUTTONS

These push buttons have upper and lower stationary contacts and a movable spring, which is normally in contact with upper point and makes contact on lower when the button is pressed.

Trade No.	Diam. Inches	Finish	Price Each
040879	2¼	Oak	$0.18
040880	2¼	Ash	.18

PAPER WEIGHT WOOD DESK PUSH BUTTONS

Trade No.	Finish	Price Each
040881	Oak	$0.50

Polished wood push with lead in bottom.

MOLDED PUSH BUTTONS

All parts, with the exception of the button center, are molded in the base. Made of hard rubber composition, with a white button center.

Trade No.	Mfrs. No.	Price Each
063859	99	$0.15

HUB PUSH BUTTONS

Made of nickel, with black composition centers.

Fits ½-inch Hole

Trade No.	Description	Price Each
090286	No. 1	$0.20
090287	No. 3, with escutcheon	.25
090288	No. 5, with binding posts	.25
090289	No. 7, with binding posts and escutcheon	.30
	Extra for pearl centers	.06

Fits ⅝-inch Hole

090290	No. 8	.25
	Extra for pearl centers	.06

PUSH BUTTONS



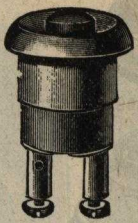
No. 25529



No. 25526



No. 25449



No. 25425

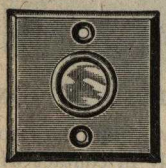


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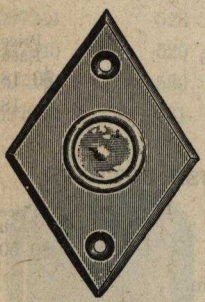
PEAR PUSHES

Trade No.	Mfrs. No.	Style Wood	Price per Dozen
		Fancy	
062286	25529	Oak	$4.00
062287	25529A	Cherry	4.00
062288	25529B	Black Walnut	4.00
062289	25529C	Mahogany	4.00
		Plain	
062290	25526	Maple	2.40
062291	25526A	Imitation Black Walnut	2.40
062292	25526B	Stained Cherry	2.40

Illustrations half actual size.



No. 26846

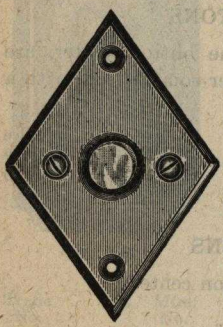


No. 26848

MIDGET PUSHES

Trade No.	Mfrs. No.	Style Rim	Style Center	Price per Dozen
		⅝-inch Hole		
062293	25449	Brass	Light Pearl	$1.68
062294	25450	Nickel Plated	Light Pearl	1.68
062295	25451	Brass	Dark Pearl	1.68
062296	25452	Nickel Plated	Dark Pearl	1.68
		½-inch Hole		
062297	25425	Brass	Black	2.16
062298	25426	Nickel Plated	Black	2.16
062299	25439	Brass	Light Pearl	2.20
062300	25440	Nickel Plated	Light Pearl	2.20
062301	25441	Brass	Dark Pearl	2.20
062302	25442	Nickel Plated	Dark Pearl	2.20

Illustration actual size.

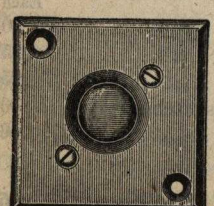


No. 26849

FLUSH PUSHES

Cast Brass, Nickel Plated

Trade No.	Mfrs. No.	Size Inches	Price per Doz.
062303	26846	1½x1½	$4.00
	Fitted with ½-inch white pearl center midget push.		
062304	26847	1¾x1¾	4.80
	Fitted with ⅝-inch white pearl center midget push.		
062305	26848	3 x2	5.28
	Fitted with ⅝-inch white pearl center midget push.		
062306	26849	3¼x2¼	4.80
	Wood back, white pearl center, has ¼-inch margin around back.		
062307	26850	2 x2	4.30
	Wood back, white pearl center, has ¼-inch margin around back.		



No. 26850

COMPOUND PUSHES

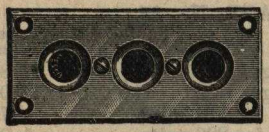
Cast Bronze, Nickel Plated

Trade No.	Mfrs. No.	No. Pushes	Size Inches	Price Each
062308	26853	2	2x3	$0.44
062309	26854	3	2x4	.56
062310	26855	4	2x5	.72
062311	26856	5	2x6	.84
062312	26857	6	2x7	1.00

Intended for call bell use, white pearl center, unless otherwise ordered. Has ⅜-inch margin around back, wood backs.

Similar in style to No. 26846

PUSH BUTTONS



Nickel-plated Compound Push Button

COMPOUND PUSH BUTTONS

Nickel-plated

Trade No.	No. of Buttons	Size Inches	Price Each
040885	2	2 x3	$0.60
040886	3	3⅞x1⅞	.70
040887	4	5 x1⅞	1.00
040888	5	6 x2	1.20
040889	6	7 x2	1.30

Wood, Light or Dark

040883	2	.....	1.10
040884	3	.....	1.44
38816	4	.....	1.80
38817	5	.....	2.20
38818	6	.....	2.60



Wood Compound Push Button

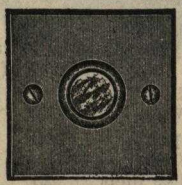
The buttons are white or black pearl, as desired.

Prices are for pushes without numbers. Numbering charged extra.

FLUSH PUSH BUTTONS

Nickel-plated, Pearl Centers

Trade No.	Description	Price Each
38819	Square shape.....	$0.60
38820	Diamond shape.....	.60



Flush Push Button

ALTMAN WEIGHTED DESK PUSH BUTTONS

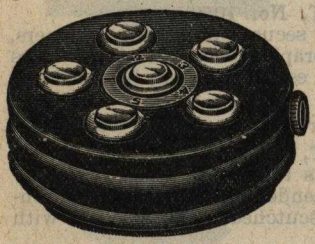
Furnished in Oak or Mahogany

Trade No.	No. of Buttons	Price Each	Trade No.	No. of Buttons	Price Each
063870	2	$1.70	063873	5	$2.70
063871	3	2.00	063874	6	3.00
063872	4	2.35	063875	7	3.35

Diameter, 3½ inches; pearl buttons.

Green Silk Cord for Above

Trade No.	No. Cond.	Price per Ft.	Trade No.	No. Cond.	Price per Ft.
38821	3	$0.10	38824	6	$0.23
38822	4	.14	38825	7	.28
38823	5	.18	38826	8	.35



Altman Desk Push Button

PAPER WEIGHT PUSH BUTTONS

Trade No.	Mfrs. No.	No. of Buttons	Size Inches	Price Each
092090	71	2	2½x1⅞	$2.50
092091	71	3	2½x1⅞	3.00
092092	71	4	2½x1⅞	3.50
092093	71	5	2½x1⅞	4.00
092094	71	6	2½x1⅞	4.50
092095	71	8	4 x1⅞	6.00
092096	71	10	4 x1⅞	6.50
092097	71	12	5½x1⅞	7.00

Other sizes up to 20 buttons.

For attaching green silk cord, per foot for each button, 15 cents.

FINISHES.—*Nickel-plated, brushed brass, old brass or bronze.

Made of pressed steel, weighted back, felt covered, 8 to 12-button, case cast. Price includes No. 63 pushes, matched finished rims.

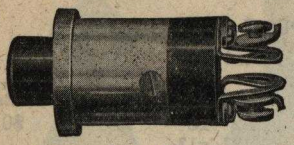
Price for special finishes quoted on application.

*This style furnished, unless otherwise specified.

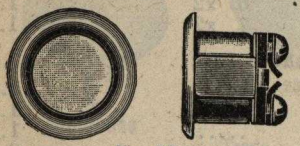


Paper Weight Push Button

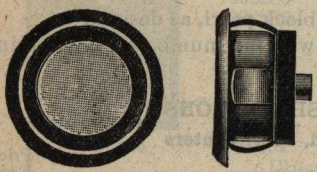
EDWARDS FLUSH PUSH BUTTONS



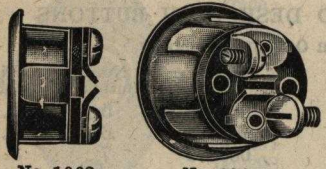
No. 85



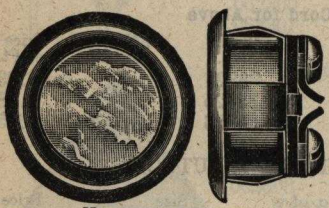
No. 63



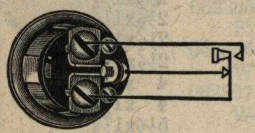
No. 1162, showing No. 60 Escutcheon



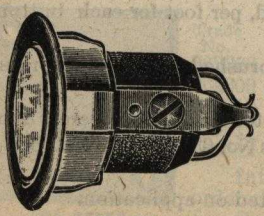
No. 1062 No. 620



No. 1059, showing No. 61 Escutcheon



No. 1160



No. 260

HIGH VOLTAGE, No. 85

Trade No.	Mfrs. No.	Style	Volts	Fits Hole Inches	Std. Pkg.	Price Each
091943	85	High voltage	110	¾	6	$1.80
091944	85A	High voltage	220	1⅛	6	4.00

Extra hard rubber bushings, for 110 volts ..... .75
Extra hard rubber bushings, for 220 volts 1.00

Long, quick break, heavy phosphor-bronze contact springs; shell solid brass with rubber insulation and metal push, perfectly insulated. Center is hard rubber.

NEW MITE, No. 63

Trade No.	Mfrs. No.	Fits Hole Inches	Center	Std. Pkg.	Price Each
091950	63	½	*Light or dark pearl	50	$0.30

⅝x⅝ inch over all; non-turnable centers, spring clip fasteners. Binding posts take up to No. 12 B. & S. wire.

NO CONTACT, No. 1162

Without back springs or binding posts. Spring clip fasteners. No. 60 escutcheon used with this button.

091955	1162	⅝	*Light or dark pearl	50	.12½

NEW MIDGET, JR., No. 1062

With scraping contact and shallow contact springs. No. 60 escutcheon may be used with this button.

091958	1062	⅝	*Light or dark pearl	50	.16

DIXIE, JR., No. 620

Non-turnable centers. Fully insulated. Scraping contact. Economy binding post takes all sizes of wire. Screws cannot come out. A high grade reliable push. No. 60 escutcheons may be used with this push.

092017	620	⅝	Light or dark pearl	50	.18
092018	621	⅝	Light or dark pearl protruding ⅛ inch	25	.40

MIDGET, No. 59

Non-turnable centers, secure spring clip fasteners, phosphor-bronze contacts. Binding posts take any size wire. No. 61 escutcheon may be used with this button.

092004	59	¾	*Light or dark pearl	50	.35

MIDGET, No. 1059

Non-turnable centers, secure spring clip fasteners, phosphor-bronze spring, scraping contacts. Connectors take any size wire. No. 61 escutcheon may be used with this button.

092006	1059	¾	*Light or dark pearl	50	.32

MIDGET, No. 1159

Two scraping contacts to close two circuits; non-turnable centers, recommended for telephone or annunciator work. No 61 escutcheon may be used with this button.

092010	1159	¾	*Light or dark pearl	50	.60

MIDGET, No. 1160

Same as No. 1159, but for return-call use. No. 61 escutcheon may be used with this button.

092012	1160	¾	*Light or dark pearl	50	.60

VAN TASSELL, No. 260

Two, Three, or Four-contact

092015	260	¾	*Light or dark pearl	..	.60

Four-contact furnished, unless otherwise ordered.

All of the above are finished in nickel-plated, brush brass, old brass or bronze. Nickel-plated is furnished, unless otherwise specified.

*Style furnished, unless otherwise specified.

Prices on special centers and finishes quoted upon application.

CONNECTICUT PUSH BUTTONS



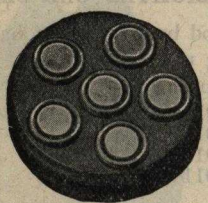
No. 510

No. 510 PUSH BUTTONS

Fitted with long self-cleaning contact springs with positive double wipe contacts which are protected from loose wires by a heavy metal guard. Lugs on the side of binding post screws keep wire connections in proper position. No soldering is necessary. Push button has a large oval center 9/16 inch in diameter, which has a solid stop. Entire button is solidly built and is practically indestructible. Can be mounted singly or in groups.

Standard finish is nickel.

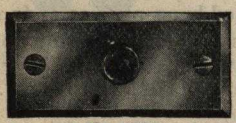
Trade No.	Style No.	Description	Std. Pkg.	Price Each
149085	510	Two-contact push, fits 5/8-inch hole, black center	25	$0.30
149086	510	Two-contact push, fits 5/8-inch hole, pearl center	25	.34



No. 210

No. 210 PORTABLE PUSH BUTTONS

Designed for use in offices and other places where neatness and finish are essential. The weighted felt base is approximately 1 inch thick, mahogany finish, and presents a very pleasing appearance. Mahogany base is fitted with bushing for green silk cord, which can be supplied in any length at slight additional charge. Furnished with one to five buttons only. All buttons are numbered.

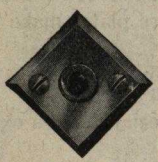


No. 250

Trade No.	Style No.	No. of Buttons	Price Each	Trade No.	Style No.	No. of Buttons	Price Each
149087	210	1	$1.80	149090	210	4	$3.95
149088	210	2	2.50	149091	210	5	4.65
149089	210	3	3.25	149092	210	6	5.35

Pearl buttons extra, 5 cents.

Green silk cord attached, per foot, per button, 10 cents.



No. 258

FLUSH BUTTON PLATES

There are listed only a few styles of flush button plates which are standard sizes. Prices will be quoted on special sizes if desired.

Trade No.	Style No.	No. of Buttons	Size Inches	Price Each
149093	250	1	1½x3¼	$0.60
149094	252	2	1½x3¼	1.70
149095	258	1	1½x1½	.60
149096	370	1	2½x4¼	1.30
149097	371	2	2½x4¼	1.90
149098	372	3	2½x4¼	2.50

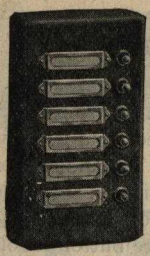


No. 372

The 2½x4¼-inch plates are drilled for No. 37 Bossert cover unless otherwise ordered.

Standard finish, brush brass. Special finishes extra.

CONNECTICUT PUSH BUTTONS



No. 212

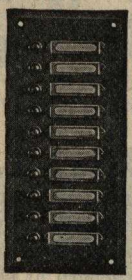
MULTIPLE PUSHES

These pushes have long positive wiping contacts. Wires are connected direct to the contact springs with machine screws, doing away with all soldered connections. Card holders are furnished with transparent celluloid strips to protect name cards. Multiple pushes over 14 buttons have double row of buttons.

MULTIPLE PUSHES ON OAK BASE

Trade No.	Style No.	No. of Buttons	Price Each	Trade No.	Style No.	No. of Buttons	Price Each
149099	211-B	4	$2.00	149103	213-B	12	$4.00
149100	211	6	2.10	149104	213	14	4.60
149101	212-B	8	2.80	149105	214-B	16	5.30
149102	212	10	3.30	149106	214	20	6.40

Special finishes, $1.20 extra.



No. 220

MULTIPLE PUSHES WITH WEIGHTED OAK BASE

These are the same as the wood base type, but have a weighted felt covered base on the underside so that they may be used on desks as a portable push.

149107	215-B	4	2.60	149111	217-B	12	4.80
149108	215	6	2.80	149112	217	14	5.50
149109	216-B	8	3.50	149113	218-B	16	6.30
149110	216	10	4.10	149114	218	20	7.40

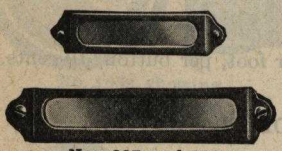
Special finishes, $1.20 extra.

Green silk covered flexible cord attached, per foot, per button, 10 cents.

FLUSH MULTIPLE PUSHES

These are made up with beveled brass plate so as to set flush in wall or desk. They are designed for high grade work.

149115	219-B	4	4.40	149119	221-B	12	6.60
149116	219	6	4.70	149120	221	14	7.40
149117	220-B	8	5.30	149121	222-B	16	8.20
149118	220	10	5.80	149122	222	20	9.60



Nos. 227 and 228

FLUSH MULTIPLE PUSHES ON OAK MATS

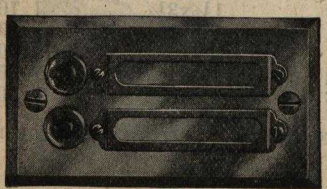
These are the same as the flush multiple pushes, but are mounted on wood mats for desk use where it is not desired to set them flush. The finished brass face plates make a very handsome combination.

149123	223	6	7.20	149125	225	14	12.95
149124	224	10	10.10	149126	226	20	15.85

Standard finish, brush brass. Special finishes extra.

CARD HOLDERS

Trade No.	Style No.	Size Opening Inches	Finish	Price Each
149127	22	1/4x1 3/16	Nicke	$0.10
149128	22	5/16x2	Nicke	.12



No. 229

FLUSH BUTTON PLATES

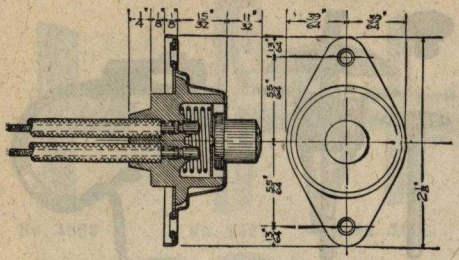
Trade No.	Style No.	Description	Price Each
149129	229	Two buttons, with card holder.....	$2.90
		Additional buttons with card holder, each.....	1.30

Made in any number of buttons.

Standard finish brush brass. Special finishes extra.

FARADAY PUSH BUTTONS

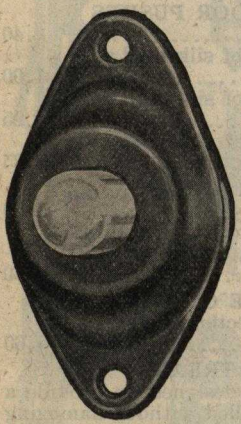
SURFACE AND FLUSH TYPES



Showing Dimensions of Surface Type Push Button

Faraday Push Buttons are designed and guaranteed to meet the most severe conditions. They will give absolutely satisfactory results wherever push buttons are required and are the only push buttons on the market that never fail.

In the Faraday Push Button an electrose composition unit with leading-in wires effectually houses the entire mechanism; there are no flimsy binding-post screws to cause trouble; leading-in wires are National Code flexible rubber-covered wire, molded into the electrose-unit; circuit wires should be soldered directly to the leading in wires and when this is done, a permanent and absolutely dependable installation is insured.



Surface Type Push Button

As shown in illustrations, contact is made on two heavy bronze studs by means of a circular brass disc carrying on its under surface a circular phosphor-bronze spring-temper contactor; this circular brass disc is at all times held in position by a phosphor-bronze spiral spring; when the porcelain center of the button is pressed, absolutely positive contact is made by the spring-contactor against the two bronze studs; the spiral spring carries no current. Current carrying parts on a Faraday Push Button are given a breakdown test of 1000 volts A. C.

Faraday Push Buttons can never stick—can never fail to close the circuit when the button is pressed.

Surface Type Buttons are provided with heavy outer brass shell, regularly finished in permanent oxidized black.

Surface Type Buttons are self-contained units.

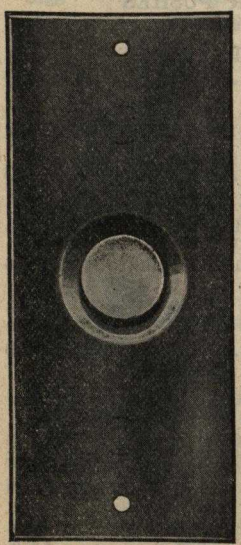
Flush Type Push Buttons are regularly made in sizes as listed below, but will be furnished in any combination or with any size or finish plates to fit building construction requirements.

For building construction work, buttons with 6-inch leads are recommended; for street car stop signal work, 20-inch leads.

Regular finish of Flush Type Buttons is brush brass, but special finished plates will be furnished when ordered at slight additional cost.

On 110-volt circuits, Faraday Push Buttons will give absolutely satisfactory service, where the current to be broken does not exceed two-tenths ampere.

The incessant trouble on signal work caused by unsatisfactory push buttons makes well worth while specifications requiring Faraday Push Buttons of proper design for all high grade building work.



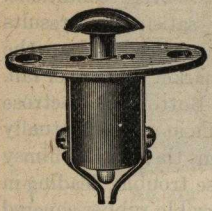
Flush Type Push Button

Model No.	Description	Price Each
	Surface Type	
932	Surface Type Push Button, black oxidized brass casing with 6-inch leads and porcelain center	$0.60
931	Same as No. 932, but with 20-inch leads for street car signal work	.70
	Flush Type	
191	Flush Type Push Button, bevel edge, brush brass plate 3 5/8 x 2 7/16-inch, with 6-inch leads and porcelain center (fits Pratt Chuck UA box)	1.25
141	Same as No. 191, but with plate 4 1/4 x 2 3/4-inch (fits standard push button switch box)	1.35
131	Same as No. 191, but with plate 3 5/16 x 1 3/16-inch	1.15
121	Same as No. 191, but with plate 2 1/4 x 1 1/8-inch	1.10

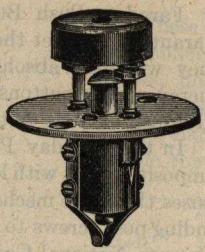
Nos. 131 and 121 cannot be used with other boxes.

Send for Special Bulletin Showing Full Line of Faraday Push Buttons

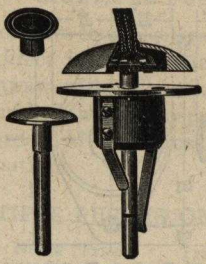
FLOOR PUSHES



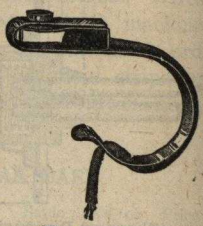
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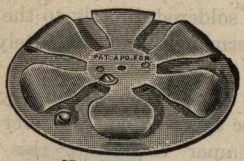
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No. 042620



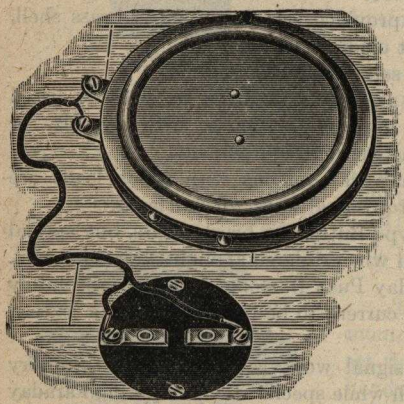
No. 64333



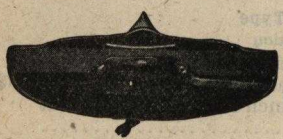
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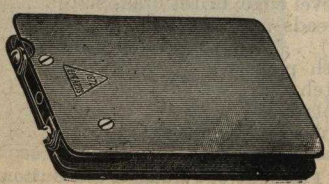
No. 042625



No. 042626 and No. 042627



No. 042628



No. 290

PLAIN FLOOR PUSHES

Trade No.	Description	Price Each
042615	2 inches in diameter	$0.30

COMBINATION FLOOR PUSHES

042616	2 inches in diameter	.40
042617	Fitted with 2 yards of silk cord and plain pear push	1.00
042618	Fitted with 3 yards of silk cord and table clamp	1.25
042619	Fitted with 3 yards of silk cord and foot push	1.35

DANDY FLOOR PUSHES

042620	Including plugs and eyelets	1.20
042621	Combination floor push, including Dandy Floor Push, 2 yards of silk cord and pear push	2.50

EDWARDS TABLE CLAMPS

64333	May be used in connection with floor push or wall plug	.60

DAISY FLOOR TREADS

The Daisy Floor Tread is designed to provide a floor push which can be installed without damaging valuable rugs by putting holes in them. By attaching a flexible cord it may be used as a portable push.

042624	Diameter, 2½ inches	1.50

MOVABLE FLOOR PUSHES

042625	Diameter of base, 3 inches	.70

RELIABLE FLOOR TREADS

042626	¼ inch thick	1.50

FLUSH DISC, FLOOR CONNECTORS

A fibre disc to be inserted flush with the floor for cord connectors.

042627	Diameter, 2 inches	.30

RENIM FLOOR TREADS

Will not creep or shift its position under the rug.

Will not injure the finest rug; the sharp point extending well up between the meshes makes it easy to find and prevents wear.

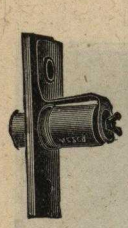
Trade No.	Description	Std. Pkg.	Price Each
042628	3 inches diameter	12	$1.00

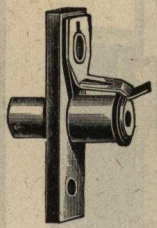
DIXIE FLOOR TREADS

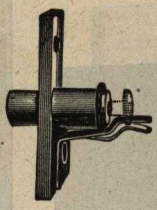
Double heavy brass contact plates, felt-covered bottom. Can be used under rug to avoid cutting. Constructed sufficiently rigid to bear weight of rug. Strain removed from connections by passing wire over three rounded corners. Vise grip, solderless connections.

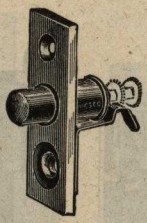
Trade No.	Mfrs. No.	Std. Pkg.	Price Each
092133	290	6	$1.00

BURGLAR ALARM ATTACHMENTS


No. 1566

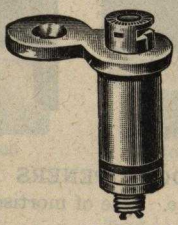

No. 1567


No. 1568


No. 1569


No. 1571


No. 1570

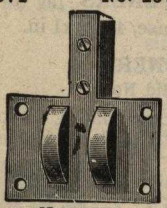

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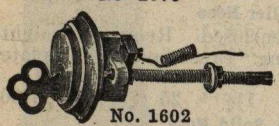

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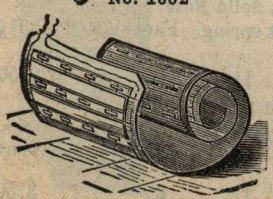

No. 1579


No. 1574


No. 1573


No. 1575


No. 1602


No. 1604

DOOR SPRINGS

Trade No.	Mfrs. No.		Price Each
10931	1566	Open circuit	$0.16
10932	1567	Open circuit	.18
10933	1568	Closed circuit	.20
10934	1569	Make or break	.20
10935	1571	Open circuit, for telescope doors	.16

DOOR TRIPS

For use over store doors to announce entrance of customer. Rings signal when door passes the trip, but is silent when open, and in closing door.

10936	1570	Open circuit	.50

FLOOR SPRINGS

Spring is placed on floor in front of safe with leg of a chair on the spring. When chair is removed, spring is released, closing the circuit. When alarm is not in use, simply press down plunger, turning slightly to either side, which locks it.

10937	1586	Floor spring	1.00

WINDOW SPRINGS

The cord of a spring shade is attached to the arm. The slightest interference with the shade will sound the alarm.

10938	1573	Transom spring	.50
10939	1574	Window spring	.18
10940	1575	Double window spring	.20
10941	1576	Single window spring	.22
10942	1579	Shade spring	.40

LOCK SWITCHES

These switches are placed on the doors of stores, residences and other buildings connected with burglar alarm systems, so that persons having the proper keys can go in or out of the building without ringing the alarm.

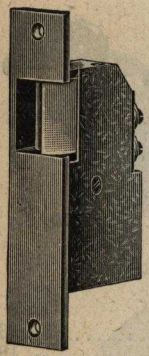
10943	1602	Yale Lock, with rod and three keys	3.50
10944	1603	Corbin Lock, with rod and three keys	3.00
10945	1647	Competition Lock, with rod and three keys	2.00

MATTING

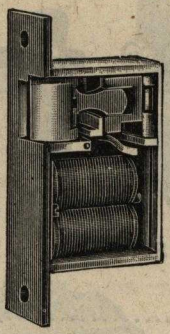
The matting is easily and quickly fitted without disfiguring or disarranging the furniture or fixtures. If the matting is placed at the entrance to an apartment, no person can enter it without sounding an alarm that will attract attention. Properly adjusted throughout a building, no burglar or sneak thief can enter without starting an alarm.

Trade No.	Mfrs. No.		Price per Sq. Ft.
10946	1604	Rolls 2 feet wide	$0.36
10947	1604A	Rolls 3 feet wide	.36

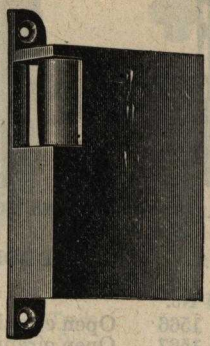
DOOR OPENERS



No. 3194



No. 3190-3188



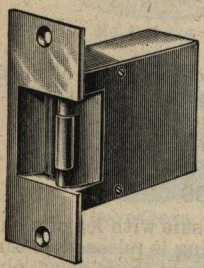
No. 3193



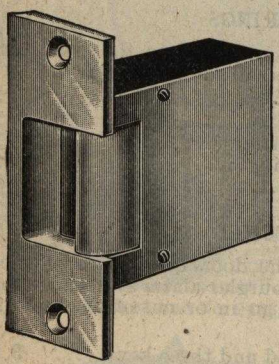
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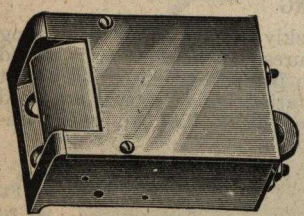
No. 9



No. 154



No. 155



No. 152

MESCO MORTISE DOOR OPENERS

Cast bronze frame and faceplate. Size of mortise required, $3\frac{7}{8}$x$2\frac{1}{8}$x1 inches.

Trade No.	Mfrs. No.	Description	Size of Face-plate, In.	Wt. Oz.	Price Each
100384	3194	With push-out spring.....	$5\frac{3}{4}$x$1\frac{1}{4}$	28	$2.00

MANHATTAN MORTISE DOOR OPENERS

These door openers are used in place of latch striking plate and are to be mortised in door frame. Size of mortise required, $3\frac{3}{4}$x$2\frac{1}{2}$x$1\frac{3}{8}$ inches.

042577 3190 With push-out spring..... $5\frac{7}{8}$x$1\frac{3}{4}$ 32 2.50

With Special Magnets

The special magnets are so arranged that when the current is applied the latch becomes disengaged and stays so until the door is opened. Push-out spring is not furnished or required. Size of mortise required, $3\frac{3}{4}$x$2\frac{1}{2}$x$1\frac{3}{8}$ inches.

042579 3188 ..... $5\frac{5}{8}$x$1\frac{1}{2}$ 32 3.30

MANHATTAN RIM DOOR OPENERS

For use with surface or rim locks in thin doors, etc.

042583 3193 With push-out spring..... $3\frac{1}{4}$x5x$1\frac{3}{8}$ 32 3.30

RELIANCE Jr. DOOR OPENERS

042584 .... Face, $5\frac{7}{8}$x$1\frac{1}{4}$ in.....Case, 4x$2\frac{1}{4}$x1 in. 1.80

EDWARDS DOOR OPENERS

Economy, Mortise Type, Solid Nose

Made of heavy pressed steel, hot brass plated. Fits any mortise. Faceplate, $5\frac{7}{8}$x$1\frac{1}{4}$ inches. With push-out spring.

Trade No.	Mfrs. No.	Dimensions, Inches Width	Depth	Thickness	Opening	Std. Pkg.	Price Each
44700	9	$3\frac{5}{8}$	$1\frac{3}{4}$	1	$1\frac{3}{16}$	.....	$1.80

Mortise Type, Roller Nose

For heavy doors. Mechanism enclosed. Requires straight mortise. With No. 79 push-out spring. Brass finish. Faceplate $1\frac{1}{4}$x$3\frac{3}{8}$ inches.

042586 154 2 $2\frac{7}{8}$ $1\frac{1}{8}$ $1\frac{1}{4}$ 25 ..... 3.00

Nojar, Mortise Type, Solid Nose

Brass finish, with No. 79 push-out spring. Faceplate, $1\frac{1}{4}$x$3\frac{3}{8}$ inches.

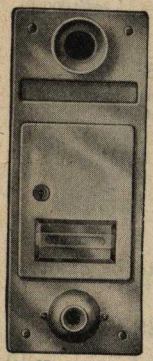
042587 155 2 $2\frac{7}{8}$ $1\frac{1}{8}$ $1\frac{1}{4}$ 25 ..... 2.50

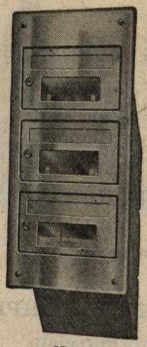
Rim Type, Solid Nose

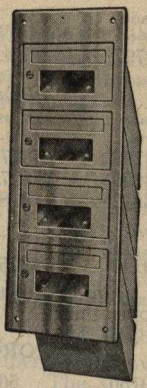
For use with surface or rim locks on thin doors, iron gates, etc. Japanned finish. Brass front. With No. 79 push-out spring.

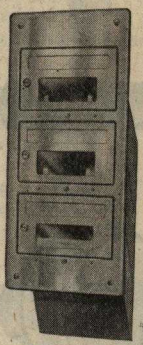
042585 152 2 $2\frac{3}{16}$ $1\frac{1}{8}$ $1\frac{1}{4}$ 6 .... 3.50

LETTER BOXES


No. 2200


No. 26


No. 260

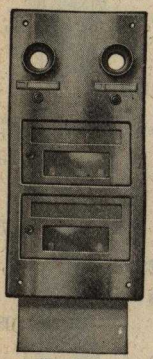

No. 268


No. 269

STANDARD LETTER BOXES

Trade No.	Mfrs. No.	Description	Price Each
17859	2200	With mouthpiece	$3.00
17860	2200	Without mouthpiece	3.00

Boxes can be furnished in brush brass and oxidized copper.


No. 261

COUCH NESTED LETTER BOXES

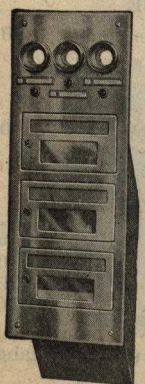
These letter boxes are classified under two headings, namely, telephone type and speaking tube type.

The telephone type is supplied in two ways, one without call buttons for use with either common talking or non-interfering apartment house telephone systems wherein the buttons for calling the suites are mounted on the vestibule telephone or on a separate call unit associated with the telephone according to the capacity of the equipment desired; the other, with buttons for calling the suites mounted on the letter box unit, one button under each door, for use with common talking apartment house telephone systems only. With this latter type, no call buttons are needed on the vestibule telephone except possibly one for calling the janitor.

Letter boxes cannot be furnished with call buttons on them for use with non-interfering telephone systems.

We advise the use of letter boxes without call buttons, believing that it simplifies the wiring for the contractor to have all the wires brought into the vestibule telephone or call unit, as the case may be.

The speaking tube type is designed for use with apartment house speaking tube systems. Each letter box unit is equipped with a mouthpiece to fit 1-inch speaking tube, and with the necessary call buttons and card holders.


No. 262

Telephone Type

Trade No.	Mfrs. No.	No. of Gangs	Outside Dimens. Inches	Wall Opening Inches	Price Each
17855	26	3	7x15	6x12¼	$11.50
17856	260	4	7x18⅞	6x16⅛	15.35
17857	268	3	7x15	6x12¼	13.30
17858	269	4	7x18⅞	6x16⅛	17.75

Speaking Tube Type

17853	261	2	7x15	6x12¼	9.50
17854	262	3	7x18⅞	6x16½	11.50

FINISH: Brush brass. An extra charge is made for other finishes.

NOTE: A clearance between partitions is needed for a distance of 5 inches below the lower edge of the wall opening for all letter boxes listed above.

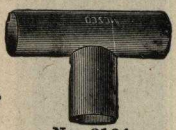
When two or more units are to be mounted side by side, the width of the wall opening should be 7 inches times the number of units minus 1 inch.

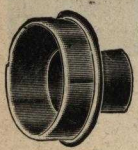
SPEAKING TUBE SUPPLIES


No. 3160

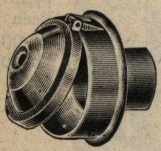

No. 3170

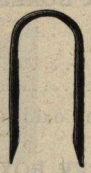

No. 3175


No. 3184


No. 2250


No. 500


No. 2500


No. 109157


No. 3151


No. 3169


No. 3152


No. 3155


No. 3157


No. 3159

SPEAKING TUBE

Trade No.	Mfrs. No.	Diam. Inches	Price per 1000 Ft
043797	3160	1	$30.00

SPEAKING TUBE ELBOWS

Trade No.	Mfrs. No.	Style	Diam. Inches	Price Each
043798	3170	Square	1	$0.04
043809	3175	Round	1	.04
043812	3184	Tee	1	.14

MOUTHPIECES

109149	2250	Brush brass	1	.20

Can be furnished also in nickel plate or oxidized copper finish.

PORCELAIN MOUTHPIECES

109150	500	Porcelain	1	.15

SPEAKING TUBE WHISTLES

109156	2500	Brush brass	1	.30

Can be furnished also in nickel plate or oxidized copper finish.

SPEAKING TUBE STAPLES

Trade No.	Mfrs. No.	Size Inches	Price Per Lb.
109157	....	1x2	.30

COLLARS FOR FLEXIBLE TUBES

Trade No.	Mfrs. No.	Size Inches	Price Each
043786	3151	1	$0.25

CONNECTORS

043787	3169	1	.03

FLANGES OR ROSETTES

For Mouthpieces or Whistles

043789	3152	1	.08

FLEXIBLE TERMINALS

Fitted with either whistle or open mouthpieces.

Trade No.	Mfrs. No.	Length Feet	Price Each
043791	3155	2	$2.50
043792	3156	3	3.00

FLEXIBLE SPEAKING TUBE

043793	3157	Any length, per foot	.30

1-inch diameter, covered with black or green braid.

TUBE RACKS

043794	3159	Nickel-plated	.40

WOOD MATS

Quarter-sawed oak, hand-rubbed and varnished.

Trade No.	Mfrs. No.	Description	Price Each
109158	....	One-gang	$1.50
109159	....	Two-gang	1.75
109160	....	Three-gang	2.00

Can be furnished up to six gang at an additional price of 25 cents per gang to list price of the three-gang mat.

MOSLER SPARK PLUGS



Vesuvius ⅞-in. Standard



Vesuvius ⅞-in. Long

VESUVIUS

The Vesuvius Vitite (stone) insulator, continuous knife-edge electrode, with innumerable sparking points, gives a maximum of speed, power and efficiency at a minimum gas consumption. Gas-tight and easily cleaned.

Trade No.	Size	Price Each
148956	½-inch, standard	$1.00
148957	⅞-inch, standard	1.00
148958	Metric	1.00
148959	½-inch, long	1.00
148960	⅞-inch, long	1.00

Also in Dodge Special, Chandler, Oakland, Haynes Special and Willys-Knight Special.



Superior Ford Special



Superior ⅞-in. Standard

SUPERIOR FORD SPECIAL

The Superior is designed to meet every requirement of the Ford engine. The shell (base) fits the Ford engine, making it easy to put in or remove. The electrodes are made of manganese wire and will not burn, corrode or warp, and the side electrode is shaped to allow the oil to drop off instead of carbonizing at the firing point. Furnished in high-grade nickel plate. Has Vitite (stone) insulator.

148961	½-inch, standard, Ford size	.75
148962	⅞-inch, standard	.75
148963	Metric	.75
148964	½-inch, long	.75
148965	⅞-inch, long	.75

SPIT FIRE

The Spit Fire is platinum pointed, and actually spits fire instead of merely sparking. The base forms a compression chamber from which a jet of flame is shot through the compressed mixture, insuring energetic, rapid ignition and the maximum of power from the motor. The platinum point lasts indefinitely.

148966	½-inch, standard	2.50
148967	⅞-inch, standard	2.50
148968	Metric	2.50
148969	½-inch, long	2.50
148970	⅞-inch, long	2.50
148971	½-inch, extra long	2.50
148972	⅞-inch, extra long	2.50



Spit Fire

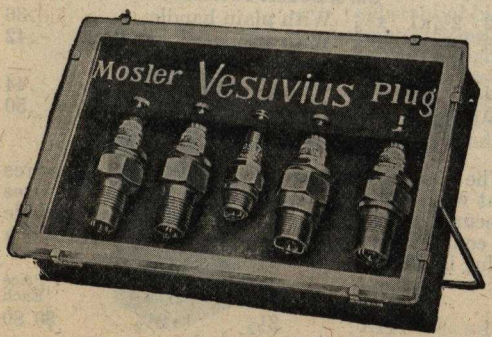


Mica

VESUVIUS MICA

Imported India mica core. Built to stand the strain and racket. Oil and waterproof. A plug for all air-cooled motors. Also made in Ford special size.

148973	½-inch, standard	1.00
148974	⅞-inch, standard	1.00
148975	Metric	1.00
148976	½-inch, Ford special	1.00



Vesuvius Display Stand

VESUVIUS DISPLAY STANDS

Supplied with the Vesuvius Exclusively

Stand is supplied free with an order for 36 plugs (assorted sizes). Put up with a stock assortment as listed below or plugs assorted as you select.

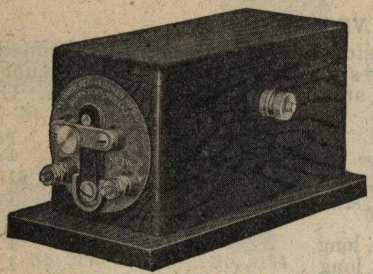
Has glass front, gold letters, backed with plush.

May be used in the show case, on the counter or as a window ornament.

Stock assortment consists of six ½-inch, twelve ⅞-inch, six ½-inch long, six ⅞-inch long, three metric mica and three ⅞-inch mica.

Trade No.	Description	Price Each
148977	Complete, with the above stock assortment	$19.80

QUICK ACTION SPARK COILS AND SWITCHES



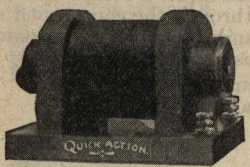
No. 7, Jump Spark Coil



No. 50, Primary Spark Coil



Long Form Primary Spark Coil



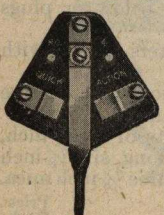
Short Form Primary Spark Coil



No. 3, Single Switch



No. 5, Double Switch



No. 4,
Double Switch



No. 11A,
Magneto Switch

JUMP SPARK COILS

These coils are guaranteed for five years. They are made for one and two-cylinder engines. They have a composition head and hammer blow vibrator guaranteed not to stick. They can be furnished with composition covers over vibrator, making connections water-tight.

Trade No.	Mfrs. No.	Description	Price Each
041179	7	Single-cylinder, open	$5.50
14447	7	Single-cylinder, with cover..	5.80
041180	7Dbl.	Two-cylinder, open.....	11.00
14448	7Dbl.	Two-cylinder, with cover...	11.60

PRIMARY SPARK COILS

For Make and Break Gas Engines and Electric Gas Lighting

These round metal case coils are wax filled. Absolutely moisture proof. Gives a hot spark. Guaranteed forever.

Trade No.	Mfrs. No.	Size Inches	Description	Price Each
041200	50	2½x6¾	Heavy steel case	$1.80
14449	50T	2½x6	Tin case, with nuts	1.60

LONG FORM PRIMARY SPARK COILS

For Make and Break Gas Engines

In the long form type the heads are of wood, and the windings are covered with a heavy paper tube.

Trade No.	Mfrs. No.	Length Inches	Diam. Core Inches Norway Wire	No. Layers of Wire	Size Wire B. & S. Gauge	Price Each
14450	6109	6½	¾	10	19	$4.50

SHORT FORM PRIMARY SPARK COILS

Edison Type, for Make and Break Gas Engines

They are so rapid in magnetization and demagnetization that a very small amount of current is needed to make a thick, powerful and hot flame, insuring an explosion every time. The time of contact closure on the commutator can be reduced to the minimum and still produce a good spark with little current consumption, even with weak batteries.

041185	QA-144	6	1⅛	14	14	9.50
041186	QA-124	6	1⅛	12	14	8.50

BATTERY SWITCHES

No. 3, Single Switches

Trade No.	Size Base, In.		Description	Price Each
047800	2⅛x1	x⅜	With plain handle.....	$0.30
047801	2⅛x1	x⅜	With insulated handle	.36

No. 5, Double Switches

047802	2¾x1	x⅜	With plain handle.....	.36
047803	2¾x1	x⅜	With insulated handle	.42

No. 4, Double Switches

047804	2¼x2½x½		With plain handle.....	.44
047805	2¼x2½x½		With insulated handle	.50

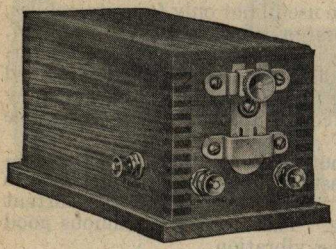
MAGNETO BATTERY SWITCHES

The base part is perforated for the entering wires so that while the switch is back-connected, the wires are secured on the face of the base so that possible loose connections can be seen and tightened. When the plug is removed the switch is inoperative.

Trade No.	Mfrs. No.	Length Over All, In.	Width Inches	Price Each
14451	11A	3½	2½	$0.80

Price does not include name plate.

JEFFERSON IGNITION APPARATUS



Box Coil

BOX TYPE COILS

Designed to answer the most rigid requirements of automobiles, motor boats and stationary gas engines.

A hot, flaming arc is produced under compression, with a minimum current consumption, thereby increasing the life of the batteries.

Coils are equipped with a trouble-proof vibrator, which is guaranteed by the makers to give satisfaction, and last indefinitely.

It is impossible to adjust the vibrator to consume an excessive amount of current. Neither can it be adjusted to stop engine from working. The windings, condenser, and vibrator are so evenly balanced that arcing at contact points is practically eliminated. Large points are used, made of the very best grade of tungsten. Assembled in a dove-tailed, polished, seasoned oak case, and are sealed in a water-proof (high melting point) compound.

Trade No.	Description	Price Each
128684	Single-cylinder	$4.50
128685	Two-cylinder	9.00
128687	Four-cylinder	18.00



Dash Coil

DASH COILS

Jefferson Covered Vibrator Coil is especially desirable for automobiles, marine use or stationary engines when exposed to the weather.

Assembled in a dove-tailed birch box, with a highly polished, oak or mahogany finish.

Coils are equipped with trouble-proof vibrator.

128688	Single-cylinder, without switch	6.00
128689	Two-cylinder, without switch	12.00
128690	Three-cylinder, without switch	18.00
128691	Four-cylinder, without switch	24.00

If magneto switch is desired, add $1.00 net additional.



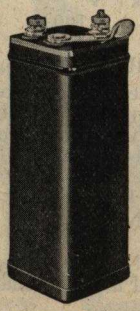
Motorcycle Coil

ROWBOAT ENGINE AND MOTORCYCLE COILS

These coils are designed to answer the most rigid requirements and give the hottest possible spark obtainable under compression with the minimum amount of current. Coils are furnished in a tubular shape fiber case, to occupy practically the same space as an ordinary dry cell, filled with special insulating compound, which renders coils impervious to moisture.

Primary and secondary cables can be furnished to any required length and can be brought out from any part of coil.

128692	Single-cylinder, 3 leads, without switch $2\frac{1}{2}$x$5\frac{1}{2}$ inches	5.00
128693	Single-cylinder, 3 leads, with plug switch, $2\frac{1}{2}$x$6\frac{1}{8}$ inches	6.00



Make and Break Coil

MAKE AND BREAK COILS

These coils are economical on battery power and generate at all times a hot, intense spark. Coils are assembled in a substantial black enameled steel case. Immersed in a special impregnating compound.

At a slight additional cost coils can be furnished with mounting brackets suitable for mounting the coil on engine or any convenient place.

Standard coils practically cover the field, but can be furnished wound to any desired ohmage.

Without Switch

Trade No.	Mfrs. No.	Dimensions Inches	Wt. Lbs.	Price Each
128694	10	$2\frac{1}{4}$x$2\frac{1}{4}$x6	3	$1.50
128695	15	$2\frac{1}{4}$x$2\frac{1}{4}$x6	3	1.70
128696	20	$2\frac{1}{4}$x$2\frac{1}{4}$x6	3	1.80
128697	30	3 x$3\frac{1}{4}$x4	5	2.00
128698	40	$3\frac{3}{4}$x$4\frac{1}{8}$x6	7	2.25

If coils are desired with single-throw switch, add 10 cents to list price; if with double-throw switch, add 20 cents.

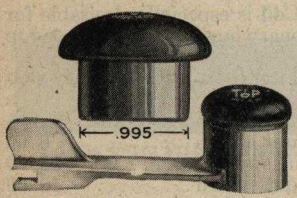
BENJAMIN PUSH BUTTONS



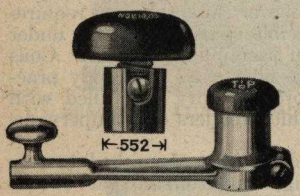
No. 8106C



No. 8106B



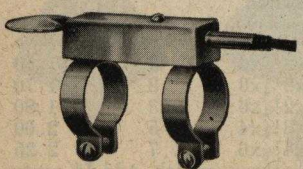
No. 8200A



No. 8321B



No. 8189F



No. 8055B

TIP TOP PUSH BUTTONS

Benjamin Push Buttons are useful not only for automobiles, but also for door-bells, elevators, or wherever a weather proof, reliable push button is required. These push buttons are water, grease, and dustproof, all insulating materials being molded composition. Current carrying parts are of hard brass, thereby eliminating the destructive effect of rust or corrosion at the points of contact.

The Tip Top Button cannot be dismantled, therefore cannot be tampered with. Its construction is such, all metal parts being cast in the composition base and cap, that the current carrying parts cannot jar loose. This insures continuous good service in the presence of strong vibration.

Steering Wheel Mounting

Designed for mounting on spider of steering wheel.

Trade No.	Mfrs. No.	Style	Std. Pkg.	Price Each
57485	8106C	Black	50	$0.60

Fore Door Mounting

Equipped with flat base for mounting on door, where it can be conveniently operated by hand or knee.

57486	8106B	Black	50	.60

Flush Type Mounting

For mounting on fore door or other conveniently accessible place. This type is used where it is desired to conceal as much of the button as possible.

57487	8106F	Black	50	.60
129538	8106G	Nickel	50	.60

Spark Advance Lever Mounting

The completeness of the Benjamin line of push buttons makes it possible to fulfill all requirements where this type of equipment is required. Over 85 automobile manufacturers have now adopted the Tip Top buttons as standard equipment and all prominent steering column manufacturers are supplying spark advance levers equipped with the Tip Top Button as a unit.

Trade No.	Mfrs. No.	Type	Std. Pkg.	Price Each
148598	8200A	Single wire or grounded..	50	$0.60
148599	8106A	Two wire.....	50	.60
148600	8321B	Single wire or grounded..	50	.60

PUSHWELL BUTTONS

The Pushwell is similar in appearance to the Tip Top, but is single-contact point construction. They are reliable, waterproof, and instantly responsive.

Steering Wheel Mounting

Trade No.	Mfrs. No.	Finish	Std. Pkg.	Price Each
57489	8189J	Black	100	$0.35

Fore Door Mounting

57488	8189F	Black	100	.25

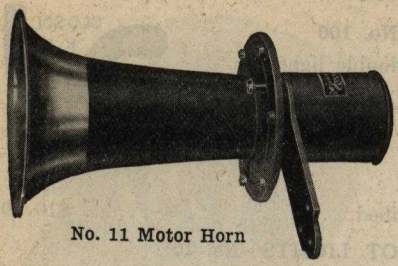
MOTORCYCLE PUSH BUTTONS

Designed especially for motorcycle electric horns. Responsive and substantial. Operated with the thumb without removing the hand from control. Case is of brass throughout; clamping brackets accommodate ⅞ or 1-inch handle bars.

Trade No.	Mfrs. No.	Type	Finish	Std. Pkg.	Price Each
148601	8055B	Two conductor	Nickel	25	$0.60
148602	8055N	Single wire or grounded..	Nickel	25	.60

Either of the above buttons finished in black enamel at no extra charge.

SAMSON HORNS



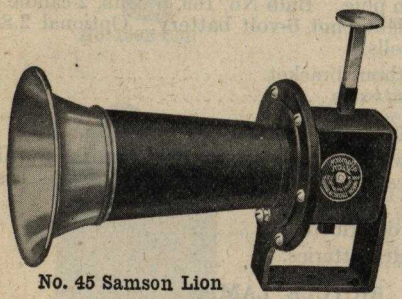
No. 11 Motor Horn



No. 16 Victor



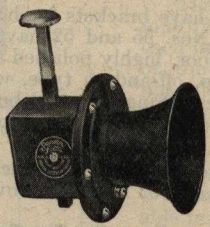
No. 35 Samson Tiger



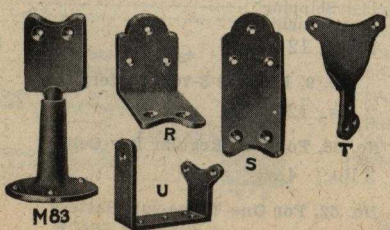
No. 45 Samson Lion



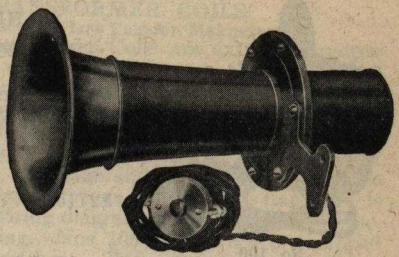
No. 36 Motorcycle Horn



No. 46 Motorcycle Horn



Mountings



No. 23 Samson Jr.

MOTOR-DRIVEN

Samson Motor Horns are made along original lines to give a loud, insistent signal.

For large cars we recommend Nos. 11 to 14. Quickly adjusted and firmly locked. Variety of mountings. Price includes neat push for mounting on floor or steering wheel; 10 feet of duplex cord and mounting bolts.

Standard finishes are all black or black with brass or nickel trim. Other finishes special. Always specify finish.

No. 23 Samson Jr. is built along same lines as larger models. Loud penetrating tone. Operates on 6 volts.

Trade No.	Mfrs. No.	Length Over All, Inches	Style Projector	Price Each
48060	11	12¾	Long bell	$15.00
48061	12	6½	Short bell	14.00
48062	13	8¾	Medium bell	14.50
48063	14	11½	Straight torpedo	14.50
48064	23	10	Long bell	7.00

VIBRATOR

The No. 16 Victor is an electrically operated horn of vibrator type. It has a remarkable volume of tone, clear and insistent. Same size as No. 23 Samson Jr. Furnished in the same finishes.

48070	16	10	Long bell	4.00

HAND-OPERATED

No. 35 Samson Tiger, has strong, clear tone. Easily operated. Simple, substantial mechanism. Right-angle or twisted mountings. 6 or 12-inch handle, shafts extra.

No. 45 Samson Lion is just as easy to operate as any electric or hand horn made.

48072	35	11	Long bell	4.50
48074	45	11	Long bell	4.00

MOTORCYCLE HORNS

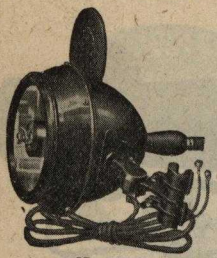
48073	36	..	Short bell	4.50
48075	46	..	Short bell	4.00

MOUNTINGS

The straight (S), right-angle (R) and twisted (T) mountings, no extra charge. For all brass motor boat mountings (M83) add $1.00.

Every model is absolutely guaranteed.

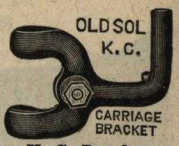
OLD SOL ELECTRIC LIGHTING OUTFITS



No. 100

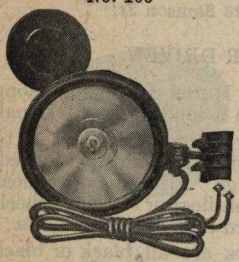
NITROJECTOR—No. 100

No. 100 Spotlight has double light control and no-glare device. Large 8-inch body, 5 feet duplex cable, 4-inch adjustable diminishing mirrorscope.



K. C. Bracket

Trade No.		Price Each
127150	Complete, as described	$10.00



No. 70

AUTO SPOT LIGHTS—No. 70

Model No. 70 has 7-inch door and body. Black enamel finish, has 4-inch adjustable, diminishing mirrorscope. Old Sol focusing device, integral with on-and-off switch in handle. Genuine silvered reflectors. Universal bracket joint with patented features, non-loosening. This bracket fits any straight or tapered windshield. Special design bracket for Studebaker when desired. Five feet of finely braided duplex cable with electrical copper terminals.

127148	Complete, as described	7.00

AUTO SPOT LIGHTS—No. 77

Same as Model 70 except size and price. Has 6-inch door and body, with five feet cable, adjustable mirrorscope, focusing device with switch in handle, patented universal bracket.

127149	Complete, as described	5.00

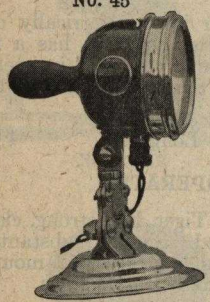


No. 45

CARRIAGE LAMPS—No. 45

Similar in design to auto searchlights. Black body and 4-inch nickel door. Perforations allow sufficient light to illumine rear red jewel. Regularly supplied with 3½ feet of duplex wire and terminals attached to switch plug. Bulb No. 169, 6 volts, 2 candle power, for 5 dry cells or Hot Shot 6-volt battery. Optional 2.8-volt 2 c. p. bulb for 2 dry cells.

127142	Complete, without bracket	2.25
127143	K. C. Bracket, extra	.25



No. 56M

MOTOR BOAT AND CANOE LAMPS—No. 56M

Have 4-inch face with port and starboard signals. Furnished with 3½ feet duplex cable, on-and-off switch plug, swivel bracket and deck base.

127145	Complete, as described	5.00

Prices do not include batteries.

BICYCLE LAMPS

These headlights have brackets for handle bars. Nos. 4 and 9 have 5-inch lamp. Nos. 55 and 52 have 4-inch lamp, auto type. Black body, nickle door, highly polished silvered reflector. Switch plug in base of lamp, off-and-on type, with 24 inches wiring and terminals for batteries. Single-contact bulb provided with Ediswan base and highly efficient Tungsten filament, 2.8 volts, 2 candle power.



Nos. 4 and 9

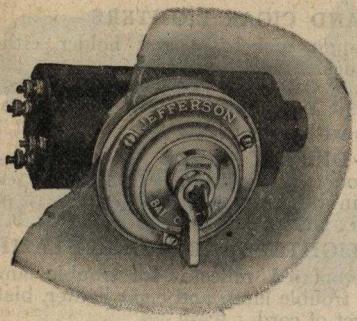


Nos. 55 and 52

Battery box black enameled, complete with straps. Nos. 55 and 52 have lock cover.

Trade No.	Shipping Weight	Price Each
	No. 4, For Two Regular Dry Cells	
127139	2 lbs., 12 oz.	$2.00
	No. 9, For One 3-volt Battery	
127140	2 lbs., 12 oz.	2.00
	No. 55, For Two Regular Dry Cells	
127146	3 lbs., 4 oz.	3.25
	No. 52, For One Three-volt Battery	
127147	3 lbs., 4 oz.	3.25

JEFFERSON AUTOMOBILE ACCESSORIES



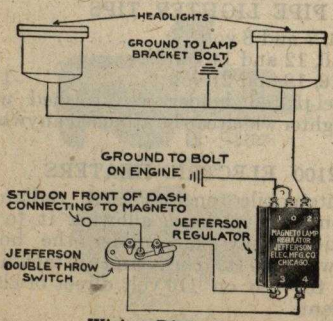
No. 100 Coil



No. 100B Coil



Magneto Lamp Regulator



Wiring Diagram

TRANSFORMER COILS

For Use with Low Tension Magnetos

Jefferson Transformer Coils are extremely powerful. They are designed to answer the most rigid automobile engine requirements, regardless of speed, horse power or compression. They can be used with practically any type of low tension magnetos, but are particularly designed for use with all dual types of Remy, Splitdorf, Kingston and Heinze makes. These coils will eliminate ignition difficulties. Each coil is furnished with wiring diagram, giving detailed instructions for installing. Nos. 100 and 100B are equipped with Yale lock switches. These ignition lock switches are of the latest and most improved types of switch construction and are a positive safeguard against thieves and joy-riders. No two locks with keys alike.

Extreme care is exercised in the manufacture of Jefferson Coils. They are most efficient and extremely economical on battery current. The windings and condenser are so carefully balanced that arcing at the contact points is virtually eliminated. All windings and condensers are guaranteed by the makers to last indefinitely.

No. 100—Tubular, with Switch

This coil is assembled in a heavy fiber casing, equipped with highly polished nickel-plated Yale kick switch lock. The coil is mounted on the back of the dash, the switch only appearing on the front. This outfit is easily installed and makes a very handsome appearance. Three keys furnished with each coil.

Trade No.	Dimensions Over All Inches	Price Each
128710	7¾x5x4	$14.00

No. 100B—Dash

This coil is furnished in a highly polished mahogany dove-tailed case, equipped with Universal Yale lock switch, and mounting brackets for attaching coil to the front of the dashboard. This coil has the same general interior construction as the No. 100. Three keys furnished with each coil.

128712	8½x5¼x4	12.00

No. 100C—Dash

This coil has the same general construction as the No. 100B, the only difference being that it is equipped with a plain kick switch.

128715	8½x5¼x4	11.00

MAGNETO LAMP REGULATORS

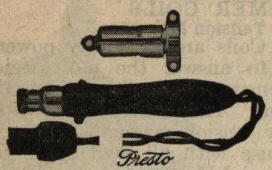
These regulators are designed primarily to allow multiple wiring. When the regulator is installed, each light is operated separately and independently of the others. If one light goes out, the rest are not affected. With the present Ford lighting system, the wiring is in series. If one light goes out, all lights on the same circuit are out. Another objectionable feature is the burning out of the headlights when running at a high rate of speed.

The Jefferson Regulator eliminates these objectionable features and makes possible the installation of 6-volt lamps in multiple instead of the present 9-volt series system. The headlight, side lights, speedometer light, spotlight and tail light may all be lighted through the Jefferson regulator. It is also equipped with a voltage tap for dimming the lights for city driving.

Trade No.	Description	Wt. Lbs.	Price Each
128713	Regulator and double-throw switch	2½	$3.50

Wiring diagrams furnished with each regulator.

PRESTO CIGAR LIGHTERS, TROUBLE LAMPS AND HEATERS



No. 199



No. 200



No. 202



No. 204



No. 205



No. 252 Combination



No. 2100 Heater

No. 199 PIPE AND CIGAR LIGHTERS

Complete with chromium nickel tip and holder, either single or double contact plugs.

Trade No.	Mfrs. No	Description	Price Each
74223	199	Complete with holder	$1.50

No. 199 DISPLAY CARDS

Six No. 199 mounted on a card with easel back ready to display on show case or in windows.

74222	199	Card of six No. 199 lighters	9.00

COMBINATION CIGAR LIGHTERS AND TROUBLE LAMPS

No. 200 has a nickel-plated reflector for trouble lamp, separate push button for trouble lamp and cigar lighter, black ebony finished handle, 10 feet of cord.

55945	200	Complete with holder	3.50

No. 202 CIGAR LIGHTERS

Furnished with 10 feet of cord and holder.

74224	202	Complete with holder	2.50

CIGAR LIGHTERS FOR FORD CARS

Obtains its power direct from the magneto, equipped with a lighter tip which is especially suited for the Ford magneto. Furnished with 10 feet of cord and has a special tip for Ford cars previous to 1915 and a regular tip for 1915, 1916 and 1917 cars. In ordering, state the year and model of car.

55954	204	Complete with holder	2.50

STAR CIGAR LIGHTERS

Constructed the same as No. 204 but has a tip for all other makes of cars—the same tip as used on other cigar lighters.

55955	205	Complete with holder	2.50

COMBINATION CIGAR LIGHTERS AND WINDERS

No. 252 combination consists of automatic cord winder No. 240, cigar lighter No. 202 and holder.

74218	252	Complete with holder	5.00

No. 250 combination consists of automatic cord winder with cigar lighter No. 200 which is a combination of the cigar lighter and trouble lamp combined, complete with holder.

74220	250	Complete with holder	6.00
74217	240	Automatic cord winder only	2.50

For any other combinations of cigar lighters and winders, add the price of both articles together. All cigar lighters are equipped with 6-volt tips unless otherwise specified.

CIGAR LIGHTER TIPS

Trade No.	Description	Price Each
74225	6, 7 and 8-volt	1.00
55950	12-volt	1.50
74226	18-volt	2.00
74227	21-volt	2.50
74228	Ford Special, Cars Previous to 1915	1.00
144817	Ford Special 1915, 1916 and 1917 cars	1.00

PIPE LIGHTER TIPS

144814	6, 7 and 8-volt	.50
144815	10, 12 and 14-volt	.75
144816	16, 18 and 21-volt	1.00

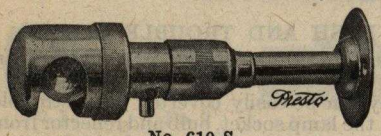
A nickel-plated holder is furnished with each cigar lighter which can be attached anywhere in the car.

No. 2100 ELECTRIC HEATERS

For automobile engines and radiators, operating on a swivel base, allowing it to be hung practically any place under the hood. Complete with 10-ft. cord and attachment plug ready for use on 110-volt direct or alternating current.

144818	Size 11½x3¼x1½ inches	4.00

PRESTO AUTO DASH LAMPS



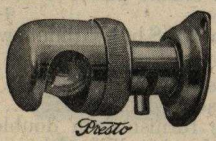
No. 610-S



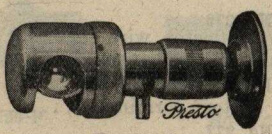
No. 612-S



No. 620-S



No. 647-S



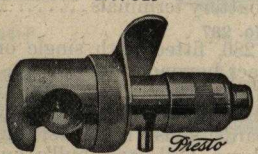
No. 618-S



No. 637-S



No. 645



No. 650-S



No. 655-S

Nos. 610-S AND 610

No. 610-S is full nickel-plated with self contained lever switch, bayonet type lamp socket complete with 6-volt 2-candle power bulb.

Trade No.	Mfrs. No.	Description	Price Each
144793	610-S		$1.25
144794	610	Same as above without lever switch...	1.00

Nos. 612-S AND 612

No. 612-S has 45 degree angle neck, full nickel-plated, with self-contained lever switch, bayonet type lamp socket complete with 6-volt 2-candle power Tungsten bulb.

144795	612-S		1.25
144796	612	Same as above, without lever switch...	1.00

No. 620-S

Crook neck dash lamp, with bowl shaped reflector for regular equipment on the Ford car, complete with 6-volt, 2-candle power bulb and switch.

144803	620-S		1.00

Nos. 647-S AND 647

Bull pup dash lamp, strong, heavy, short and chunky, built for service, full nickel-plated with self-contained lever switch, bayonet type lamp socket and 6-volt, 2-candle power Tungsten bulb. Length from dash to bulb center, 2 inches.

144797	647-S		1.15
144798	647	Same as above, without lever switch...	.90

Nos. 618-S AND 618

No. 618-S bull dog dash lamp is a longer edition of the bull pup, full nickel-plated, with self-contained switch, bayonet type lamp socket, 6-volt, 2 candle power Tungsten bulb. Length from dash to bulb center, 2½ inches.

144799	618-S		1.25
144800	618	Same as above, without lever switch...	1.00

Nos. 637-S AND 637

Dash lamp for Ford cars. Length from dash to bulb center, 2½ inches. 10 degree angle flange. Has self-contained lever switch, bayonet type lamp socket. Complete with 6-volt, 2-candle power Tungsten bulb.

144801	637-S		1.25
144802	637	Same as above, without lever switch...	1.00

Nos. 645 AND 640

No. 645 dash or instrument board lamp fitted with oval flange for wood dash. A close, compact lamp for countersunk clocks, speedometers, etc. Complete, with 6-volt 2-candle power Tungsten bulb.

56246	645		.90
56244	640	Same as No. 645 but with nut for metal dash	.90

Nos. 650-S AND 650

No. 650-S cowl dash step light or tonneau lamp complete with self-contained lever switch and 6-volt, 2-candle power Tungsten bulb. Length over all, 3 inches.

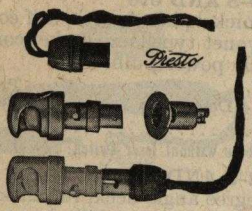
56247	650-S		1.25
56248	650	Same as above, without lever switch...	1.00

Nos. 655-S AND 655

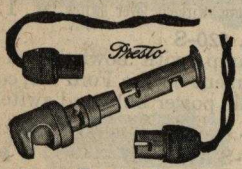
No. 655-S metal dash lamp with self-contained lever switch complete, with bayonet lamp socket, 6-volt, 2-candle power Tungsten bulb and nut for metal dash.

56249	655-S		1.25
56250	655	Same as above, without lever switch...	1.00

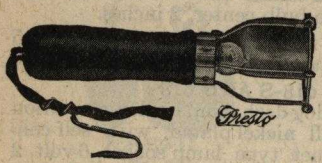
PRESTO DASH AND TROUBLE LAMPS



No. 230-S



No. 235-S



Nos. 276 and 277



Nos. 281 and 282



Nos. 286 and 287



Nos. 291 and 292

COMBINATION DASH AND TROUBLE LAMPS

These combinations are suitable for all cars. Finished in polished nickel-plate.

When desired they can be easily coverted into a trouble lamp. Simply remove the lamp socket, bulb and reflector from the dash socket and use the 10 feet of wire fitted with bayonet plug socket; connect the plug to the socket on the dash and the other end to the reflector and lamp as shown in the illustration, all of which is furnished complete.

Nos. 230-S and 230

Nos. 230-S combination dash and trouble lamp with lever switch in head complete with 10 feet of cord and 6 volt 2 candle power tungsten bulb.

No. 230 is the same as No. 230-S but without switch lever in lamp head, but has switch type dash socket.

Trade No.	Mfrs. No.	Description	Price Each
57166	230-S	Complete as described	$2.25
56238	230	Complete as described	2.00

Nos. 235-S and 235

No. 235-S is for Ford cars. This combination with lever switch in head complete can be operated from two dry cells or storage battery. 6 volt, 2 candle power bulb furnished regularly.

No. 235 is the same as No. 235-S but without switch lever in lamp head but has switch type dash socket.

57167	235-S	Complete as described	2.25
56240	235	Complete as described	2.00

Nos. 230-S and 235-S are furnished in double contact only. Nos. 230 and 235 are furnished in either double or single contact.

No. 276

Furnished with one-third reflector, wire guard, 10 feet of black cotton cord, adjustable hook hanger, bayonet lamp socket and 6 volt, 4 candle power Mazda bulb.

57156 276 With regular battery terminals 1.00

No. 277

57157 277 Same as No. 276, fitted with single or double contact bayonet plug 1.25

No. 281

Furnished with full reflector, 3 inches in diameter, nickel-plated, highly polished, 10 feet of black cotton cord, bayonet lamp socket and 6 volt, 2 candle power Mazda bulb.

57158 281 With regular battery terminals 1.00

No. 282

57159 282 Same as No. 281, fitted with single or double contact bayonet plug 1.25

No. 286

Furnished with full reflector, nickel-plated, highly polished, 3-inch lens for reading street signs and house numbers complete with 10 feet of black cotton cord, with bayonet lamp socket and 6-volt, 4 candle power Mazda bulb.

57160 286 With regular battery terminals 1.25

No. 287

57161 287 Same as No. 286, fitted with single or double contact bayonet plug 1.50

No. 291

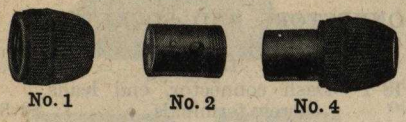
A combination of trouble lamp and searchlight, made especially for reading signboards, house numbers, etc., at a distance. Has a powerful lamp bulb and bull's eye lens; handsomely finished throughout; has a convenient switch in handle; black handle and cord; heavy brass, nickel-plated. Furnished complete with 6-volt, 6 candle power Ediswan base bulb.

57162 291 With regular battery terminals 2.25

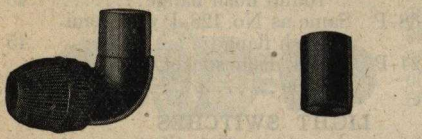
No. 292

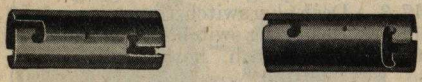
57163 292 Same as No. 291, fitted with single or double contact bayonet plug 2.50

PLUNGER TYPE CONNECTORS, PLUGS AND SOCKETS


No. 1 No. 2 No. 4

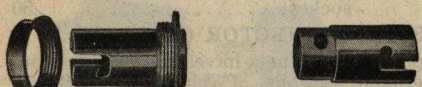

No. 4-C No. 4-P

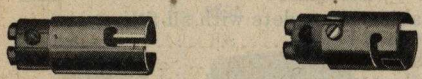

No. 8 No. 10


No. 5-P No. 6-P

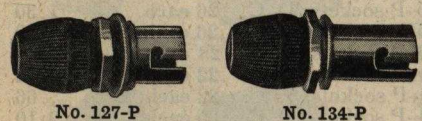

No. 7-P

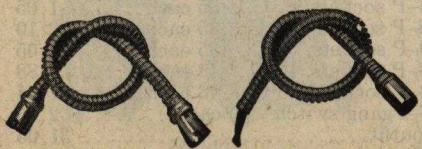

No. 125-P No. 135-P


No. 78 No. 13-P


No. 14-P No. 30-P


No. 44-P No. 44-PS


No. 127-P No. 134-P


No. 51 No. 55

Trade No.	Mfrs. No.	Description	Price Each
56004	1	Composition rubber cap, for plugs	$0.04
56005	2	Hard rubber plug, threaded for caps	.18
56006	4	Rubber cap and plug together	.22
144748	4–C	Same as No. 4, but made to convert two wires to single contact	.35
144749	4–P	Plunger plug for tail lamps	.40
144750	8	Elbow plug and cap together, for Ford cars	.45
55984	10	Plug, plain, with screw terminals	.15
144751	5–P	Double end socket, plain	.26
144752	6–P	Double end socket, switch type	.28
56016	105–P	Combination of No. 5 with plug No. 4	.48
56017	106–P	Combination of No. 6 with plug No. 4	.50
144755	7–P	Extension plug socket, switch type	.50
144754	125–P	Socket with adjustable nuts	.45
144756	135–P	Focusing socket, Ford headlights	.45
144757	78	Tail lamp sleeve socket	.15
144758	13–P	Lamp and plug socket, side lead	.22
55988	14–P	Lamp and plug socket, end lead	.22
144759	30–P	Lamp socket, removable sleeve, set screw plug	.30
55966	44–P	Lamp socket, with rubber cap over terminals	.35
144760	44–PS	Same as No. 44–P, but switch type	.35
144761	127–P	Metal dash socket, with rubber cap over terminals	.50
144762	134–P	Lamp converter, screw terminals	.56

EXTENSIONS

No. 51

Flexible brass-armored tube extension, with 5/8-inch Anchor Bayonet Plugs.

Trade No.	Length Inches	Price Each
108989	10	$0.86
108990	13	.93
108991	16	1.00

No. 55

With plug on one end only, other end open with 6 inches of wire extending outside armor.

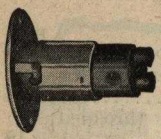
108992	10	.63
144774	13	.67
144775	16	.70

No. 54

With adjustable nuts on one end for converting oil or gas lights to electricity without use of solder.

144780	10	1.16
144781	13	1.23
144782	16	1.30

CONNECTORS, SOCKETS, SWITCHES AND ADAPTERS



No. 18-P



No. 68-P



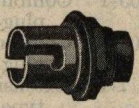
No. 58-P



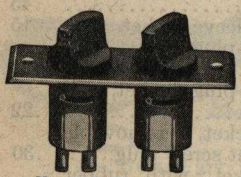
No. 128-P



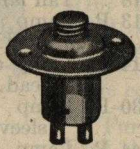
No. 138-P



No. 124-P



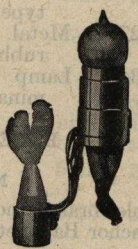
No. 417, Two-gang



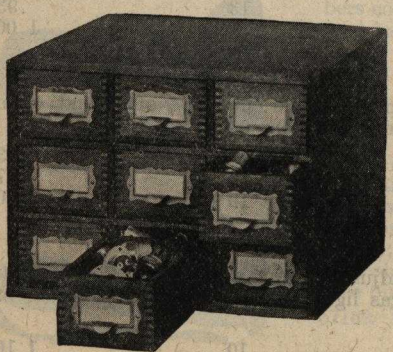
No. 400



Nos. 301-302



Nos. 303-304



Presto Connector Cabinet

CONNECTORS AND SOCKETS

Trade No.	Mfrs. No.	Description	Price Each
55990	18–P	Dash connector, end leads, screw terminals	$0.35
55980	68–P	Dash socket, "on and off" switch type, end leads	.35
108983	58–P	Dash socket, semi-flush flange	.30
108984	128–P	Metal dash connector, end leads, screw terminals, round flush flange	.48
108985	138–P	Same as No. 128–P with semi-flush flange	.45
108986	124–P	Metal dash socket, extended type	.45

LIGHT SWITCHES

55975	417	Dash plug switch, one-gang	.50
108982	417–2	Dash plug switch, two-gang	1.00
108987	417–3	Dash plug switch, three-gang	1.50
108988	417–4	Dash plug switch, four-gang	2.00
55974	400	Floor push horn switch button	.60

No. 417 switches are for use on Ford cars. Prices do not include lamp bulbs.

GIL-BO ADAPTERS

For Oil Burners

Trade No.	Mfrs. No.	Description	Price Each
144776	301	With fiber candelabra socket	$0.30
144777	302	With No. 11 bayonet lamp socket	.50

Nos. 301 and 302 are for use on Ford cars.

For Gas Burners

144778	303	With fiber candelabra socket	.30
144779	304	With No. 11 bayonet lamp socket	.50

PRESTO CONNECTOR CABINETS

These connector cabinets have nine drawers containing eighteen sections. Cabinets are 9x12x12 inches.

Trade No.	Description	Price Each
144783	Cabinet complete with all fittings listed below	$40.05
144784	Cabinet only	9.00

Cabinets are furnished either with or without connectors.

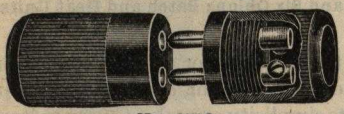
Fittings

20 No.	4 plugs, D. C., .22 each	4.40
5 No.	4 plugs, S. C., .22 each	1.10
5 No.	4–C plugs, D. C., to S. C. .35 each	1.75
5 No.	4–P plugs, D. C., .40 each	2.00
6 No.	8 plugs, D. C., .45 each	2.70
5 No.	5–P sockets, D. C., .26 each	1.30
5 No.	5–P sockets, S. C., .26 each	1.30
5 No.	6–P sockets, D. C., .28 each	1.40
6 No.	14–P sockets, D. C., .22 each	1.32
3 No.	14–P sockets, S. C., .22 each	.66
6 No.	44–P sockets, D. C., .35 each	2.10
3 No.	44–P sockets, S. C., .35 each	1.05
6 No.	68–P sockets, D. C., .35 each	2.10
3 No.	18–P sockets, S. C., .35 each	1.05
6 No.	128–P sockets, D. C., .48 each	2.88
3 No.	128–P sockets, S. C., .48 each	1.44
5 No.	417–1-gang switch, .50 each	2.50
Complete outfit		31.05

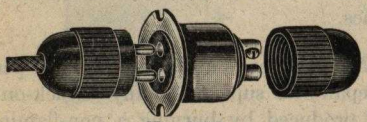
CONNECTORS



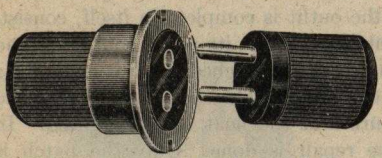
No. 6501



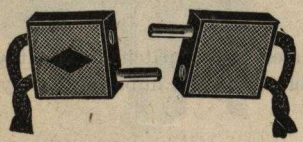
No. 6502



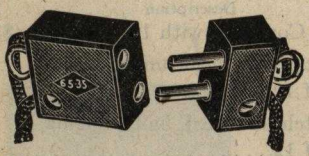
No. 6493



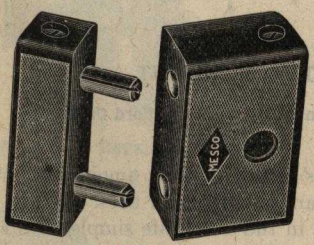
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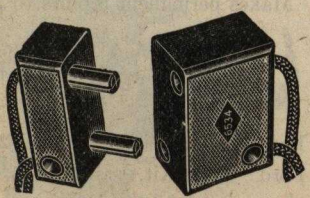
No. 6536



No. 6535



No. 6540



No. 6534

MIDGET SEPARABLE CONNECTORS

The screw caps on each end are made of hard composition and will prevent shocks to the user, and also protect the connections of wires and binding posts, and prevent grounding or other troubles caused by exposed contacts and current-carrying parts.

They are used extensively on automobiles and launches, for connecting battery electric lamp circuits, and other places where a quick connector is desired.

Trade No.	Mfrs. No.	Description	Price Each
059270	6501	Separable connector, small size..	$0.50
059271	6480	Small size plug only.....	.25
059272	6481	Small size receptacle only.....	.25
059273	6502	Separable connector, medium size	.60
059274	6482	Medium size plug only.....	.30
059275	6483	Medium size receptacle only....	.30

FLUSH MIDGET SEPARABLE CONNECTORS

This device can be used to advantage in any place where a permanent battery connection is desired and is always ready for service by inserting the plug. The base can be inserted in a ⅝-inch hole and the plug end to miniature lamp either portable or stationary.

059267	6493	Separable connector.....	.80
059268	6480	Plug only.....	.25
059269	6484	Receptacle only.....	.55

FLUSH MEDIUM SEPARABLE CONNECTORS

The connector is the same size and design as No. 6502 listed above, with a metal ring and flange for attaching the receptacle part in a permanent position. The current-carrying parts are of ample capacity for almost every service for which storage or primary batteries are used.

094217	6497	Medium separable connector...	.90
059274	6482	Plug only	.30
094218	6485	Receptacle only.....	.60

STAGE CONNECTORS

Small Size, 1⅞x1¼x⅞ inches

Very convenient for making and breaking a circuit rapidly and as frequently as desired. Small size can be used on any battery circuit.

042568	6536	Small rectangular connector....	.50

Medium Size, 1⅞x1¼x¾ inches

For connecting portables, fans, small motors, etc.

It is provided with two eye screws, one at each end, which can be used for anchoring the cord should it be deemed advisable to do so. Can also be looped together by this means, so that when separated the two parts can be located and connected without delay.

This connector will make and break a circuit for any apparatus or lights using 15 amperes or less.

042569	6535	Medium rectangular connector..	.60
094210	6537	Plug only	.30
094211	6538	Receptacle only.....	.30

Large Size, 2⅛x1⅞x¾ inches

Can be used with safety for making and breaking 25 amperes on 125 volt circuits.

042570	6540	Large rectangular connector....	.80
094212	6539	Plug only.....	.40
094213	6543	Receptacle only.....	.40

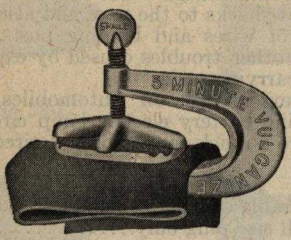
Semi-large Size, 1⅞x1⅞x⅞ inches

Similar to No. 6540 but slightly smaller and made without a tie hole. Made in accordance with the Underwriters' requirements and will safely carry 25 amperes on 125 volt circuits.

094214	6534	Semi-large rectangular connector	.80
094215	6545	Plug only	.40
094216	6526	Receptacle only.....	.40

SHALER VULCANIZERS

FOR MOTORISTS



Five-Minute Repairing Tube

THE FIVE-MINUTE

With Six Round and Six Oblong Patch and Heat Units

In one season the demand for this vulcanizer has made it one of the biggest selling accessories ever put on the market. Its simplicity appeals to every motorist on sight. Each sale means a continuous customer for the special patches.

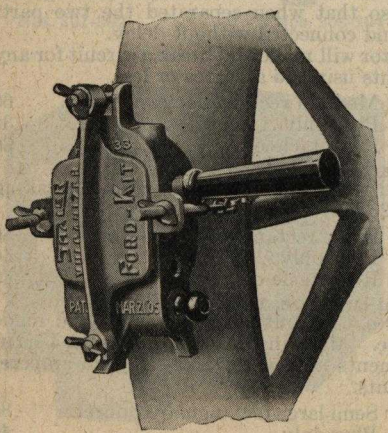
The Shaler 5-Minute mends all tube punctures perfectly, making repairs far superior to any "stuck-on" patch. Heat is produced by burning a non-flaming chemical fuel unit. Each of the twelve patch units furnished with the outfit is complete in itself, consisting of the patent heat unit in its metal container, and the patch of raw rubber attached to the vulcanizing surface of the container. This cartridge is clamped over the puncture and the heat unit is lighted. In five minutes the repair is done. Only the patch is heated. Anyone can use it. There is no danger of overcuring.

Each outfit includes twelve patch and heat units, six round and six oblong, packed in bright display box.



Display Carton with Each Dozen Vulcanizers

Trade No.	Type	Mfrs. No.	Description	Price Each
124281	M	5	Complete with 12 units...	$1.50
124282			Extra patch and heat units, round, per box of 12.....	.75
124283			Extra patch and heat units, oblong, per box of 12.....	.75



Ford-Kit Repairing Casing

THE FORD-KIT

For Casings and Tubes of Ford Cars

The Ford-Kit is a great seller among owners of Fords and other cars having small tires. Heats with gasoline or alcohol in the same safe simple manner as the Shaler Vul-Kit. There is no loose fuel to spill; no smoke or soot. Makes permanent repairs to tubes and casings.

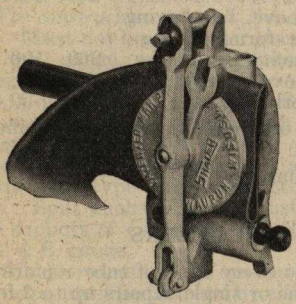
Trade No.	Type	Mfrs. No.	Description	Price Each
124284	H	33	Ford-Kit.....	$2.75
124285	I	34	Ford Tube-Kit, same as above, but for tubes only..	1.75

SHALER VULCANIZERS

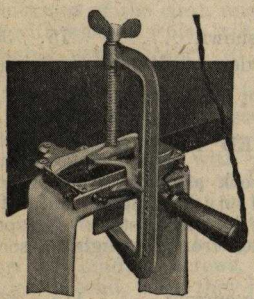
FOR MOTORISTS



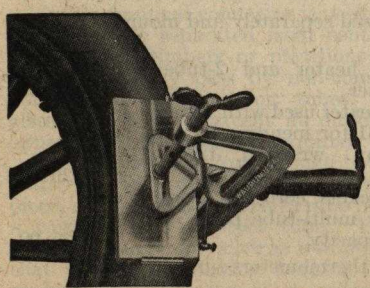
Vul-Kit Display Stand for Dealers



Vul-Kit Repairing Tube



Type D-83 Repairing Tube



Type D-83 Repairing Casing

THE VUL-KIT

Gasoline Heated. For All sized Casings and Tubes

The Vul-Kit is recommended as a sure means of doubling tire mileage by sealing casing cuts before dirt and water rot the fabric. Casings always need attention which will be given only if the motorist has his own vulcanizer.

The Vul-Kit has a 3½x4-inch curved surface for mending cuts, sandpockets, etc., in all sized casings without removing tire from wheel or letting out the air. A machined surface of 10 square inches mends all tube injuries, curing clear through and making permanent repairs of any size. The asbestos inlaid pressure plate is swiveled to avoid squeezing one side of tube tighter than the other and to enable the largest tube to be handled without pinching its edges. A lamp burning gasoline or alcohol gives the correct heat without dangerous exposed blaze or smoke. A measure gives the proper fuel charge, eliminating watching or regulating. The fuel is absorbed by a wick so there is no flaming liquid to spill. Handle is detachable. Complete with repair rubber, cement and instructions.

Trade No.	Type	Mfrs. No.	Description	Carton	Wt. Lbs.	Price Each
46618	G	32	Polished nickel.....	12	4½	$3.50
46619	F	31	Same as above but for tubes only..			2.00

PRIVATE GARAGE MODEL

Heats from City Lighting Current

Handles every kind of tube and casing work that the average motorist will care to undertake. Dealers should recommend it as absolutely the best motorist's vulcanizer.

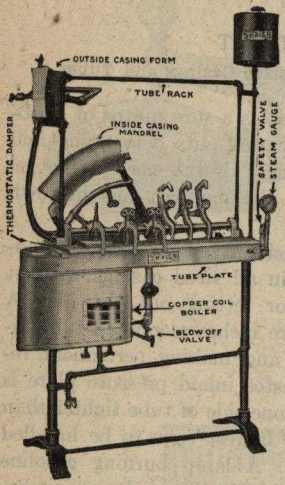
Tube and casing surfaces are 3½x7 inches — twice the size of any other motorist's vulcanizer. Electricity is the safest heat and conflicts with no garage regulations. Thermostatic heat control maintains the exact vulcanizing temperature so that a tire cannot be overheated, and by maintaining this temperature as long as necessary, permits curing through the thickest tread as well as making superficial repairs. Since the temperature control is independent of current fluctuations, no regulating is required. One or two tubes can be mended at a time.

Complete outfit includes conducting cord and plug, tube shelf, thermometer, repair material and instructions. Current consumption, 70 watts.

Trade No.	Type	Mfrs. No.	Description	Wt Lbs.	Retail Price Each
050350	D	83	Polished nickel for A. C. or D. C.....	13	$12.50

SHALER VULCANIZERS

FOR REPAIR SHOPS



Steam Vulcanizing Plant

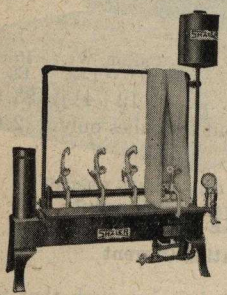
STEAM VULCANIZING PLANTS

Handles every practicable tube and casing repair on all sized tires. 4¾x30-inch tube plate cures six tubes at one time and can be heated independently of casing attachment. Casings repaired by approved wrapped tread method, requiring only one-half the material and time as other methods, yet making stronger, better appearing repairs owing to the efficient method of applying new fabric inside of tire and curing from inside and outside of tire at the same time. There are no air bags; no watching or regulating. Copper coil boiler raises steam in about 20 minutes and maintains correct pressure automatically by means of thermostat. Furnished with clamps and blocks for tubes, bead strips for rim cuts, tape for wrapping treads, thermometer, steam gauge and safety valve.

Trade No.	Type	Mfrs. No.	Description	Wt. Lbs.	Price Each
106621	NPR	41	Complete garage plant, as shown	200	$70.00
106622	NPR	42	Same as above, but having two casing forms giving double capacity	260	90.00
106623	N	41	Same as above but equipped for tube work only	160	50.00

Gas or gasoline burner as ordered. If none is specified, gasoline burner will be furnished.

Shipped direct from factory only.



Steam Tube Vulcanizers

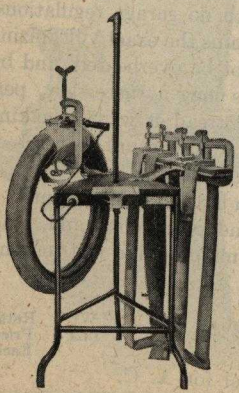
STEAM TUBE VULCANIZERS

This model is designed to do every kind of tube repairing. It cures four tubes, at one time or single repairs up to 2 feet long. Temperature regulated automatically.

No other guaranteed steam vulcanizer at near the same price has so great a capacity, heats so quickly, or operates so simply.

106624 L 40 Complete as shown..... 75 35.00

Gas or gasoline burner as ordered. If none is specified, gasoline burner will be furnished.



Electric Heated Plant

ELECTRIC HEATED PLANTS

Same capacity and perfect work as Type NPR No. 41. Heats from safe, clean, economical city lighting current. Temperature is controlled automatically by thermostats. No special wiring is needed as current is taken from any lighting socket. Uses less current than a flatiron.

106625 ACE 101 For alternating current..... 115 65.00

For rheostat controlled direct current equipment add, $10.00.

The units may be purchased separately and mounted on any workbench.

106626 A 61 Outside heater and 2-tube vulcanizer..... ... 13.50

106627 C 71 Inside heater used with Type A No. 61 for mending blow-outs by wrapped tread method..... ... 20.00

Includes tape, clamp, brackets, cord and thermometer.

106628 E 91 Gang or multi-tube plate, 6 tubes capacity..... ... 25.00

Clamps, blocks, cord and thermometers furnished.

Write for Complete Descriptive Bulletins of Above Models

NATIONAL ELECTRICAL CODE

EDITION OF 1915

CLASS "C"—INSIDE WORK

(Including all Work for Light, Power and Heat, Protected by Service Cut-out and Switch. For Signaling Systems see Class E.)

ALL SYSTEMS AND VOLTAGES

GENERAL RULES

16. Wires.

(*See also Nos. 17, 18, 20, 26, 27, 44, 47 and 48. For construction rules see Nos. 49 to 57.*)

a. Must not be of smaller size than No. 14 B. & S. gauge, except as allowed for fixture work and pendant cord.

b. Conductors of size No. 8 B. & S. gauge or over used in connection with solid knobs must be securely tied thereto. If wires are used for tying they must have an insulation of the same type as the conductors they confine. Split knobs or cleats must be used for the support of conductors smaller than No. 8 B. & S. gauge.

Knobs or cleats which are arranged to grip the wire, must be fastened by either screws or nails. If nails are used, they must be long enough to penetrate the woodwork not less than one-half the length of the knob and fully the thickness of the cleat, and must be provided with washers which will prevent under reasonable usage, injury to the knobs or cleats.

c. Must be so spliced or joined as to be both mechanically and electrically secure without solder. The joints must then be soldered unless made with some form of *approved* splicing device, and covered with an insulation equal to that on the conductors.

Stranded wires (except in flexible cords) must be soldered before being fastened under clamps or binding screws, and whether stranded or solid, when they have a conductivity greater than that of No. 8 B. & S. gauge they must be soldered into lugs for all terminal connections, except where an *approved* solderless terminal connector is used.

d. Must be separated from contact with walls, floors, timbers or partitions through which they may pass by non-combustible, non-absorptive, insulating tubes, such as glass or porcelain, except at outlets where *approved* flexible tubing is required.

Bushings must be long enough to bush the entire length of the hole in one continuous piece, or else the hole must first be bushed by a continuous waterproof tube. This tube may be a conductor, such as iron pipe, but in that case an insulating bushing must be pushed into each end of it, extending far enough to keep the wire absolutely out of contact with the pipe.

e. Where not enclosed in *approved* conduit, molding or armored cable and where liable to come in contact with gas, water, or other metallic piping or other conducting material, must be separated therefrom by some continuous and firmly fixed non-conductor creating a permanent separation. Must not come nearer than two (2) inches to any other electric lighting, power or signaling wire, not enclosed as above, without being permanently separated therefrom by some continuous and firmly fixed non-conductor. The non-conductor used as a separator must be in addition to the regular insulation on the wires. Where tubes are used, they must be securely fastened at the ends to prevent them from moving along the wire.

Deviations from this rule may, when necessary, be allowed by special permission.

f. Must be so placed in wet places that an air space will be left between conductors and pipes in crossing, and the former must be run in such a way that they cannot come in contact with the pipe accidentally. Wires should be run over, rather than under, pipes upon which moisture is likely to gather or which, by leaking, might cause trouble on a circuit.

g. The installation of electrical conductors in molding, or on insulators, in elevator shafts will not be approved, but conductors may be installed in such shafts if encased in *approved* metal conduits, or armored cables.

h. In three-wire (not three-phase) systems, the neutral must be of sufficient capacity to carry the maximum current to which it may be subjected.

17. Underground Conductors.

a. Must be protected against moisture and mechanical injury where brought into a building, and all combustible material must be kept from the immediate vicinity.

b. Must not be so arranged as to shunt the current through a building around any catch-box.

c. Where underground service enters building through tubes, the tubes shall be tightly closed at outlets with asphaltum or other non-

conductor, to prevent gases from entering the building through such channels.

d. No underground service from a subway to a building, and no service from a private generating plant shall supply more than one building, except by special permission, unless the conductors are properly protected by fuses and are carried outside all the buildings but the one served. Conductors in conduit or duct under two inches of concrete under a building, or buried back of two inches of concrete or brick within a wall are considered as lying outside of the building. These requirements do not apply to factory yards and factory buildings under single occupancy or management.

18. Table of Allowable Carrying Capacities of Wires.

(*For construction rules see Nos. 49 to 57.*)

The following table, showing the allowable carrying capacity of copper wires and cables of ninety-eight per cent conductivity, according to the standard adopted by the American Institute of Electrical Engineers, must be followed in placing interior conductors.

For insulated aluminum wire the safe carrying capacity is eighty-four per cent of that given in the following tables for copper wire with the same kind of insulation.

B. & S. Gauge Number	Diameter of Solid Wire in Mils	Area in Circular Mils	Table A. Rubber Insulation Amperes	Table B. Other Insulation Amperes
18	40.3	1,624	3	5
16	50.8	2,583	6	10
14	64.1	4,107	15	20
12	80.8	6,530	20	25
10	101.9	10,380	25	30
8	128.5	16,510	35	50
6	162.0	26,250	50	70
5	181.9	33,100	55	80
4	204.3	41,740	70	90
3	229.4	52,630	80	100
2	257.6	66,370	90	125
1	289.3	83,690	100	150
0	325.	105,500	125	200
00	364.8	133,100	150	225
0000	409.6	167,800	175	275
		200,000	200	300
0000	460.	211,600	225	325
		300,000	275	400
		400,000	325	500
		500,000	400	600
		600,000	450	680
		700,000	500	760
		800,000	550	840
		900,000	600	920
		1,000,000	650	1,000
		1,100,000	690	1,080
		1,200,000	730	1,150
		1,300,000	770	1,220
		1,400,000	810	1,290
		1,500,000	850	1,360
		1,600,000	890	1,430
		1,700,000	930	1,490
		1,800,000	970	1,550
		1,900,000	1,010	1,610
		2,000,000	1,050	1,670

1 Mil=0.001 inch.

19. Switches, Cut-outs, Circuit-breakers, Etc.

a. On constant potential circuits, all service switches and all switches controlling circuits supplying current to motors or heating devices, and all fuses, unless otherwise provided (for exceptions as to switches see Nos. 8 *c*, 25 *a* and 43 *c;* for exceptions as to cut-outs see No. 23 *a* and *b*), must be so arranged that the fuses will protect and the opening of the switch will disconnect all of the wires, that is, in the two-wire system the two wires, and the three-wire system the three wires, must be protected by the fuses and disconnected by the operation of the switch.

When installed without other automatic overload protective devices automatic overload circuit breakers must have the poles and trip coils so arranged as to afford complete protection against overloads and short circuits. In two or three-phase three-wire circuits and two-phase four-wire circuits there must be a trip-coil in each of two phases, and in four-wire three-phase circuits there must be a trip-coil in each phase. If a circuit-breaker is also used in place of the switch it must be so arranged that no one pole can be opened manually without disconnecting all the wires.

This, of course, does not apply to the grounded circuit of street railway systems.

b. Must, when placed where exposed to mechanical injury or in the immediate vicinity of easily ignitible stuff or where exposed to inflammable gases or dust, or flyings of combustible material, be mounted in *approved* cut-out boxes or cabinets, except oil switches, circuit-breakers and similar devices which have approved casings.

Cabinets and cut-out boxes must be of metal when used with metal conduit, armored cable or metal molding systems.

c. Must, when located where exposed to moisture as in basements and similar places, be mounted in *approved* cut-out boxes or cabinets, and when located in wet places or outside of buildings must be mounted in approved "weatherproof" cut-out boxes or cabinets.

d. Time switches, sign flashers and similar appliances must be of approved design and enclosed in *approved* cabinets, except sign flashers mounted as described in No. 83*b*.

e. Must have the spacing within cabinets or cut-out boxes between the walls of the cabinet or cut-out box and current-carrying parts of devices as specified in No. 70.

CONSTANT-CURRENT SYSTEMS.

PRINCIPALLY SERIES ARC-LIGHTING

Constant current systems will not be allowed inside buildings except by special permission.

20. Wires.

(*See also Nos. 16, 17, 18 and 44. For construction rules see Nos. 49 and 50.*)

a. Must have an *approved* rubber insulating covering.

b. Must be arranged to enter and leave the building through an *approved* double-contact service switch, mounted in a non-combustible case, kept free from moisture, and easy of access to police or firemen.

c. Must always be in plain sight, and never encased, except when *required* by this Department.

d. Must be supported on glass or porcelain insulators, which separate the wire at least one inch from the surface wired over and must be kept *rigidly* at least eight inches from each other, except within the structure of lamps, on hanger-boards or in cut-out boxes, or like places, where a less distance is necessary.

e. Must, on side walls, be protected from mechanical injury by a substantial boxing, retaining an air space of one inch around the conductors, closed at the top (the wires passing through bushed holes), and extending not less than seven feet from the floor. When crossing floor timbers in cellars or in rooms where they might be exposed to injury, wires must be attached by their insulating supports to the under side of a wooden strip not less than one-half an inch in thickness. Instead of the running boards, guard strips on each side of and close to the wires will be accepted.

These strips to be not less than seven-eighths of an inch in thickness and at least as high as the insulators.

21. Series Arc Lamps.

(*For construction of Arc Lamp see No. 74.*)

a. Must be carefully isolated from inflammable material.

b. Must be provided at all times with a glass globe surrounding the arc, and securely fastened upon a closed base. Broken or cracked globes must not be used.

c. Must be provided with a wire netting (having a mesh not exceeding one and one-fourth inches) around the globe and an *approved* spark arrester (see No. 75), when readily inflammable material is in the vicinity of the lamps, to prevent escape of sparks or carbon or melted copper.

Outside arc lamps must be suspended at least eight feet above sidewalks. Inside arc lamps must be placed out of reach or suitably protected.

Arc lamps, when used in places where they are exposed to flyings of easily inflammable material, must have the carbons enclosed completely in a tight globe in such manner as to avoid the necessity for spark arresters.

"Enclosed arc" lamps, having tight inner globes, may be used, and the requirements of Sections *b* and *c* above would, of course, not apply to them.

d. Where hanger-boards are not used, lamps must be hung from insulating supports other than their conductors.

e. Lamps when arranged to be raised and lowered either for carboning or other purposes, shall be connected up with stranded conductors from the last point of support to the lamp, when such conductor is larger than No. 14 B. & S. gauge.

22. Incandescent Lamps in Series Circuits.

a. Must have the conductors installed as required in No. 20, and each lamp must be provided with an automatic cut-out.

b. Must have each lamp suspended from a hanger-board (see No. 73), by means of rigid tube.

c. No electro-magnetic device for switches and no multiple-series or series-multiple system of lighting will be approved.

d. Must not under any circumstances be attached to gas fixtures.

CONSTANT-POTENTIAL SYSTEMS.

GENERAL RULES—ALL VOLTAGES.

23. Automatic Cut-outs (Fuses and Circuit-breakers).

(*See also No. 19. For construction rules see Nos. 66 and 67.*)

a. Must be placed on all service wires, either overhead or underground, in the nearest accessible place to the point where they enter the building and inside the walls, and arranged to cut off the entire current from the building. Departure from this rule may be authorized only under special permission in writing.

Where the switch required by No. 24 *a* is inside the building, the cut-out required by this section must be placed so as to protect it, unless the switch is of the knife-blade type and is enclosed in an *approved* box or cabinet, under which conditions the switch may be placed between the source of the supply and the cut-out.

Must not be placed in any permanently grounded service wire.

In risks having private plants, the yard wires running from building to building are not considered as service wires, so that cut-outs would not be required where the wires enter buildings, provided that the next fuse back is small enough to properly protect the wires inside the building in question.

b. Must be placed at every point where a change is made in the size of wire [unless the cut-out in the larger wire will protect the smaller (see No. 18)].

Must not be placed in any permanently grounded wire, except as called for in Section *d*.

c. Must be in plain sight, or enclosed in an *approved* cabinet, and readily accessible. They must not be placed in the canopies or shells of fixtures.

Link fuses may be used only when mounted on *approved* bases which, except on switchboards must be mounted in *approved* cut-out boxes or cabinets. A space of at least two inches must be provided between the open-link fuses and metal, or metal lined walls or metal, metal lined or glass paneled doors of cabinet or cut-out boxes.

d. Must be so placed that no set of small motors, small heating devices or incandescent lamps, whether grouped on one fixture or on several fixtures or pendants (nor more than

16 medium size or 25 candelabra size sockets or lamp receptacles) requiring more than 660 watts, will be dependent upon one cut-out.

By special permission, in cases where wiring equal in size and insulation to No. 14 B. & S. gauge *approved* rubber-covered wire is carried direct into keyless sockets or receptacles, and where the location of sockets and receptacles is such as to render unlikely the attachment of flexible cords thereto, the circuits may be so arranged that not more than 1,320 watts (or thirty-two sockets or receptacles) will be dependent upon the final cut-out.

Except for signs and outline lighting, sockets and lamp receptacles will be considered as requiring not less than 40 watts each, if of the medium size, or 25 watts each if of candelabra size.

Receptacles for attachment plugs rated at not over 660 watts each may be connected to ordinary branch circuits, and where so installed will be considered as requiring not less than 40 watts. Heating and other appliances rated not over 660 watts each may be connected to such receptacles only when the normal load in use on the circuit at any time will not exceed 660 watts. A cut-out must be provided for each receptacle rated above 660 watts.

All branches or taps from any three-wire system which are directly connected to lamp sockets or other translating devices, must be run as two-wire circuits if the fuses are omitted in the neutral or if the difference of potential between the two outside wires is over 250 volts, and both wires of such branch or tap circuits must be protected by proper fuses.

The above shall also apply to motors, except that small motors may be grouped under the protection of a single set of fuses, provided the rated capacity of the fuses does not exceed 10 amperes.

When 1,320 watts are dependent upon one fusible cut-out, as is allowed in theatre wiring, outline lighting, signs and large chandeliers, the fuses may be in accordance with the following table:

125 volts or less	20 amperes
126 to 250 volts	10 amperes

Fused rosettes may be used only for open work in large mills. *Approved* link fused rosettes may be used at a voltage of not over 125 and *approved* enclosed fused rosettes at a voltage of not over 250, the fuse in the rosettes not to exceed 3 amperes, and a fuse of over 25 amperes must not be used in the branch circuit.

e. The rated capacity of fuses must not exceed the allowable carrying capacity of the wire as given in No. 18. Circuit-breakers must not be set more than 30 per cent above allowable carrying capacity of the wire, unless a fusible cut-out is also installed on the circuit. Where a rubber-covered conductor carries the current of only one A. C. motor of a type requiring large starting current, it may be protected by a fuse or an automatic circuit-breaker without time limit device, rated in accordance with Table B of No. 18. The rated continuous current capacity of a time limit circuit breaker protecting a motor of the above type need not be greater than 125 per cent of the motor current rating, provided the time limit device is capable of preventing the breaker opening during the starting period.

In the great majority of cases where A. C. motors of the above type are started by means of autostarters the current-carrying capacity of wires meeting the rule will not exceed the following percentages of the full load currents of the motors,—

Rated full load current	Percentage
0– 30 amperes	250
31–100 "	200
Above 100 "	150

For the protection of wires having safe carrying capacities exceeding the rated capacity of the largest *approved* enclosed type fuses, *approved* enclosed fuses arranged in multiple may be used, provided as few fuses as possible are used and the fuses are of equal capacity and provided the cut-out terminals are mounted on a single continuous pair of substantial bus-bars. The total capacity of the fuses should not exceed the safe carrying capacity of the wires. This does not apply to motor circuits.

Fixture wire or flexible cord of No. 18 B. & S. gauge will be considered as properly protected by 10 ampere fuses.

f. Each conductor of motor circuits, except on main switchboard or when otherwise subject to competent supervision, must be protected by an *approved* fuse, whether automatic overload circuit-breakers are installed or not. Single-phase motors may have one side protected by an *approved* automatic overload circuit-breaker only, if the other side is protected by an *approved* fuse.

Circuit-breakers will be approved for circuits having a maximum capacity greater than that for which approved enclosed fuses are rated.

24. Switches.

(*See No. 19. For construction of Switches see No. 65.*)

a. Must be placed on all service wires, either overhead or underground, in the nearest readily accessible place to the point where the wires enter the building, and arranged to cut off the entire current. Departure from this rule may be authorized only under special permission in writing.

Service cut-out and switch must be arranged to cut off current from all devices including meters. Service switches must indicate plainly whether they are open or closed.

In risks having private plants the yard wires running from building to building are not considered as service wires, so that switches would not be required in each building if there are other switches conveniently located on the mains or if the generators are near at hand.

b. Must always be placed in dry, accessible places, and be grouped as far as possible. (See No. 19 *c.*) Single-throw knife switches must be so placed that gravity will not tend to close them. Double-throw knife switches

may be mounted so that the throw will be either vertical or horizontal as preferred, but if the throw be vertical a locking device must be provided, so constructed as to insure the blades remaining in the open position when so set.

When practicable switches must be so wired that blades will be "dead" when switch is open.

Up to 250 volts and thirty amperes, *approved indicating snap* switches are suggested in preference to knife switches on lighting circuits.

c. Single-pole switches must never be used as service switches nor for the control of outdoor signs or circuits located in damp places, nor placed in the neutral wire of a three-wire system, except in the two-wire branch or tap circuit supplying not more than 660 watts.

This, of course, does not apply to the grounded circuits of street railway systems.

Three-way switches are considered as single-pole switches.

d. Where flush switches or receptacles are used, whether with conduit systems or not, they must be enclosed in an *approved* box constructed of iron or steel, in addition to the porcelain enclosure of the switch or receptacle.

At floor outlets, attachment plugs and receptacles must be enclosed in *approved* floor outlet boxes especially designed for this purpose. Departure from this rule may be authorized only under special permission in writing in cases where attachment plugs and receptacles are not subject to mechanical injury and the presence of moisture is not probable.

e. Where possible, at all switch outlets, unless outlet boxes which will give proper support for switches are used, a seven-eighths inch block must be fastened between studs or floor timbers flush with back of lathing to hold tubing and to support switches. When this cannot be done, wooden base blocks, not less than three-fourths inch in thickness, securely screwed to lathing, or *approved* fittings designed for the service, must be provided for switches.

f. Sub-bases of non-combustible, non-absorptive, insulating material, which will separate the wires at least one-half inch from the surface wired over, must be installed under all snap switches used in exposed knob and cleat work. Sub-bases must also be used in molding work, but they may be made of hardwood or they may be omitted if the switch is approved for mounting directly on the molding.

25. Electric Heaters.

a. Each heater of more than six (6) amperes or 660 watts capacity must be protected by a cut-out, and controlled by a switch or plug connector plainly indicating whether "on" or "off" and located within sight of the heater. Heaters of six (6) amperes or 660 watts capacity, or less, may be grouped under the protection of a single set of fuses, provided the rated capacity of the fuses does not exceed ten (10) amperes, or may be connected individually to lighting circuits when the normal load in use on the circuit at any time will not exceed 660 watts.

b. Flexible conductors for smoothing irons and sad irons, and for all devices requiring over 250 watts, must have an *approved* insulation and covering complying with the requirements of No. 51*k*.

c. With portable heating devices, *approved* plug connectors must be used, so arranged that the plug may be pulled out to open the circuit without leaving any live parts so exposed as to render likely accidental contact therewith. The connector may be located at either end of the flexible conductor or inserted in the conductor itself.

d. Smoothing irons, sad irons and other heating devices that are intended to be applied to combustible articles, must be provided with *approved* stands.

e. Stationary heaters, such as radiators, ranges, plate warmers, etc., must be so located as to furnish ample protection between the device and surrounding combustible material.

f. Must each be provided with a name-plate, giving the maker's name and the normal capacity in volts and amperes, or in volts and watts.

LOW-POTENTIAL SYSTEMS.

550 Volts or Less.

Any circuit attached to any transforming device, machine, or combination of machines, which develops a difference of potential between any two wires or between any wire and the ground of not over 550 volts, shall be considered as a low-potential circuit, and as coming under this class. The primary circuit not to exceed a potential of 3,500 volts, unless the primary wires are installed in accordance with the requirements as given in No. 13, or are underground. For 550 volt motor equipments a margin of ten per cent above the 550 volt limit will be allowed at the generator or transformer.

26. Wires.

GENERAL RULES

(See also Nos. 16, 17, 18, 20 and 27. For construction rules, see Nos. 49 to 57.)

a. When entering cabinets, cut-out boxes or junction boxes, except where they are in conduit, armored cable or metal molding, they must be protected by non-combustible, non-absorptive, insulating bushings, which fit tightly the holes in the box or cabinet and are well secured in place. The wires should completely fill the holes in the bushings, so as to keep out dust, tape being used to build up the wires if necessary. For concealed knob and tube work, or for open work in dry places, *approved* flexible tubing will be accepted in lieu of bushings, providing it extends from the last porcelain support into a wooden cabinet, or is secured to a metal cabinet, cut-out box, junction or switchbox by an *approved* fitting.

b. Must not be laid in plaster, cement or

similar finish, and must never be fastened with staples.

c. Must not be fished for any great distance, and only in places where the inspector can satisfy himself that the rules have been complied with.

d. Twin wires must never be used, except in conduits, or where flexible conductors are necessary.

e. Must, where exposed to mechanical injury, be suitably protected. When crossing floor timbers in cellars, or in rooms where they might be exposed to injury, wires must be installed in *approved* conduit or armored cable or be attached by their insulating supports to the under side of a wooden strip, not less than one half inch in thickness and not less than three inches in width. Instead of the running boards, guard strips on each side of and close to the wires will be accepted. These strips to be not less than seven-eighths of an inch in thickness and at least as high as the insulators.

Protection on side walls must extend not less than seven feet from the floor and must consist of substantial boxing, retaining an air space of one inch around the conductors, closed at the top (the wires passing through bushed holes) or *approved* metal conduit or pipe of equivalent strength.

When metal conduit or pipe is used, the insulation of each wire must be re-enforced by *approved* flexible tubing extending from the insulator next below the pipe to the one next above it, unless the conduit is installed according to No. 28 (Sections *c* and *f* excepted), and the wire is approved for conduit use. The two or more wires of a circuit *each* with its flexible tubing (when required), if carrying alternating current *must*, or if direct current, *may* be placed within the same pipe.

In damp places the wooden boxing may be preferable because of the precautions which would be necessary to secure proper insulation if the pipe were used. With this exception, however, iron piping is considered preferable to the wooden boxing, and its use is strongly urged. It is especially suitable for the protection of wires near belts, pulleys, etc.

f. When run in unfinished attics, or roof spaces, will be considered as concealed, and when run in close proximity to water tanks or pipes, will be considered as exposed to moisture.

In unfinished attics, or roof spaces, wires are considered as exposed to mechanical injury, and must not be run on knobs on upper edge of joists.

SPECIAL RULES

For Open Work.

In dry places.

g. Must have an *approved* rubber (Type Letter R. S. for wires smaller than No. 6 B. & S. gage and Type Letter R. D. for wires No. 6 and larger), slow-burning weatherproof (Type Letter S. B. W.), or slow-burning insulation (Type Letter S. B.).

h. Must be rigidly supported on non-combustible, non-absorptive insulators, which will separate the wires from each other and from the surface wired over in accordance with the following table:

Voltage	Distance from Surface.	Distance between Wires.
0 to 300	½ inch	2½ inches
301 to 550	1 inch	4 inches

Rigid supporting requires under ordinary conditions, where wiring along flat surfaces, supports at least every four and one-half feet. If the wires are liable to be disturbed, the distance between supports must be shortened. In buildings of mill construction, mains of not less than No. 8 B. & S. gauge, where not liable to be disturbed, may be separated about six inches, and run from timber to timber, not breaking around, and may be supported at each timber only.

Must not be "dead-ended" at a rosette, socket or receptacle unless the last support is within twelve inches of the same.

In damp places, or buildings specially subject to moisture or to acid or other fumes liable to injure the wires or their insulation.

i. Must have an *approved* insulating covering.

For protection against water, rubber insulation must be used. For protection against corrosive vapors, either weatherproof or rubber insulation must be used.

j. Must be rigidly supported on non-combustible, non-absorptive insulators, which separate the wire at least one inch from the surface wired over, and must be kept apart at least two and one-half inches for voltages up to 300, and four inches for higher voltages.

Rigid supporting requires under ordinary conditions, where wiring over flat surfaces, supports at least every four and one-half feet. If the wires are liable to be disturbed, the distance between supports must be shortened. In buildings of mill construction, mains of not less than No. 8 B. & S. gauge, where not liable to be disturbed, may be separated about 6 inches, and run from timber to timber, not breaking around, and may be supported at each timber only.

For Molding Work (Wooden and Metal).

(*See No. 29. For construction of Moldings see No. 60.*)

k. Must have an *approved* rubber insulating covering (Type Letter R. S. for wires smaller than No. 6 B. & S. gauge and Type Letter R. D. for wires No. 6 and larger), and must be in continuous lengths from outlet to outlet, or from fitting to fitting, no joints or taps to be made in molding. Where branch taps are necessary in molding work *approved* fittings for this purpose must be used.

l. Must never be placed in either metal or wooden molding in damp locations; must never be placed in either metal or wooden molding in concealed locations or where the difference of potential between any two wires in the same system is over 300 volts. When the electrical construction is being carried out in metal molding, permission will be given to extend these moldings through walls and partitions if the molding and capping are in continuous lengths where passing

through the walls and partitions. Not more than four No. 14 B. & S. gauge rubber covered wires, and no single circuit of more than 1,320 watts shall be used in metal molding.

m. Must for alternating current systems if in metal molding have the two or more wires of a circuit installed in the same molding.

It is suggested that this be done for direct current systems also, so that they may be changed to alternating systems at any time, induction troubles preventing such a change if the wires are in separate moldings.

For Conduit Work.

n. Must have an *approved* rubber insulating covering, and within the conduit tubing must be without splices or taps. Must be double braided (Type Letters R. D.) for twin, twisted pair or multiple conductor cables and for all single conductors of No. 6 B. & S. gauge and larger.

Slow burning insulation may, however, be used in permanently dry locations where excessive temperatures are present, provided special permission in writing be given in advance.

o. Must not be drawn in until all mechanical work on the building has been, as far as possible, completed.

Conductors in vertical conduit risers must be supported within the conduit system in accordance with the following table:

No. 14 to 0 inclusive every 100 feet.

No. 00 to 0000 inclusive every 80 feet.

Above 0000 to 350,000 C. M. inclusive every 60 feet.

Above 350,000 C. M. to 500,000 C. M. inclusive every 50 feet.

Above 500,000 C. M. to 750,000 C. M. inclusive every 40 feet.

Above 750,000 C. M. every 35 feet.

The following methods of supporting cables are recommended:

1. *Approved* clamping devices constructed of or employing insulating wedges inserted in the ends of conduits.
2. Junction boxes may be inserted in the conduit system at the required intervals, in which insulating supports of *approved* type must be installed and secured in a satisfactory manner so as to withstand the weight of the conductors attached thereto, the boxes to be provided with proper covers.
3. Cables may be supported in *approved* junction boxes on two or more insulating supports so placed that the conductors will be deflected at an angle of not less than 90 degrees, and carried a distance of not less than twice the diameter of the cable from its vertical position. Cables so suspended may be additionally secured to these insulators by tie wires.

Other methods may be used if specially approved.

p. Must, for alternating systems, have the two or more wires of a circuit drawn in the same conduit.

It is suggested that this be done for direct current systems also, so that they may be changed to alternating systems at any time, induction troubles preventing such a change if the wires are in separate conduits.

Except in the case of stage pocket and border circuits the same conduit must not contain more than four two-wire, or three three-wire circuits of the same system, except by special permission, and must never contain circuits of different systems.

For Concealed "Knob and Tube" Work.

q. Must have an *approved* rubber insulating covering (Type Letter R. S. for wires smaller than No. 6 B. & S. gauge and Type Letter R. D. for wires No. 6 and larger).

r. Must be rigidly supported on non-combustible, non-absorptive insulators which separate the wire at least one inch from the surface wired over. Should preferably be run singly on separate timbers, or studding, and must be kept at least five inches apart.

Must be separated from contact with the walls, floor timbers and partitions through which they may pass by non-combustible, non-absorptive, insulating tubes, such as glass or porcelain. Wires passing through cross timbers in plastered partitions must be protected by an additional tube extending at least four inches above the timber.

Rigid supporting requires, under ordinary conditions, where wiring along flat surfaces, supports at least every four and one-half feet. If the wires are liable to be disturbed the distance between supports must be shortened.

At distributing centers, outlets or switches where space is limited, and the five-inch separation cannot be maintained, each wire must be separately encased in a continuous length of *approved* flexible tubing.

s. When in a concealed knob and tube system, it is impracticable to place the whole of a circuit on non-combustible supports of glass or porcelain, that portion of the circuit which cannot be so supported must be installed with *approved* metal conduit, or *approved* armored cable, except that if the difference of potential between the wires is not over 300 volts, and if the wires are not exposed to moisture, they may be fished if separately encased in *approved* flexible tubing, extending in continuous lengths from porcelain support to porcelain support, from porcelain support to outlet, or from outlet to outlet.

t. When using either conduit or armored cable in mixed concealed knob and tube work, the requirements for conduit work or armored cable work must be complied with as the case may be.

u. Must at all outlets, except where conduit is used, be protected by *approved* flexible tubing, extending in continuous lengths from the last porcelain support to at least one inch beyond the outlet. In the case of combination gas and electric outlets the tubes on the wires must extend at least flush with the outlet ends of gas caps, and if box or plate is used, gas pipes must be securely fastened into the outlet box or plate to secure good electrical connection.

When the surface at any outlet is broken,

it must be repaired so as to leave no holes or open spaces at such outlet.

It is suggested that *approved* outlet boxes or plates be installed at all outlets in concealed "knob and tube" work, the wires to be protected by *approved* flexible tubing, extending in continuous lengths from the last porcelain support into the box.

27. Armored Cables.

(*See also No. 26 s. For construction of Armored Cables see No. 57.*)

a. Must be continuous from outlet to outlet or to junction boxes or cabinets, and the armor of the cable must properly enter and be secured to all fittings, and the entire system must be mechanically secured in position.

In case of service connections and main runs, this involves running such armored cable continuously into a main cut-out cabinet or gutter surrounding the panel board, as the case may be.

b. Must be equipped at every outlet with an *approved* outlet box or plate, as required in conduit work.

Outlet plates must not be used where it is practicable to install outlet boxes.

For concealed work in walls and ceilings composed of plaster on wooden joist or stud construction, outlet boxes or plates and also cut-out cabinets must be so installed that the front edge will not be more than one-fourth inch back of the finished surface of the plaster, and if this surface is broken or incomplete it shall be repaired so that it will not show any gaps or open spaces around the edges of the outlet box or plate or of the cut-out cabinet. On wooden walls or ceilings, outlet boxes or plates and cut-out cabinets must be so installed that the front edge will either be flush with the finished surface or project therefrom. This will not apply to concealed work in walls or ceilings composed of concrete, tile or other non-combustible material.

In buildings already constructed where the conditions are such that neither outlet box nor plate can be installed, these appliances may be omitted by special permission, provided the armored cable is firmly and rigidly secured in place.

c. Must have the metal armor of cables permanently and effectually grounded to water piping, gas piping or other suitable grounds, provided that when connections are made to gas piping, they must be on the street side of the meter. If the armored cable system consists of several separate sections, the sections must be bonded to each other, and the system grounded, or each section may be separately grounded, as required above.

The armor of cables and gas pipes must be securely fastened in outlet boxes, junction boxes and cabinets, so as to secure good electrical connection.

If armor of cables and metal of couplings, outlet boxes, junction boxes, cabinets or fittings having protective coating of non-conducting material, such as enamel are used, such coating must be thoroughly removed from the threads of both couplings and the armor of cables, and from surfaces of the boxes, cabinets and fittings where the armor of cables or ground clamp is secured in order to obtain the requisite good connection. Grounded pipes must be cleaned of rust, scale, etc., at place of attachment of ground clamp.

Connections to grounded pipes and to armor of cables must be exposed to view or accessible, and must be made by means of *approved* ground clamps.

Ground wires must be of copper, at least No. 10 B. & S. gauge (where largest wire contained in cable is not greater than No. 0 B. & S. gauge), and need not be greater than No. 4 B. & S. gauge (where the largest wire contained in cable is greater than No. 0 B. & S. gauge). They shall be protected from mechanical injury.

The ground for the armored cable system is not to be considered as a ground for a secondary system (see No. 15).

d. When installed in so-called fireproof buildings in course of construction or afterwards if exposed to moisture, or where it is exposed to the weather, or in damp places, such as breweries, stables, etc., the cable must have a lead covering placed between the outer braid of the conductors and the steel armor.

The lead covering is not to be required when the cable is run against brick walls or laid in ordinary plaster walls unless same are continuously damp.

e. Where entering junction boxes, and at all other outlets, etc., must be provided with *approved* terminal fittings which will protect the insulation of the conductors from abrasions, unless such junction or outlet boxes are specially designed and approved for use with the cable.

f. Junction boxes must always be installed in such a manner as to be accessible.

g. For alternating current systems must have the two or more conductors of the circuit enclosed in one metal armor.

h. All bends must be so made that the armor of the cable will not be injured. The radius of the curve of the inner edge of any bend not to be less than 1½ inches.

28. Interior Conduits.

(*See also No. 26 n to p. For construction of Conduit see No. 58, and for construction of Outlet, Junction and Flush Switch Boxes see No. 59.*)

a. No conduit smaller than one-half inch electrical trade size shall be used.

b. Must be continuous from outlet to outlet or to junction boxes or cabinets, and the conduit must properly enter, and be secured to all fittings and the entire system must be mechanically secured in position.

In case of service connections and main runs, this involves running each conduit continuously into a main cut-out cabinet or gutter surrounding the panel board, as the case may be.

Departure from this rule may be authorized in case of underground services by special permission.

c. Must be first installed as a complete conduit system, without the conductors.

d. Must be equipped at every outlet with an *approved* outlet box or plate. At exposed ends of conduit (but not at fixture outlets) where wires pass from the conduit system without splice, joint or tap, an *approved* fitting having separately bushed holes for each conductor must be used. Departure from this rule may be authorized by special permission.

Outlet plates must not be used where it is practicable to install outlet boxes.

For concealed work in walls and ceilings composed of plaster on wooden joist or stud construction, outlet boxes or plates and also cut-out cabinets must be so installed that the front edge will not be more than one-fourth inch back of the finished surface of the plaster, and if this surface is broken or incomplete it shall be repaired so that it will not show any gaps or open spaces around the edges of the outlet box or plate or of the cut-out cabinet. On wooden walls or ceilings, outlet boxes or plates and cut-out cabinets must be so installed that the front edge will either be flush with the finished surface or project therefrom. This will not apply to concealed work in walls or ceilings composed of concrete, tile or other non-combustible material.

In buildings already constructed where the conditions are such that neither outlet box nor plate can be installed, these appliances may be omitted, providing the conduit ends are bushed and secured.

It is suggested that outlet boxes and fittings having conductive coatings be used in order to secure better electrical contact at all points throughout the conduit system.

e. Metal conduits where they enter junction boxes, and at all other outlets, etc., must be provided with *approved* bushings or fastening plates fitted so as to protect wire from abrasion, except when such protection is obtained by the use of *approved* nipples, properly fitted in boxes or devices.

f. Must have the metal of the conduit permanently and effectually grounded to water piping, gas piping or other suitable grounds, provided that when connections are made to gas piping, they must be on the street side of the meter. If the conduit system consists of several separate sections, the sections must be bonded to each other, and the system grounded, or each section may be separately grounded, as required above. Where short sections of conduit (or pipe of equivalent strength) are used for the protection of exposed wiring on side walls, and such conduit or pipe and wiring is installed as required by No. 26 *e*, the conduit or pipe need not be grounded.

Conduits and gas pipes must be securely fastened in outlet boxes, junction boxes and cabinets, so as to secure good electrical connections.

If conduit, couplings, outlet boxes, junction boxes, cabinets or fittings, having protective coating of non-conducting material such as enamel are used, such coating must be thoroughly removed from threads of both couplings and conduit, and such surfaces of boxes, cabinets and fittings where the conduit or ground clamp is secured in order to obtain the requisite good connection. Grounded pipes must be cleaned of rust, scale, etc., at place of attachment of ground clamp.

Connections to grounded pipes and to conduit must be exposed to view or accessible, and must be made by means of *approved* ground clamps.

Ground wires must be of copper, at least No. 10 B. & S. gauge (where largest wire contained in conduit is not greater than No. 0 B. & S. gauge), and need not be greater than No. 4 B. & S. gauge (where largest wire contained in conduit is greater than No. 0 B. & S. gauge). They shall be protected from mechanical injury.

The ground on the conduit system is not to be considered as a ground for a secondary system (see No. 15).

g. Junction boxes must always be installed in such a manner as to be accessible. Such boxes are considered to be accessible when installed in an attic that has sufficient head room, but which is reached only by a portable ladder and permanent hatch.

h. All elbows or bends must be so made that the conduit will not be injured. The radius of the curve of the inner edge of any elbow not to be less than three and one-half inches. Must have not more than the equivalent of four quarter bends from outlet to outlet, the bends at the outlets not being counted.

i. SIZE OF CONDUITS FOR THE INSTALLATION OF WIRES AND CABLES.
NUMBER OF CONDUCTORS IN SYSTEM.

	One conduct'r in a conduit. Size conduit, inches.	Two conduct'rs in a conduit. Size conduit, inches.	Three conduct'rs in a conduit. Size conduit, inches.	Four conduct'rs in a conduit. Size conduit, inches.
Size B & S	Electrical Trade Size	Electrical Trade Size	Electrical Trade Size	Electrical Trade Size
14	½	½	½	¾
12	½	¾	¾	¾
10	½	¾	¾	1
8	½	1	1	1
6	½	1	1¼	1¼
5	¾	1¼	1¼	1¼
4	¾	1¼	1¼	1½
3	¾	1¼	1¼	1½
2	¾	1¼	1½	1½
1	¾	1½	1½	2
00	1	1½	2	2
00	1	2	2	2½
000	1	2	2	2½
0000	1¼	2	2½	2½
CM				
200000	1¼	2	2½	2½
250000	1¼	2½	2½	3
300000	1¼	2½	2½	3
400000	1¼	3	3	3½
500000	1½	3	3	3½
600000	1½	3	3½	
700000	2	3½	3½	
800000	2	3½	4	
900000	2	3½	4	
1000000	2	4	4	
1250000	2½	4½	4½	
1500000	2½	4½	5	
1750000	3	5	5	
2000000	3	5	6	
TWIN CONDUCTOR				
14	½	¾	1	1
12	½	¾	1	1¼
10	¾	1	1¼	1¼

3 CONDUCTOR CONVERTIBLE SYSTEM.

Size of Conductors		Size Conduit, in.
2-conductor Size B. & S.	1-conductor Size B. & S.	Electrical Trade Size
14	10	¾
12	8	¾
10	6	1
8	4	1
6	2	1¼
5	1	1¼
4	0	1½
3	00	1½
2	000	1½
1	0000	2
0	250000	2
00	350000	2½
000	400000	2½
0000	550000	3
250000	600000	3
300000	800000	3
400000	1000000	3½
500000	1250000	4
600000	1500000	4
700000	1750000	4½
800000	2000000	4½

SINGLE-CONDUCTOR COMBINATION.

NOTE—Where special permission has been given in accordance with No. 26, *p*. the following table to apply.

No. of Wires	Size Conduit, in. Electrical Trade Size
3 No. 14 R.C. solid	½
5 No. 14 R.C. solid	¾
10 No. 14 R.C. solid	1
18 No. 14 R.C. solid	1¼
24 No. 14 R.C. solid	1½
40 No. 14 R.C. solid	2
74 No. 14 R.C. solid	2½
90 No. 14 R.C. solid	3

29. Metal Moldings.

(*See also No. 26 k to m. For construction of Moldings see No. 60.*)

a. Must be continuous from outlet to outlet, to junction boxes, or *approved* fittings designed especially for use with metal moldings, and must at all outlets be provided with *approved* terminal fittings which will protect the insulation of conductors from abrasion, unless such protection is afforded by the construction of the boxes or fittings.

b. Such molding where passing through a floor must be carried through an iron pipe extending from the ceiling below to a point five feet above the floor which will serve as an additional mechanical protection and exclude the presence of moisture often prevalent in such locations.

Where the mechanical strength of the molding itself is adequate, this ruling may be modified to require the protecting piping from the ceiling below to a point at least three inches above the flooring.

Where such moldings pass through a partition the iron pipe required for passing through floors may be omitted and the molding passed directly through, providing the partition is dry and the molding is in a continuous length with no joint or coupling within the partition.

c. Backing must be secured in position by screws or bolts, the heads of which must be flush with the metal.

d. Must have the metal of molding permanently and effectually grounded to water piping, gas piping, or other suitable grounds, provided that when connections are made to gas piping, they must be on the street side of the meter. If the metal molding system consists of several separate sections, the sections must be bonded to each other and the system grounded, or each section may be separately grounded, as required above.

Metal moldings and gas pipes must be securely fastened to outlet boxes, junction boxes and cabinets, so as to secure a good electrical connection. Molding must be so installed that adjacent lengths of molding will be mechanically and electrically secured at all points.

If metal molding, couplings, outlet boxes, junction boxes, cabinets or fittings having protective coating of non-conducting material such as enamel are used, such coating must be thoroughly removed from the threads of couplings and metal moldings, and from the surfaces of boxes, cabinets and fittings where the metal molding or ground clamp is secured in order to obtain the requisite good connection. Grounded pipes must be cleaned of rust, scale, etc., at the place of attachment of the ground clamp.

Connection to grounded pipes and to metal moldings must be exposed to view, or accessible, and must be made by means of *approved* ground clamps.

Ground wires must be copper, at least No. 10 B. & S. gauge. They shall be protected from mechanical injury.

e. Must be installed so that for alternating systems the two or more wires of a circuit will be in the same metal molding.

It is suggested that this be done for direct systems also, so that they may be changed to the alternating system at any time, induction troubles preventing such change if the wires are in separate moldings.

30. Fixtures.

(*For construction of Fixture Wires see No. 52. For construction of Fixtures see No. 77.*)

a. When supported at outlets in metal conduit, armored cable, or metal molding systems, or from gas piping or any grounded metal work, or when installed on metal walls or ceilings, or on plaster walls or ceilings containing metal lath, or on walls or ceilings in fireproof buildings, must be insulated from such supports by *approved* insulating joints placed as close as possible to the ceilings or walls. The insulating joint may be omitted in conduit, armored cable or metal molding systems with straight electric fixtures in which the insulation of conductors is the equivalent of insulation in other parts of the system, and provided that *approved* sockets, receptacles or wireless clusters are used of a type having porcelain or equivalent insulation between live metal parts and outer metal shells, if any.

Gas pipes must be protected above the insulating joint by *approved* insulating tubing, and where outlet tubes are used they must be of sufficient length to extend below the insulating joint, and must be so secured that they will not be pushed back when the canopy is put in place.

Where insulating joints are required, fixture canopies of metal must be thoroughly and permanently insulated from metal walls or ceilings, or from plaster walls or ceilings on metal lathing, and from outlet boxes.

Canopy insulators must be securely fastened in place, so as to separate the canopies thoroughly and permanently from the surfaces and outlet boxes from which they are designed to be insulated.

For fixtures which are not attached to gas pipes or conduit unless outlet boxes or other *approved* fittings which will give proper support for fixtures are used, a seven-eighths inch block must be fastened between studs or floor timbers flush with the back of lathing to hold tubing and to support fixtures. When this cannot be done, wooden base blocks, not less than ¾ inch in thickness, securely screwed to lathing, must be provided.

Fixtures having so-called flat canopies, tops or backs, will not be approved for installation, except where outlet boxes are used.

b. When installed out of doors, must be of water-tight construction.

c. Fixture wires must be not smaller than No. 18 B. & S. gauge, and must have an *approved* rubber insulating covering (see No. 52).

In wiring certain designs of show-case fixtures, ceiling bulls-eyes and similar appliances in which the wiring is exposed to temperatures in excess of 120 degrees Fahrenheit (49 degrees Centigrade), from the heat of the lamps, *approved* slow-burning wire must be used. All such forms of fixtures must be submitted for examination, test and approval before being introduced for use.

d. Supply conductors, and especially the splices to fixture wires, must be kept clear of the grounded part of gas pipes, and, where shells or outlet boxes are used, they must be made sufficiently large to allow the fulfillment of this requirement.

e. Must, when wired on the outside, have the conductors so secured as not to be cut or abraded by the pressure of the fastenings or motion of the fixture.

Must not, when wired on the outside, be used in show windows or in the immediate vicinity of especially inflammable stuff.

Chain fixtures must be wired with flexible conductors.

f. Wires of different systems must never be contained in or attached to the same fixture, and under no circumstances must there be a difference of potential of more than 300 volts between wires contained in or attached to the same fixtures.

g. Must be free from short circuits between conductors and from contacts between conductors and metal parts of fixtures, and must be tested for such conditions before being connected to supply conductors.

31. Sockets.

(*For construction of Sockets see No. 72.*)

a. In rooms where inflammable gases may exist the incandescent lamp and socket must be enclosed in a vapor-tight globe, and supported on a pipe-hanger, wired with *approved* rubber-covered wire soldered directly to the circuit.

b. In damp or wet places, or where exposed to corrosive vapors, weatherproof sockets especially approved for the location must be used. Unless made up on fixtures they must be hung by separate *stranded* rubber-covered wires not smaller than No. 14 B. & S. gauge, which should preferably be twisted together when the pendant is over three feet long.

These wires must be soldered direct to the circuit wires but supported independently of them.

c. Sockets and receptacles installe over specially inflammable stuff or where exposed to flyings of combustible material, must be of the keyless type, and, unless individual switches are provided, must be installed at least seven and one-half feet above the floor, or must be so located or guarded that the lamps cannot be readily backed out by hand.

Departure from this rule may be authorized only by special permission in writing.

d. When the socket is not attached to a fixture, the inlet if threaded must be not less than ⅜ inch pipe size, and must be provided with an *approved* insulating bushing.

32. Flexible Cord.

(*For construction of Flexible Cord see No. 51.*)

a. Must have an *approved* insulation and covering.

b. Must not, except in street railway property, be used where the difference of potential between the two wires is over 300 volts.

c. Must not be used as a support for clusters.

d. Must not be used except for pendants, wiring of fixtures, portable lamps or motors, portable heating apparatus or other portable devices.

For all portable work, including those pendants which are liable to be moved about sufficiently to come in contact with surrounding objects, flexible wires and cables especially designed to withstand this severe service must be used.

When necessary to prevent portable lamps from coming in contact with inflammable materials, or to protect them from breakage, they must be surrounded with a substantial guard.

e. Unless provided with *approved* metal armor, must not be used in show windows or in show cases, except that *approved* portable cord may be used for the purpose of supplying current to portable lamps and other devices for exhibition purposes, and flexible cord may be used for chain fixtures.

f. Must be protected by insulating bushings where the cord enters the socket.

g. Must be so connected to all fittings that strain is taken from the joints and binding screws.

h. Must where passing through covers of outlet boxes be protected by *approved* bushings especially designed for this purpose. So-called hard rubber or composition bushings threaded into box covers must not be used.

33. Arc Lamps on Constant-potential Circuits.

(*For construction of Arc Lamps see No. 74.*)

a. Must have a cut-out (see No. 19 *a*) for each lamp or each series of lamps.

The branch conductors must have a carrying capacity about fifty per cent in excess of the normal current required by the lamp.

b. Must only be furnished with such resistances or regulators as are enclosed in non-combustible material, such resistances being treated as sources of heat. Incandescent lamps must not be used for this purpose.

c. Must be supplied with globes and protected by spark arresters and wire netting around the globe, as in the case of series arc lamps (see No. 21).

Outside arc lamps must be suspended at least eight feet above sidewalks. Inside arc lamps must be placed out of reach or suitably protected.

d. Lamps when arranged to be raised and lowered, either for carboning or other purposes, shall be connected up with stranded conductors from the last point of support to the lamp, when such conductor is larger than No. 14 B. & S. gauge.

e. Economy and compensator coils for arc lamps must be mounted on non-combustible, non-absorptive, insulating supports, such as glass or porcelain, allowing an air space of at least one inch between frame and support, and must in general be treated as sources of heat.

34. Vapor Lamps.

Enclosed Mercury Vapor Lamps.

a. Must have cut-out for each lamp or series of lamps except when contained in single frame and lighted by a single operation, in which case not more than five lamps should be dependent upon single cut-out.

b. Must only be furnished with such resistances or regulators as are enclosed in non-combustible cases, such resistances to be treated as sources of heat. In locations where these resistances or regulators are subject to flyings of lint or combustible material, all openings through cases must be protected by fine wire gauze.

High-potential Vacuum Tube Systems.

c. The tube must be so installed as to be free from mechanical injury or liability to contact with inflammable material.

d. High-potential coils and regulating apparatus must be installed in *approved* steel cabinet not less than one-tenth inch in thickness; same to be well ventilated in such a manner as to prevent the escape of any flame or sparks, in case of burnout in the various coils. All apparatus in this box must be mounted on slate base and the enclosing case positively grounded. Supplying conductors leading into this high-potential case to be installed in accordance with the standard requirements governing low-potential systems, where such wires do not carry a potential of over 300 volts.

35. Gas Filled Incandescent Lamps.

a. Must be so grouped that not more than 660 watts (nor more than 16 sockets or receptacles) are to be dependent on one cut-out except that in cases where wiring equal in size to No. 14 B. & S. gauge is carried directly into keyless sockets or receptacles, the location of which is such as to render unlikely the attachment of flexible cords thereto, the circuits may be so arranged that not more than 1,320 watts (or 32 sockets or receptacles) will be dependent on the final cut-out. Where a single socket or receptacle is used on a circuit the limitation of watts permissible on the final cut-out shall be the maximum capacity for which such socket or receptacle is approved.

b. Must not be used in show windows or in other locations where inflammable material is liable to come in contact with lamp equipment except where used in connection with *approved* fixtures where temperature of any exposed portion of same does not exceed 200 degrees Fahr. (93 degrees Centigrade).

c. Must not be used in connection with medium-base sockets or receptacles if of above 200 watts nominal capacity nor with Mogul base sockets or receptacles if of above 1,500 watts capacity. If of above 100 watts, must not, if provided with a shade, reflector, fixture or other enclosure above the socket, be used in either medium or Mogul base types of sockets or receptacles having fibre or paper linings.

d. Fixtures within buildings must be wired with conductors of *approved* slow-burning or asbestos covering where the temperature to which wire is subjected at any point exceeds 120 degrees Fahr. (49 degrees Centigrade). Where fixtures are placed outside of buildings *approved* rubber insulated wire is required.

36. Transformers.

See (also Nos. 11, 14, 15 and 45.)

(*For construction of Transformers see No. 81.*)

Oil Transformers.

a. Must not be placed inside of any building except central stations and sub-stations, unless by special permission.

Air Cooled Transformers.

The following sections do not apply to apparatus or fittings, the operation of which depends either wholly or in part upon special transformers embodied in the devices, but all such apparatus or fittings must be submitted for special examination and approval before being used.

b. Must not be placed inside of any building excepting central stations or sub-stations, if the highest voltage of either primary or secondary exceeds 550 volts.

c. Must, with the exception of bell ringing and other signaling transformers, be so mounted that the case shall be at a distance of at least one foot from combustible material or separated therefrom by non-combustible, non-absorptive, insulating material, such as slate, marble or soapstone. This will require the use of a slab or panel somewhat arger than the transformer.

37. Decorative Lighting Systems.

Special permission may be given in writing for the temporary installation of *approved* Systems of Decorative Lighting, provided the difference of potential between the wires of any circuit shall not be over 150 volts and also provided that no group of lamps requiring more than 1,320 watts shall be dependent on one cut-out.

38. Theatre and Moving Picture Establishment Wiring.

All wiring, apparatus, etc., not specifically covered by special rules herein given, must conform to the general requirements of this Code, and the term "theatre" shall mean a building, or that part of a building regularly or frequently used for dramatic, operatic, moving picture or other performances or shows or which has a stage for such performances used with scenery or other stage appliances.

a. **Services.**

Where supply may be obtained from two separate street mains, two separate and distinct services must be installed, one service to be of sufficient capacity to supply current for the entire equipment of theatre, while the other service must be at least of sufficient capacity to supply current for all emergency lights. Where supply cannot be obtained from two separate sources, the feed for emergency lights must be taken from a point on the street side of main service fuses. By "emergency lights" are meant exit lights and all lights in lobbies, stairways, corridors, and other portions of theatre to which the public have access, which are normally kept lighted during the performance.

Where source of supply is an isolated plant within same building, an auxiliary service of at least sufficient capacity to supply all emergency lights must be installed from some outside source, or a suitable storage battery within the premises may be considered the equivalent of such service.

b. **Stage.**

All permanent construction on stage side of proscenium wall, except as hereinafter provided, must be *approved* conduit or armored cable.

c. **Switchboards.**

1. Must be made of non-combustible, non-absorptive, insulating material, and where accessible from stage level must be protected by a suitable guard-rail to prevent accidental contact with live parts on the board and comply with the requirements of Rule 3.

2. Dimmers must be dead when the switch controlling circuit of which dimmer forms a part is open.

d. **Footlights.**

Must be wired in *approved* conduit or armored cable, each lamp receptacle being enclosed within an *approved* outlet box, or the lamp receptacles may be mounted in an iron or steel box, metal to be of a thickness not less than No. 20 U. S. sheet metal gauge treated to prevent oxidation, so constructed as to enclose all the wires and providing at least one-half inch separation between the metal of the box and receptacle terminals. Wires to be soldered to lugs of receptacles.

Must be so wired that no set of lamps requiring more than 1,320 watts nor more than 32 receptacles shall be dependent upon one cut-out.

e. **Borders and Proscenium Sidelights.**

1. Must be constructed of steel of a thickness not less than No. 20 U. S. sheet metal gauge, treated to prevent oxidation, be suitably stayed and supported, and so designed that flanges of reflectors will protect lamps.

2. Must be so wired that no set of lamps requiring more than 1,320 watts nor more than 32 receptacles shall be dependent upon one cut-out.

3. Must be wired in *approved* conduit or armored cable, each lamp receptacle to be enclosed within an approved outlet box, or the lamp receptacles may be mounted in an iron or steel box, metal to be of a thickness not less than No. 20 U. S. sheet metal gauge treated to prevent oxidation, so constructed as to enclose all wires. Wires to be soldered to lugs of receptacles.

4. Must be provided with suitable guards to prevent scenery or other combustible material coming in contact with lamps.

5. Cables for borders must be of *approved* type and suitably supported; conduit construction must be used from switchboard to point where cables must be flexible to permit of the raising and lowering of border.

6. For the wiring of the border proper, wire with *approved* slow-burning insulation must be used.

7. Borders must be suitably suspended, and if a wire rope is used same must be insulated by at least one strain insulator inserted at the border.

f. **Stage and Gallery Pockets.**

Must be of *approved* type, insulated from ground and controlled from switchboard, each receptacle to be of not less than 35 ampere rating for arc lamps nor 15 amperes for incandescent lamps, and each receptacle to be wired to its full capacity. Arc pockets to be wired with wire not smaller than No. 6 B. & S. gauge and incandescent pockets with not less than No. 12 B. & S. gauge.

Plugs for arcs and incandescent pockets must not be interchangeable.

g. **Scene Docks.**

Where lamps are installed in Scene Docks, they must be so located and installed that they will not be liable to mechanical injury.

h. **Curtain Motors.**

Must be of enclosed type and installed so as to conform to the general requirements of this Code. (See No. 8.)

i. **Control for Stage Flues.**

In cases where dampers are released by an electric device, the electric circuit operating same must be normally closed.

Magnet operating damper must be wound to take full voltage of circuit by which it is supplied, using no resistance device, and must not heat more than normal for apparatus of similar construction. It must be located in loft above scenery, and be installed in a suitable iron box with a tight, self-closing door.

Such dampers must be controlled by at least two standard single pole switches mounted within *approved* iron boxes provided with self-closing doors without lock or latch, and located, one at the electrician's station and others as designated.

j. **Dressing Rooms.**

Must be wired in *approved* conduit or armored cable. All pendant lights must be equipped with *approved* reinforced cord, armored cable, or steel armored flexible cord.

All lamps must be provided with *approved* guards which are sealed or locked in place.

k. **Portable Equipment.**

Arc lamps used for stage effects must conform to the following requirements:

1. Must be constructed entirely of metal of a thickness not less than No. 20 U. S. sheet metal gauge except where use of *approved* insulating material is necessary.

2. Must be substantially constructed, and so designed as to provide for proper ventilation, and to prevent sparks being emitted from lamps when same are in operation, and mica must be used for frame insulation.

3. Front opening must be provided with a self-closing hinged door frame, in which wire gauze or glass must be inserted, except in the case of lens lamps, where the front may be stationary, and a solid door be provided on back or side.

4. Must be so constructed that neither carbons nor live parts will be brought into contact with metal of hood during operation, and arc lamp frames and standards must be so installed and protected as to prevent the liability of their being grounded.

5. Switch on standard must be so constructed that accidental contact with any live portion of same will be impossible.

6. All stranded connections in lamp and at switch and rheostat must be provided with *approved* lugs.

7. Rheostats must be plainly marked with their rated capacity in volts and amperes, and, if mounted on standard, must be raised to a height of at least three inches above floor. Resistance must be enclosed in a substantial and properly ventilated metal case which affords a clearance of at least one inch between case and resistance element.

8. A competent operator must be in charge of each arc lamp, except that one operator may have charge of two lamps when they are not more than ten feet apart, and are so located that he can properly watch and care for both lamps.

l. **Bunches.**

Must be substantially constructed of metal and must not contain any exposed wiring.

The cable feeding same must be tubed in an approved manner where passing through the metal, and must be properly secured to prevent any mechanical strain from coming on the connection.

m. **Strips.**

Must be constructed of steel of a thickness not less than No. 20 U. S. sheet metal gauge, treated to prevent oxidation, and suitably stayed and supported and so designed that flanges will protect lamps.

Cable must be tubed in a suitable manner where passing through the metal, and must be properly secured to prevent serious mechanical strain from coming on the connections.

Must be wired in *approved* conduit or armored cable, each lamp receptacle being enclosed within an *approved* outlet box, or the lamp receptacles may be mounted in an iron or steel box, metal to be of a thickness not less than No. 20 U. S. sheet metal gauge, treated to prevent oxidation, so constructed as to enclose all wires. Wires to be soldered to lugs of receptacles.

n. **Portable Plugging Boxes.**

Must be constructed so that no current-carrying part will be exposed, and each receptacle must be protected by *approved* fuses mounted on slate or marble bases and enclosed in a fireproof cabinet equipped with self-closing doors. Each receptacle must be constructed to carry thirty amperes without undue heating, and the bus-bars must have a carrying capacity equivalent to the current required for the total number of receptacles, and *approved* lugs must be provided for the connection of the master cable.

o. **Pin Plug Connectors.**

Must be of an *approved* type, so installed that the "female" part of plug will be on live end of cable, and must be so constructed that tension on the cable will not cause serious mechanical strain on the connections.

p. **Portable Conductors.**

Flexible conductors used from receptacles to arc lamps, bunches and other portable equipments must be *approved* stage cable except that for the purpose of feeding a stand lamp under conditions where conductors are not liable to severe mechanical injury, an *approved* reinforced cord may be used, provided cut-out designed to protect same is not fused over ten amperes capacity.

q. **Lights on Scenery.**

Where brackets are used they must be wired entirely on the inside, fixture stem must come through to the back of the scenery and end of stem be properly bushed and fixtures to be securely fastened in position.

r. **String or Festooned Lights.**

Wiring of same must be of *approved* type, joints to be properly made, soldered and taped, and staggered where practicable.

Where lamps are used in lanterns or similar devices, *approved* guards must be employed.

s. **Special Electrical Effects.**

Where devices are used for producing special effects such as lightning, waterfalls, etc., the apparatus must be so constructed and located that flames, sparks, etc., resulting from the operation cannot come in contact with combustible material.

t. **Auditorium.**

All wiring must be installed in *approved* conduit, metal molding or armored cable. Where receptacles are used they must be enclosed in approved boxes.

Exit lights must not have more than one set of fuses between same and service fuses.

Exit lights and all lights in halls, corridors or any other part of the building used by audience, except the general auditorium lighting, must be fed independently of the stage lighting, and must be controlled only from the lobby or other convenient place in front of the house.

All fuses must be enclosed in *approved* cabinets.

u. **Moving Picture Equipments Other Than Those of Approved Miniature Type.**

1. *Arc Lamps.*—Arc lamps must be constructed so far as practicable in accordance with the requirements of No. 38 *k*, 1, 2, 3, 4 and 6, and incandescent lamps must be suitably enclosed.

2. *Rheostats.*—Rheostats, transforming devices or any substitute therefor must be of types expressly designed and approved for the purpose. Their installation and location must be subject to approval as parts of the moving picture machine.

3. *Top and Bottom Reels.*—Must be enclosed in steel boxes or magazines, each with an opening of *approved* construction at bottom or top, so arranged as not to permit entrance of flame to magazine. No solder is to be used in the construction of these magazines. The front side of each magazine must consist of a door swinging horizontally, and be provided with a substantial latch.

4. *Automatic Shutter.*—Must be provided and must be so constructed as to shield the film from the beam of light whenever the film is not running at operating speed. Shutter must be permanently attached to the gate frame.

5. *Extra Films.*—Must be kept in individual metal boxes equipped with tight-fitting covers.

6. *Machine Operation.*—Must be of an *approved* type. If driven by a motor, must be of a type expressly designed and approved for such operation, and when so approved, motor driven machines, when in charge of a skilled operator, may be authorized under special permission in writing given in advance.

7. *Machine Enclosure.*—Machine must be placed in an enclosure or house made of suitable fireproof material; must be properly lighted and large enough for operator to walk freely on either side of or back of machine.

Ventilation for permanent booths must be provided by means of a vent pipe having a cross section of not less than 78 square inches; said pipe leading to the outside of the building or to a special non-combustible vent flue. All parts of vent pipe to be at least one inch from any combustible material or separated therefrom by means of approved non-combustible heat insulating material not less than one-half inch in thickness. A fan capable of exhausting fifty cubic feet of air per minute shall be installed and arranged in such a way that gas and smoke passing through the vent flue shall not come in contact with the motor. The motor must be connected to the emergency service and must not be controlled from the booth.

All openings into this booth must be arranged so as to be entirely closed by doors or shutters constructed of the same or equally good fire-resisting material as the booth it-

self. Doors or covers must be arranged so as to be held normally closed by spring hinges or equivalent devices.

8. *Reels Containing Films Under Examination or in Process of Rewinding.*—Must be enclosed in magazines or *approved* metal boxes similar to those required for films in operation, and not more than two feet of film shall be exposed in booth.

v. **Moving Picture Equipments of Approved Miniature Type for Home, Lecture and Similar Purposes.**

1. All equipments must be expressly approved, and such approval must cover the entire machine including all attachments, current-controlling devices and other parts employed, including also the film.

2. The entire equipment must consume not more than 660 watts.

3. Arc lamps must be constructed so far as practicable in accordance with the requirements of No. 38 *k*, 1, 2, 3, 4 and 6, and incandescent lamps must be suitably enclosed.

4. Rheostats, transformers, switches and other similar current-controlling devices must be attached to and form a part of the machine, must have no live parts exposed, and must comply with the requirements of No. 65 and No. 78 or No. 81 *a*, *b*, *c*.

5. Films must be of an *approved* slow-burning type having a permanent distinctive marker.

6. Machines must be so constructed that they cannot be used with films employed on the full-sized commercial moving picture machine. This may be accomplished by using a film of special width or with special perforations or by any other approved means.

The regular film which is not allowed on miniature machines is 1⅜ inches wide and has on each edge 5.4 perforations per inch.

7. Machines must be marked with the name or trade-mark of the maker, and with the voltage and current rating for which they are designed, and be plainly marked, "For use with slow-burning films only."

39. Outline Lighting.

(*Other than Signs on Exterior of Buildings.*)

a. Must be connected only to low-potential systems.

b. Open or conduit work or metal trough construction may be used but moulding will not be permitted.

c. Where flexible tubing is required, the ends must be sealed and painted with moisture repellant and kept at least one-half inch from surface wired over.

d. Wires for use in rigid or flexible steel conduit must comply with requirements for conduit work. Where armored cable is used, the conductors must be protected from moisture by lead sheath between armor and insulation.

e. Must be protected by its own cut-out, and controlled by its own switch; single pole switches must not be used. Cut-outs, switches, flashers and similar appliances must be of *approved* types and be installed as required by the Code for such appliances, and, if outside the building, must, with the exception of transformer of weatherproof type, be installed in *approved* weatherproof cabinets.

f. Circuits must be so arranged that not more than 1,320 watts will be dependent upon one cut-out.

g. Sockets and receptacles must be of the keyless porcelain type and wires must be soldered to lugs on same. Miniature receptacles will not be approved for outdoor work.

h. For open work, wires must be *approved* rubber covered, not less than No. 14 B. & S. gauge and must be rigidly supported on non-combustible, non-absorptive insulators, which separate the wires at least one inch from the surface wired over. Rigid supporting requires, under ordinary conditions where wiring over flat surfaces, supports at least every four and one-half feet. If the wires are liable to be disturbed, the distance between supports should be shortened. In those parts of circuits where wires are connected to *approved* receptacles which hold them at least one inch from surface wired over, and which are placed not over one foot apart, such receptacles will be considered to afford the necessary support and spacing of the wires. Between receptacles more than one foot, but not less than two feet apart, an additional non-combustible, non-absorptive insulator maintaining a separation and spacing equivalent to the receptacles must be used. Except as above specified, wires must be kept apart at least two and one-half inches for voltages up to 300, and four inches for higher voltages.

i. For metal trough construction, the troughs and other details must comply with the requirements of No. 83 *a* to *f*, inclusive.

40. Car Wiring and Equipment of Cars.

The following rules apply to all cars or locomotives used for electric railway service, and cars or locomotives for other railway service which are equipped with electric circuits, and operating on either low or high potential systems.

a. **Protection of Car Body, Etc.**

1. Where the underside of car bodies is composed wholly or in part of combustible material under which any apparatus is mounted, a protection of *approved* fire resisting and heat insulating material not less than ¼ inch in thickness, or sheet iron or steel, not less than .04 inch in thickness must be provided as follows:

2. Over motor trucks the protection must extend the entire width of the car and lengthwise of the car to a distance of at least 12 inches beyond the area under which the flexible motor leads, contact shoe leads, brake shoes and motor exclusive of gear case, may come in any operating position. In all cases fireproof material or sheet iron or sheet steel must have joints well fitted and must be

securely fastened, and the whole surface must be treated with a moisture repellant paint.

3. Over resistances, contactors, lightning arresters, air compressor motors and other electrical apparatus and conductors, except where their casings provide approved protection for the car body, non-metallic, fire resisting, heat insulating material must extend to the edge of the car or not less than 8 inches beyond all edges of the devices.

4. All conductors (except flexible motor leads, leads over grid resistance and as provided in Sec. *d*, paragraph 7), on the underside of car bodies, must be installed either in *approved* conduit or in *approved* totally enclosed fire resisting ducts. Leads must be brought out of conduits or ducts through *approved* fittings.

b. Wires, Cables, Etc.

1. All conductors must be stranded and must comply with the requirements of this Code for rubber-covered wires and cable.

Fixture wire will not be permitted.

The allowable carrying capacity of wires shall be determined by Table A of No. 18, except that motor, trolley and resistance leads shall not be less than No. 7 B. & S. gauge. For heater circuits, arc headlight and air compressor circuits, conductors shall be not less than 6,000 circular mils cross section area and for lighting and other auxiliary circuits, conductors shall be not less than 4,000 circular mils cross section area.

The leads between the car body and main motors shall be flexible and triple braided.

The current values used in determining the size of motor, trolley and resistance leads shall be the per cent of the full load current, based on one hour rating of the motor, as given by the following table:

Size each motor	Motor leads	Trolley leads	Resistance leads
75 H.P. or less	50%	40%	15%
Over 75 H.P.	45%	35%	15%

2. Must be so spliced or joined as to be both mechanically and electrically secure without solder. The joints must then be soldered and covered with an insulation equal to that on the conductors. Joints made with *approved* splicing devices and those connecting the leads at motors, plows or third rail shoes need not be soldered.

3. Cable connections to all apparatus, excepting drum controllers, must be made as follows:

Cables not larger than No. 12 B. & S. must be attached, (a) by having all strands dipped in solder and clamped under a screw head, and against a metal base provided with a projection or lug for retaining the cable under the screw head, or (b) by a flat terminal soldered to the cable and clamped to a base or post by means of a screw or nut, or (c) by inserting all strands in a hole in a block or post and holding by a set screw, or (d) by other approved method of connection.

Cables larger than No. 12 B. & S. must be attached, (a) by a terminal soldered to the cable and securely fastened to the device by a bolt, or screw or by clamping, or (b) the end of cable may be held by a clamp so designed as to prevent a separation of the cable strands, or (c) the end of the cable after the insulation is removed shall be dipped in solder and be fastened into the device by means of at least two set screws having check nuts, or (d) by other approved method of connection.

c. Cut-outs, Circuit Breakers and Switches.

1. Cut-outs must be of *approved* cartridge or *approved* blowout type. Circuit breakers and switches including oil circuit breakers and oil switches must be of *approved* types.

2. All cut-outs and switches having exposed live metal parts must be located in cabinets. Cut-outs and switches not in iron boxes or in cabinets, must be mounted on not less than one-fourth inch fire resisting, insulating material, which must project at least one-half inch beyond all sides of the cut-out or switch.

3. Cut-out and switch cabinets must be substantially made of steel not less than one-sixteenth inch in thickness or of hard wood. For cabinets containing switches or cut-outs having exposed live metal parts, the entire inside including the door must be lined with an *approved* fire resisting, insulating material not less than one-quarter inch thick, securely fastened and treated with a moisture repellant paint.

4. Circuits carrying constant loads, such as lighting, heater circuits, etc., must not be fused at more than the rated capacity of the cables as given in Table A of No. 18.

5. Light, control, heater and auxiliary circuits may be taken off ahead of the main power cut-out but must each be separately fused.

6. Circuit breakers may be housed in a cabinet of metal or of wood lined with *approved*, fire resisting insulating material not less than one-quarter inch thick. Care must be taken that the arc chute is placed so that the arc will not come in contact with any wood work or grounded metal. With lined wooden cabinets the conduit carrying the wires must end just outside the cabinet.

7. Where power is derived from both a third rail and an overhead trolley, a switch must be installed by which the third rail shoe may be cut out when not in use.

d. Conduit.

When from the nature of the case, or on account of the size of the conductors, the ordinary conduit and junction box construction is not possible, a special form of conduit system may be used, provided the general requirements as given below are complied with.

When conduit is used, outlets must be provided with *approved* outlet boxes, or when wires are fully protected from mechanical injury, the outlet box may be omitted and conduit fitted with an *approved* bell mouth or *approved* bushing.

1. Conduits, outlet and junction boxes must be of approved type.

Conduit for lighting, heating and air compressor circuits need not be larger than one-quarter inch electrical trade size. Where exposed to dampness, conduit system must

be so installed as to exclude moisture from wheel wash and other causes.

2. Conduit must be continuous between and be firmly secured into all outlet or junction boxes and fittings, making a thorough mechanical and electrical connection between same.

3. Conduits, where they enter all outlet or junction boxes and fittings, must be provided with *approved* bushings fitted so as to protect cables from abrasion.

4. Conduit must be permanently and effectively grounded.

5. Junction and outlet boxes must be installed in such a manner as to be accessible.

6. All conduits, outlets or junction boxes and fittings must be firmly and substantially fastened to the frame work of the car.

7. For A. C. circuits carrying over 150 amperes and located wholly below the car body, conduit may be omitted.

e. **Molding.**

Must be of an *approved* type, and may be installed only where not subject to moisture. Metal molding must be permanently and effectively grounded.

f. **Lighting and Lighting Circuits.**

1. Receptacles and clusters must be of approved type.

2. Circuits must be run in *approved* conduit or *approved* metal molding, except that for circuits of 700 volts or less conductors may be installed in approved non-metallic moulding.

3. When conduit or metal molding is used, receptacles or clusters must be mounted on *approved* outlet boxes or in other approved manner, and the exposed metal parts must be thoroughly grounded.

4. When circuits are run in non-metallic molding, receptacles or clusters must be mounted on blocks of hard wood or fire resisting insulating material.

5. Headlight circuits when under the car body must be in conduit. Resistance must be well ventilated and mounted as specified in section A. Plugs and plugging receptacles must be of *approved* type.

6. Lamp or voltage regulators and controllers for axle driven or power driven generator equipments for car lighting service must be installed in *approved* cabinets and ventilated.

7. Storage batteries for car lighting or car control must be installed in an approved manner.

g. **Heaters and Heater Circuits.**

1. Heaters must be of *approved* type. Metal enclosures must be thoroughly grounded.

2. Panel heaters should preferably be mounted in metal risers set back at least 4 inches from front edge of seat to prevent pocketing of heated air by clothing of passengers.

The heating element must be located at least 4 inches from all unprotected woodwork. If the woodwork is protected by at least one-quarter inch thick approved fire resisting insulating material, this distance may be reduced to 2 inches.

3. Heaters for cross seats must be so located that heating element will be at least 6 inches below combustible material of seats, unless underside of seat is protected by not less than one-fourth inch fire resisting, insulating material, or .04 inch sheet metal with 1 inch air space over same, when the distance may be reduced to 3 inches.

4. Circuits must be run in *approved* conduit and connection of wires to heater must be protected from mechanical injury.

h. **Auxiliary Motor Circuits.**

1. Motor frame must be thoroughly grounded. Motors when in a confined space must be in an approved metal box or a wooden box lined with one-quarter inch fire resisting, insulating material and ventilated.

2. Circuits under car floor must be run in metal conduit.

3. Air compressor governor must be of the enclosed type or must be enclosed in an *approved* cabinet or box.

i. **Main Circuits and Devices.**

1. Conductors connecting between trolley base and main cut-out or circuit breakers must have an insulation approved for the voltage carried, and where run lengthwise of the car must be run on a wooden strip mounted on three-eighths inch filler blocks, located at such a distance apart as to allow water to pass freely under it. The running board may be used for this purpose. The trolley lead must be securely fastened to trolley base, must be arranged to prevent the entrance of moisture where passing through roof.

2. Current collectors (such as trolley stands, pantographs, third-rail shoes, etc.) must be supported on well-seasoned and thoroughly painted hard wood or other insulating supports approved for the voltage carried.

3. Conductors connecting between third-rail shoes on same truck must be supported in a hard wood or insulating molding, or in metal conduit. If the conductor is run in conduit, it must be fused as near as possible to the contact shoe before entering the conduit.

4. Conductors on the underside of the car must be run in metal conduit. Junction boxes, or other *approved* fittings, must be installed where branches in conduit are made. Main cables between controllers (at either end of the car) may be in cable boxes in the interior of the car. Cable boxes, if of wood, must be at least five-eighths inch thick, lined with one-quarter inch fire resisting, insulating material, with *approved* floor bushings.

Cables or power circuits (where exposed

under car floor) must be run in metal conduit, terminating with *approved* bell mouths or bushings. Conduits, where they terminate above the car floor must project at least 1 inch above the floor line of the car body or platform.

5. Motor leads where leaving the motor shell must be snugly and well bushed with high grade rubber bushings. Motor leads must be rigidly supported on the motor frame by hard wood or other *approved* cleats. Motor leads must be connected with cables on car body by *approved* connecting devices. Motor leads must be fastened to car body by hard wood cleats placed on each side of the motor lead connectors; or motor leads may be connected to cables on car body in an *approved* form of junction box.

6. Resistances must be so located that there will be at least six inches air space between resistances proper and the fire resisting, insulating protection of the combustible material of the car. Resistance grids must be thoroughly insulated from resistance frames, and frames must be insulated from supports.

The insulation must be removed from conductors for at least six inches back from resistance terminal. The bare stranded wire must be filled with solder to make it rigid.

7. The frames of all electrical apparatus under the car except the main and auxiliary motors and transformers, may be insulated from the car framing.

8. Metal cases and frames of controllers located above the car floor must be thoroughly grounded.

9. When necessary, guards constructed of sheet metal must be provided to protect the resistances and other devices from wheel wash, dirt, etc.

j. **Lightning Arresters.**

1. Must be so located as to protect all auxiliary circuits in addition to main motor circuits, and must be connected ahead of all metal conduit or molding.

2. Must have an adequate ground connection of not less than No. 12 B. & S. gauge wire run in as straight a line as possible to the ground, and must be properly protected from mechanical injury by fire resisting insulating molding or wooden molding.

3. Circuit for lightning arresters need not be run in metal conduit.

k. **General Rules**

1. Insulating joints must be provided below the top of the car roof in whistle or smoke pipes which project above the level of the car roof, or projecting portions of such pipes must be surrounded by a substantial guard or cage not in electrical connection with such pipes.

2. All coal burning heating devices must be thoroughly grounded. An adequate insulating cover over hot water tanks projecting above car roof must be provided.

41. Car Houses.

a. The trolley wires must be securely supported on insulating hangers.

b. The trolley hangers must be placed at such a distance apart that, in case of a break in the trolley wire, contact with the floor cannot be made.

c. Must have an emergency cut-out switch located at a proper place outside of the building, so that all the trolley wires in the building may be cut out at one point, and line insulators must be installed, so that when this emergency switch is open, the trolley wire will be dead at all points within 100 feet of the building. The current must be cut out of the building when not needed for use in the building.

This may be done by the emergency switch, or if preferred, a second switch may be used that will cut out all current from the building, but which need not cut out the trolley wire outside as would be the case with the emergency switch.

If the feed to the car house is underground this emergency switch may be installed inside the building, but must be located at a point as near as practicable to where the underground feeder enters the building.

d. All lamps and stationary motors must be installed in such a way that one main switch may control the whole of each installation, lighting and power independently of the main cut-out switch called for in Section *c*.

e. Where current for lighting and stationary motors is from a grounded trolley circuit, the following special rules to apply:

1. Cut-outs must be placed between the non-grounded side and lights or motors they are to protect. No set or group of incandescent lamps requiring over 2,000 watts must be dependent upon one cut-out.
2. Switches must be placed between non-grounded side and lights and motors they are to protect.
3. Must have all rails bonded at each joint with a conductor having a carrying capacity at least equivalent to No. 0 B. & S. gauge annealed copper wire, and all rails must be connected to the outside ground return circuit by a not less than No. 0 B. & S. gauge copper wire or by equivalent bonding through the track. All lighting and stationary motor circuits must be thoroughly and permanently connected to the rails or to the wire leading to the outside ground return circuit.

f. All pendant cords and portable conductors will be considered as subject to hard usage.

g. Must, except as provided in Section *e*, have all wiring and apparatus installed in accordance with the rules for constant-potential systems.

h. Must not have any system of feeder distribution centering in the building.

i. Cars must not be left with the trolley in electrical connection with the trolley wire.

41A. Lighting and Power from Railway Wires.

Must not be permitted, under any pretense, in the same circuit with trolley wires with a ground return, except in electric railway cars, electric car houses, power houses, passenger and freight stations connected with the operation of electric railways.

42. Garages.

For the purposes of this rule a garage is considered as that building or portion of a building in which one or more self-propelled vehicles carrying volatile inflammable liquid for fuel or power are kept for use, sale, storage, rental, repair, exhibition or demonstration purposes; and all that portion of a building that is on or below the floor or floors on which such vehicles are kept which is not separated therefrom by tight unpierced fire walls and fire-resisting floors.

In addition to the general requirements of the Code the following rules shall apply:

a. In garages used for more than two vehicles, as above, all conductors except those required for pendent lamps or portable connections must be installed in *approved* metal conduit or *approved* armored cable, except that *approved* metal molding may be used only in offices and showrooms. Metal conduit, armored cable or metal molding must be so installed that all outlet and junction boxes shall be located at least four feet above the floor. In garages used for one or two vehicles, as above, conduit or armored cable construction is not required.

b. Flexible cord for pendent lights must be *approved* reinforced cord.

c. Flexible cords for portable lamps, motors or other apparatus must be *approved* cord designed for rough usage. The portable cord must carry the male end of an *approved* pin plug connector or equivalent, the female end being of such design or so hung that the connector will break apart readily at any position of the cable. The connector must be kept at least four feet above the floor.

d. Flexible cable for charging must be of *approved* theatre stage type, this cable carrying parts of *approved* connectors of at least fifty amperes capacity. The connectors must be of such design or so hung that at least one will break apart readily at any position of the cable. Current-carrying parts of connectors must be shielded to prevent accidental contact. The fixed, or wall connector, must be kept at least four feet above the floor, and if not located on switchboard or charging panel, must be protected against accidental contact.

e. Cut-outs, switches and receptacles must be placed at least four feet above the floor, except as provided in Section *g* below.

f. All portable lights must be equipped with *approved* keyless sockets of molded composition or metal-sheathed porcelain type. These sockets must be equipped with handle, hook and substantial guard.

g. Switchboards and charging panels, at or upon which are mounted devices which in operation may produce a spark, must be located in a room or enclosure provided for the purpose unless all such spark producing devices are at least four feet above the floor or surrounded by vapor proof enclosures.

h. Motors or dynamos, not actually a part of a vehicle, if not located at least four feet above the floor must be of the fully enclosed type. Motors located four feet or more above the floor, if not of the fully enclosed type, must be provided with wire screen of not less than No. 14 mesh over openings at commutator end.

43. Electric Cranes.

All wiring, apparatus, etc., not specifically covered by special rules herein given, must conform to the General Requirements of this Code, except that the switch required by No. 8 c for each motor may be omitted.

a. Wiring.

1. All wires except bare collector wires, those between resistances and contact plates of rheostats and those subjected to severe external heat, must be *approved* rubber-covered and not smaller in size than No. 12 B. & S. Insulation on wires between resistances and contact plates of rheostats must conform to Section *d*, while wires subjected to severe external heat must have *approved* slow-burning insulation.

2. All wires excepting collector wires and those run in metal conduit or *approved* flexible cable must be supported by knobs or cleats which separate them at least one inch from the surface wired over, but in dry places where space is limited and the distance between wires as required by No. 26 *h* cannot be obtained, each wire must be separately encased in *approved* flexible tubing securely fastened in place.

Collector wires must be supported by *approved* insulators so mounted that even with the extreme movements permitted the wires will be separated at all times at least 1½ inches from the surface wired over. Collector wires must be held at the ends by *approved* strain insulators.

3. Main collector wires carried along the runways must be rigidly and securely attached to their insulating supports at least every 20 feet, and separated at least 6 inches when run in a horizontal plane; if not run in a horizontal plane, they must be separated at least 8 inches. If spans longer than 20 feet are necessary the distance between wires must be increased proportionately but in no case shall the span exceed 40 feet.

4. Where bridge collector wires are over 80 feet long, insulating supports on which the wires may loosely lie must be provided at least every 50 feet.

Bridge collector wires must be kept at least 2½ inches apart, but a greater spacing should be used whenever it may be obtained.

5. Collector wires must not be smaller in size than specified in the following table for the various spans.

Distance between rigid supports. Feet	Size wire required. B. & S.
0 to 30	6
31 to 60	4
Over 60	2

b. **Collectors.**

Must be so designed that sparking between them and collector wires will be reduced to a minimum.

c. **Switches and Cut-outs.**

1. The main collector wires must be protected by a cut-out and the circuit controlled by a switch. Cut-out and switch to be so located as to be easy of access from the floor.

2. Cranes operated from cabs must have a cut-out and switch connected into the leads from the main collector wires and so located in the cab as to be readily accessible to the operator.

3. Where there is more than one motor on a single crane, each motor lead must be protected by a cut-out located in the cab if there is one.

d. **Controllers.**

Must be installed according to No. 4, except that if the crane is located out doors the insulation on wires between resistances and contact plates of rheostats must be rubber where the wires are exposed to moisture and insulation is necessary and also where they are grouped. If the crane operates over readily combustible material, the resistances must be placed in an enclosure made of non-combustible material, thoroughly ventilated and so constructed that it will not permit any flame or molten metal to escape in the event of burning out the resistances. If the resistances are located in the cab, this result may be obtained by constructing the cab of non-combustible material and providing sides which enclose the cab from its floor to a height at least 6 inches above the top of the resistances.

e. **Grounding of Iron Work.**

The motor frames, the entire frame of the crane and the tracks must be permanently and effectually grounded.

HIGH-POTENTIAL SYSTEMS.

550 TO 3,500 VOLTS.

Any circuit attached to any machine or combination of machines which develops a difference of potential between any two wires of over 550 volts and less than 3,500 volts, shall be considered as a high-potential circuit, and as coming under this class, unless an approved transforming device is used, which cuts the difference of potential down to 550 volts or less. For 550 volt motor equipments a margin of ten per cent above the 550 volt limit will be allowed at the generator or transformer without coming under high-potential systems.

44. Wires.

(*See also Nos. 16, 17, 18 and 20. For construction rules see Nos. 49 and 50.*)

a. Must have an *approved* rubber-insulating covering.

b. Must be always in plain sight, and never encased, except as provided for in No. 8 *b*, or where specially required.

c. Must (except as provided for in No. 8 *b*), be rigidly supported on glass or porcelain insulators, which raise the wire at least one inch from the surface wired over, and must be kept about eight inches apart.

Rigid supporting requires under ordinary conditions, where wiring along flat surfaces, supports at least about every four and one-half feet. If the wires are unusually liable to be disturbed the distance between supports must be shortened.

In buildings of mill construction, mains of not less than No. 8 B. & S. gauge, where not liable to be disturbed, may be separated about ten inches and run from timber to timber, not breaking around, and may be supported at each timber only.

d. Must be protected on side walls from mechanical injury by a substantial boxing, retaining an air space of one inch around the conductors, closed at the top (the wires passing through bushed holes) and extending not less than seven feet from the floor. When crossing floor timbers, in cellars, or in rooms where they might be exposed to injury, wires must be attached by their insulating supports to the under side of a wooden strip not less than one-half an inch in thickness.

45. Transformers.

(*See also Nos. 11, 14, 15 and 36. For construction of Transformers see No. 81.*)

Transformers must not be placed inside of buildings without special permission.

a. Must be located as near as possible to the point at which the primary wires enter the building.

b. Must be placed in an enclosure constructed of fire-resisting material; the enclosure to be used only for this purpose, and to be kept securely locked, and access to the same allowed only to responsible parties.

c. The transformer case must be permanently and effectually grounded, and the enclosure in which the transformers are placed must be practically air-tight, except that it must be thoroughly ventilated to the outdoor air, if possible through a chimney or flue. There should be at least six inches air space on all sides of the transformer.

46. Series Lamps.

a. No multiple series or series multiple system of lighting will be approved.

b. Must not, under any circumstances, be attached to gas fixtures.

STANDARD SYMBOLS FOR WIRING PLANS

As Adopted and Recommended by the National Electrical Contractors Association (Secretary's Office, Utica, N. Y.) and the American Institute of Architects (Secretary's Office, Washington, D. C.), from Whom Copies May be Obtained.

Ceiling outlet; electric only. Numeral in center indicates number of stand. 16 C. P. incand. lamps.

Ceiling outlet; combination. $\frac{4}{2}$ indicates 4-16 C. P. stand. incand. lamps and 2 gas burners. If gas only

Bracket outlet; electric only. Numeral in center indicates number of stand. 16 C. P. incand. lamps.

Bracket outlet; combination. $\frac{4}{2}$ indicates 4-16 C. P. stand. incand. lamps and 2 gas burners. If gas only

Wall or baseboard receptacle outlet. Numeral in center indicates number of stand. 16 C. P. incand. lamps.

Floor outlet. Numeral in center indicates number of stand. 16 C. P. incand. lamps.

Outlet for outdoor standard or pedestal; electric only. Numeral indicates number of stand. 16 C. P. lamps.

Outlet for outdoor standard or pedestal; combination. $\frac{6}{6}$ indicates 6-16 C. P. stand. incand. lamps; 6 gas burners.

Drop cord outlet.

One light outlet, for lamp receptacle.

Arc lamp outlet.

Special outlet, for lighting, heating and power current, as described in specifications.

Ceiling fan outlet.

S^1 S. P. switch outlet.
S^2 D. P. switch outlet.
S^3 3-way switch outlet.
S^4 4-way switch outlet.
S^D Automatic door switch outlet.
S^E Electrolier switch outlet.

} Show as many symbols as there are switches. Or in case of a very large group of switches, indicate number of switches by a Roman numeral, thus: S^{XII}, meaning 12 single-pole switches. Describe type of switch in specifications, that is, flush or surface, push button or snap.

Meter outlet.

Distribution panel.

Junction or pull box.

Motor outlet; numeral in center indicates horse power.

Motor control outlet.

Transformer.

Main or feeder run concealed under floor.

Main or feeder run concealed under floor above.

Main or feeder run exposed.

Branch circuit run concealed under floor.

Branch circuit run concealed under floor above.

Branch circuit run exposed.

Pole line.

Riser.

Telephone outlet; private service.

Telephone outlet; public service.

Bell outlet.

Buzzer outlet.

Push button outlet; numeral indicates number of pushes.

Annunciator; numeral indicates number of points.

Speaking tube.

Watchman clock outlet.

Watchman station outlet.

Master time clock outlet.

Secondary time clock outlet.

Door opener.

Special outlet; for signal systems, as described in specifications.

Battery outlet.

} Circuit for clock, telephone, bell or other service, run under floor, concealed. Kind of service wanted ascertained by symbol to which line connects.

} Circuit for clock, telephone, bell or other service, run under floor above, concealed. Kind of service wanted ascertained by symbol to which line connects.

NOTE.—If other than standard 16 C. P. incandescent lamps are desired, specifications should describe capacity of lamp to be used.

Suggestions in Connection with Standard Symbols for Wiring Plans

It is important that ample space be allowed for the installation of mains, feeders, branches and distribution panels.

It is desirable that a key to the symbols used accompany all plans.

If mains, feeders, branches and distribution panels are shown on the plans, it is desirable that they be designated by letters or numbers.

Heights of centre of wall outlets (unless otherwise specified):

Living rooms....5 feet, 6 inches
Chambers .....5 feet
Offices.....6 feet
Corridors.....6 feet, 3 inches

Height of switches (unless otherwise specified) 4 feet.

TABLES

UNITS OF MEASURE

The electrical units are derived from the following mechanical units of the metric system:

METER.—A unit of length equal, approximately, to one ten-millionth part of a quadrant of a meridian of the earth taken through Paris; or, approximately, to 39.37 inches.

GRAMME.—Unit of weight. Weight of a cubic centimeter of water at a temperature of 4 degrees centigrade.

SECOND.—Unit of time. The time of one swing of a pendulum making 86,400 swings in a solar day.

ELECTRICAL UNITS

VOLT.—Such an electromotive force as would cause a current of one ampere to flow against a resistance of one ohm. Such an electromotive force as would charge a condenser of the capacity of one farad with a quantity of electricity equal to one coulomb.

OHM.—The practical unit of electric resistance. Such a resistance as would limit the flow of electricity under an electromotive force of one volt, to a current of one ampere, or one-coulomb-per-second.

MEGOHM.—1,000,000 ohms.

AMPERE.—The practical unit of electric current. A rate of flow of electricity transmitting one coulomb per second. The current of electricity which would pass through a circuit whose resistance is one ohm, under an electromotive force of one volt.

COULOMB.—The practical unit of electric quantity. Such a quantity of electricity as would pass in one second through a circuit conveying one ampere. The quantity of electricity contained in a condenser of one farad capacity, when subjected to the E. M. F. of one volt.

FARAD.—The practical unit of electric capacity. Such a capacity of a conductor or condenser that one coulomb of electricity is required to produce therein a difference of potential of one volt.

MICROFARAD (MFD).—One-millionth of a farad.

WATT.—A unit of electric power. A volt-ampere. The power developed when 44.25 foot-pounds of work are done in a minute, or 0.7375 foot-pound of work is done in a second.

JOULE.—A volt-coulomb or unit of electric energy or work. The amount of electric work required to raise the potential of one coulomb of electricity one volt. Ten million ergs.

OHM'S LAW

Ohm's law is a method of expressing relationship existing between the electromotive force, current and resistance, and is practically the basis of most electrical computations. It is expressed in various forms, as follows:

$$\text{Current Flow} = \frac{\text{Electromotive Force}}{\text{Resistance}} \text{ or, } I = \frac{E}{R}$$

Electromotive force equals the current flow multiplied by resistance.

Electromotive Force = Current Flow x Resistance, or $E = I \times R$.

Resistance equals the electromotive force divided by the current flow.

$$\text{Resistance} = \frac{\text{Electromotive Force}}{\text{Current Flow}} \text{ or, } R = \frac{E}{I}$$

I = Amperes. E = Volts. R = Ohms.

Electromotive force varies directly as the current and resistance.

Resistance varies directly with the electromotive force and inversely as the current.

Current varies directly with the electromotive force and inversely as the resistance.

MIL

The "mil," whose expressed value is $\frac{\text{One}}{\text{One-Thousandth}}$ (.001) of an inch, is the practical basis for determining the diameters and thereby the area of all wires used as electric conductors. The diameters being given, the area is obtained by the well-known rule, "the area of a circle, in circular units, is equal to the square of its diameter"; hence the square of the diameter of a wire expressed in mils equals the area of its cross section.

$D^2 = A$, which area is expressed in Circular Mils or CM, hence $D^2 = CM$.

WIRING FORMULA

Ohm's law is practically the basis for the various formulæ in general use for determining the proper size of wire to use to carry various currents. It is essential to know the amount of current expressed in amperes, the distance, and to decide upon the loss to allow in transmission; the best rule is as follows:

The cross section (CM) of the necessary wire is found by multiplying twice the distance one way (2D) by the amount of current expressed in amperes (C) and this by the resistance of one mil-foot (10.7) and dividing by the loss in transmission expressed in volts (v).

$$\text{or, } CM = \frac{2D \times C \times 10.7}{v} \quad \text{or, } CM = \frac{D \times C \times 21.4}{v}$$

USEFUL INFORMATION

PULLEYS AND GEARS

For single reduction or increase of speed by means of belting where the speed at which each shaft should run is known, and one pulley is in place:

Multiply the diameter of the pulley which you have by the number of revolutions per minute that its shaft makes; divide this product by the speed in revolutions per minute at which the second shaft should run. The result is the diameter of pulley to use.

Where both shafts with pulleys are in operation and the speed of one is known:

Multiply the speed of the shaft by diameter of its pulley and divide this product by diameter of pulley on the other shaft. The result is the speed of the second shaft.

Where a countershaft is used, to obtain size of main driving or driven pulley, or speed of main driving or driven shaft, it is necessary to calculate, as above, between the known end of the transmission and the countershaft, then repeat this calculation between the countershaft and the unknown end.

A set of gears of the same pitch transmit speeds in proportion to the number of teeth they contain. Count the number of teeth in the gear wheel and use this quantity instead of the diameter of pulley, mentioned above, to obtain number of teeth cut in unknown gear, or speed of second shaft.

Rule for Finding Size of Pulleys

$$d = \frac{D \times S}{S'} \qquad D = \frac{d \times S'}{S}$$

d = diameter of driven pulley

D = diameter of driving pulley.

S = number of revolutions per minute of driving pulley.

S′ = number of revolutions per minute of driven pulley.

SHAFTING, BELTING, PULLEYS AND GEARS

Shafting

The rule for determining the size of shaft for transmitting a given power at a given speed (8-foot centers for hangers) is as follows:

$$\sqrt[3]{\frac{\text{H. P.} \times 80}{\text{R. P. M.}}} = \text{diameter in inches.}$$

When "H. P."=the horse power to be transmitted, "R. P. M."=the revolutions per minute.

Belts

The following formula is used to determine the length of belting:

$$\frac{(D + d \times 3.16)}{2} \times 2D^1 = \text{length.}$$

When D= diameter of large pulley, d= diameter of small pulley, and D^1= distance between centers of shafting.

BARE COPPER WIRE

HARD OR SOFT DRAWN

Dimensions, Weights and Resistances

Am. Gauge B. & S. No.	Diam. Mils.	Circular Mils.	Pounds per 1,000 Ft.	Pounds per Mile	Feet per Pound	Ohms per 1,000 Feet	Ohms per Mile	Feet per Ohm	Ohms per Pound
0000	460.	211600.	639.33	3375.7	1.56	.04906	.25903	20383	.000076736
000	409.640	167805.	507.01	2677.	1.97	.06186	.32664	16165	.00012039
00	364.800	133079.40	402.09	2123.	2.49	.07801	.41187	12820	.00019423
0	324.950	105592.50	319.04	1684.5	3.13	.09831	.51909	10409.	.00030772
1	289.300	83691.20	252.88	1335.2	3.95	.12404	.65490	8062.3	.00048994
2	257.630	66373.	200.54	1058.8	4.99	.15640	.82582	6393.7	.00078045
3	229.420	52634.	159.03	839.68	6.29	.19723	1.0414	5070.2	.0012406
4	204.310	41742.	126.12	665.91	7.93	.24869	1.3131	4021.	.0019721
5	181.940	33102.	100.01	528.05	10.	.31361	1.6558	3188.7	.0031361
6	162.020	26250.50	79.32	418.81	12.61	.39546	2.0881	2528.7	.0049868
7	144.280	20816.	62.90	332.11	15.90	.49871	2.6331	2005.2	.0079294
8	128.490	16509.	49.88	263.37	20.05	.62881	3.3201	1590.3	.012608
9	114.430	13094.	39.56	208.88	25.28	.79281	4.1860	1261.3	.010042
10	101.890	10381.	31.37	165.63	31.38	1	5.2800	1000.	.031380
11	90.742	8234.	24.88	137.37	40.20	1.2607	6.6568	793.18	.050682
12	80.808	6529.90	19.73	104.18	50.69	1.5898	8.3940	629.02	.080585
13	71.961	5178.39	15.68	82.792	63.78	2.0037	10.5798	499.06	.127788
14	64.084	4106.76	12.44	65.658	80.42	2.5266	13.3405	375.79	.203180
15	57.068	3256.76	9.86	52.069	101.40	3.1860	16.8223	313.87	.323079
16	50.820	2582.67	7.82	41.292	127.87	4.0176	21.2130	248.90	.513737
17	45.257	2048.20	6.20	32.746	161.24	5.0660	26.7485	197.39	.816839
18	40.303	1624.33	4.92	25.970	203.31	6.3880	33.7285	156.54	1.298764
19	35.890	1288.09	3.90	20.594	256.39	8.0555	42.5329	124.14	2.065312
20	31.961	1021.44	3.09	16.331	323.32	10.1584	53.6362	98.44	3.284374
21	28.462	810.09	2.45	12.952	407.67	12.8088	67.6302	78.07	5.221775
22	25.347	642.47	1.95	10.272	514.03	16.1504	85.2343	61.92	8.301819
23	22.571	509.45	1.54	8.1450	648.25	20.3674	107.540	49.10	13.20312
24	20.100	404.01	1.22	6.4593	817.43	25.6830	135.606	38.94	20.99405
25	17.900	320.41	.97	5.1227	1030.71	32.3833	170.984	30.88	33.37780
26	15.940	254.08	.77	4.0623	1299.77	40.8377	215.623	24.49	53.07946

ELECTRIC LIGHT CONDUCTORS

No. B. & S.	Diameter Mils	Diameter Millimeters	Square of Sectional Diameter=Area Circular Mils	Square Milimeters	Approved Carrying Capacity In Amperes National Code	Weight Lbs., Bare Lbs., per 1000 Ft.	Lbs., per Mile	Weatherproof Insulation Lbs., per 1000 Ft.	Lbs., per Mile
0000	460.	11.684	211600.	107.219	225	639.33	3359	758	4000
000	409.640	10.405	167805.	85.028	175	507.01	2663	606	3200
00	364.800	9.266	133079.4	67.431	150	402.09	2112	492	2600
0	324.950	8.254	105592.5	53.504	125	319.04	1661	385	2036
1	289.300	7.348	83694.2	42.409	100	252.88	1328	308	1628
2	257.630	6.544	66373.	33.632	90	200.54	1069	250	1310
3	229.420	5.827	52634.	26.670	80	259.03	835	201	1060
4	204.310	5.189	41742.	21.151	70	126.12	662	163	862
5	181.940	4.621	33102.	16.773	55	100.01	526	134	706
6	162.020	4.115	26250.5	13.301	50	79.32	417	110	577
8	128.490	3.264	16509.	8.366	35	49.80	262	74	392
10	101.890	2.588	10381.	5.260	25	31.37	165	52	275
12	80.808	2.053	6529.9	3.309	20	19.73	103	36	193
14	64.084	1.628	4106.8	2.081	15	12.41	65	26	135
16	50.820	1.291	2582.9	1.309	6	7.81	41	18	96

COMMERCIAL COPPER WIRE

98 PER CENT CONDUCTIVITY

Data Applies to Solid Wires, Sizes from No. 18 to 1, and on Stranded Wires and Cables No. 0 and Upwards

Size of Wire B. & S.	Approved Carrying Capacity Amperes Circular Mils	Weather-proof	Rubber Covered	Bare Wire Wt., Lbs. per 1000 Ft.	Diam. Inches	3-Braid W. P. Wire Rub. Covered Wire Wt., Lbs. per 1000 Ft. Solid	Diam. Inches	Wt., Lbs. per 1000 Ft.	Diam. Inches
18	1624	5	3	4.91	.....	13	1/8	.....	.....
16	2583	10	6	7.81	.....	17	5/32	.....	.....
14	4107	20	15	12.44	.....	25	3/16	35	.189
12	6530	25	20	19.73	.081	35	7/32	45.6	.206
10	10380	30	25	31.37	.102	53	1/4	60.2	.227
8	16510	50	35	49.88	.168	74	17/64	83.5	.253
6	26250	70	50	79.32	.162	111	5/16	129.5	.320
5	33100	80	55	100.01	.182	135	11/32	153.5	.338
4	41740	90	70	126.12	.204	164	25/64	184	.360
3	52630	100	80	159.03	.229	199	27/64	222	.385
2	66370	125	90	200.54	.258	250	15/32	270	.414
1	83690	150	100	252.88	.289	310	1/2	347	.495
0	105500	200	125	322	.375	407	9/16	422	.530
00	133100	225	150	406	.420	495	39/64	540	.611
000	167800	275	175	513	.470	629	47/64	662	.675
0000	211600	325	225	645	.530	767	25/32	812	.735
....	200000	300	200			Stranded			
....	250000	....	....	762	.575	942	15/16	985	.830
....	300000	500	325	915	.630	1112	1	1170	.887
....	350000	450	300	1068	.679	1276	1 1/16	1340	.940
....	400000	500	325	1220	.728	1434	1 1/8	1515	.988
....	450000	550	337	1373	.770	1653	1 3/16	1685	1.033
....	500000	600	400	1525	.819	1823	1 1/4	1860	1.077
....	550000	640	425	1678	.855	1988	1 9/32	2080	1.150
....	600000	680	450	1830	.891	2189	1 5/16	2255	1.188
....	650000	720	475	1983	.936	2370	1 3/8	2430	1.125
....	700000	760	500	2135	.963	2553	1 7/16	2605	1.262
....	750000	800	525	2288	1.040	2712	1 15/32	2780	1.296
....	800000	840	550	2440	1.056	2893	1 1/2	2960	1.330
....	850000	880	575	2593	1.088	3047	....	3130	1.362
....	900000	920	600	2745	1.120	3226	1 9/16	3305	1.392
....	950000	960	625	2898	1.125	3376	....	3480	1.422
....	1000000	1000	650	3050	1.152	3520	1 5/8	3660	1.452
....	1100000	1080	690	....	.....	....	....	....	.....
....	1200000	1150	730	....	.....	....	....	....	.....
....	1300000	1220	770	....	.....	....	....	....	.....
....	1400000	1290	810	....	.....	....	....	....	.....
....	1500000	1360	850	4575	1.408	4500	1 7/8	....	.....
....	1600000	1430	890	....	.....	....	....	....	.....
....	1700000	1490	930	....	.....	....	....	....	.....
....	1800000	1550	970	....	.....	....	....	....	.....
....	1900000	1610	1010	....	.....	....	....	....	.....
....	2000000	1670	1050	....	.....	7000	2 1/8	....	.....

WIRE DATA

STANDARD STRANDED COPPER CONDUCTORS

Size C. M.	Number of Wires in the Strand: 7	19	37	7x7-49	61	91	127	169	217
	Diameter in Inches of Each Wire in the Strand								
2000000	.5345	.3243	.2325	.202	.181	.1482	.1255	.1088	.096
1750000	.5000	.3034	.2175	.189	.1694	.1386	.1157	.1003	.0898
1500000	.4629	.2810	.2013	.175	.1568	.1284	.1087	.0942	.0831
1250000	.4226	.2565	.1838	.1507	.1431	.1172	.0992	.086	.0759
1000000	.378	.2294	.1644	.1429	.1285	.1048	.0887	.0769	.0678
950000	.3684	.2236	.1602	.1392	.1248	.1021	.0864	.075	.0662
900000	.3586	.2176	.1559	.1355	.1215	.0994	.0841	.073	.0644
850000	.3484	.2115	.1516	.1317	.1181	.0966	.0818	.0709	.0626
800000	.338	.205	.147	.1278	.1145	.0937	.0793	.0687	.0607
750000	.3273	.1986	.1424	.1237	.1109	.0908	.0768	.0666	.0588
700000	.3163	.1919	.1375	.1195	.1071	.0883	.0742	.0644	.0568
650000	.3047	.1850	.1325	.1152	.1032	.0845	.0716	.0620	.0547
600000	.2928	.1778	.1273	.1107	.0992	.0812	.0687	.0596	.0526
550000	.2803	.1701	.1219	.106	.0950	.0777	.0658	.0570	.0503
500000	.2672	.1622	.1162	.101	.0905	.0741	.0627	.0544	.048
450000	.2535	.1539	.1103	.0958	.0859	.0703	.0595	.0516	.0455
400000	.2391	.1451	.1040	.0904	.081	.0663	.0561	.0487	.0429
350000	.2236	.1357	.0973	.0845	.0757	.0620	.0526	.0455	.0401
300000	.207	.1257	.0901	.0783	.0701	.0573	.0486	.0421	.0372
250000	.189	.1147	.0822	.0714	.064	.0524	.0444	.0384	.0340
Size B. & S.									
0000	.1736	.1055	.0756	.0657	.0589	.0482	.0408	.....	.....
000	.1548	.0940	.0673	.0586	.0525	.0429	.0363	.....	.....
00	.1378	.0836	.0599	.0521	.0467	.0382	.0323	.....	.....
0	.1228	.0746	.0534	.0464	.0416	.0340	.0288	.....	.....
1	.1093	.0663	.0475	.0413	.0370	.0303	.0252	.....	.....
2	.0973	.0592	.0423	.0369	.0329	.0269	.0228	.....	.....
3	.0867	.0526	.0377	.0327	.0294	.0240	.0203	.....	.....
4	.0772	.0468	.0335	.0291	.0261	.0214	.0179	.....	.....
5	.0687	.0417	.0299	.026	.0233	.0190	.0161	.....	.....
6	.0612	.0372	.0266	.0231	.0207	.0169	.0143	.....	.....
7	.0545	.0331	.0237	.....	.0184	.0151	.0128	.....	.....
8	.0485	.0293	.0211	.0184	.0164	.0135	.0114	.....	.....
9	.0435	.0262	.0187	.....	.0146	.0120	.0101	.....	.....
10	.0385	.0233	.0168	.....	.0129	.0106	.0090	.....	.....

EQUIVALENTS OF WIRES

Showing Approximately Equal Capacities in the Use of Conductors of Different Sizes

Total Capacity C. M.	Equivalent in Number of Smaller Conductors or Combinations: 2	3	4	5	6	Combinations	
1000000	....	....	....	0000	000	.....	.....
800000	....	....	0000	000	00	.....	.....
600000	....	0000	000	00	0	.....	.....
500000	....	000	00	0	1	.....	.....
400000	0000	00	0	1	2	.....	.....
350000	000	....	1	2	...	0000 & 00	.....
300000	....	0	2	....	3	000 & 00	0000 & 1
250000	00	1	....	3	4	000 & 1	0000 & 4
B. & S.							
0000	0	2	3	4	5	00 & 1	000 & 3
000	1	3	4	5	6	0 & 2	00 & 5
00	2	4	5	6	...	1 & 3	0 & 6
0	3	5	6	....	8	2 & 4	.....
1	4	6	....	8	...	3 & 5	.....
2	5	....	8	....	...	4 & 6	.....
3	6	8	....	10	...	.....	.....
4	....	....	10	....	...	6 & 8	.....
5	8	10	....	12	...	.....	.....
6	....	....	12	....	14	8 & 10	.....
8	....	....	14	....	16	10 & 12	.....
10	....	....	16	....	18	12 & 14	.....

GAUGES AND WEIGHTS OF WIRES

TABLE SHOWING DIFFERENCE OF GAUGES IN DECIMALS OF AN INCH

COPPER WIRE

No. Wire Gauge	Brown & Sharpe Diam. Inches	Brown & Sharpe Weight, Pounds Per 1000 Ft.	Brown & Sharpe Weight, Pounds Per Mile	Roebling, A. S. & W. Co. or Washburn & Moen Diam. Inches	Roebling, A. S. & W. Co. or Washburn & Moen Weight, Pounds Per 1000 Ft.	Roebling, A. S. & W. Co. or Washburn & Moen Weight, Pounds Per Mile	English Legal Standard Diam. Inches	English Legal Standard Weight, Pounds Per 1000 Ft.	English Legal Standard Weight, Pounds Per Mile	Birmingham or Stubbs Diam. Inches	Birmingham or Stubbs Weight, Pounds Per 1000 Ft.	Birmingham or Stubbs Weight, Pounds Per Mile
6–0	.....	...	....	.460	641.20	3385.5	.464	652	3441	....	...	....
5–0	.....	...	....	.430	560.29	2958.3	.432	565	2983	....	...	....
4–0	.46000	641	3382	.393	468.02	2471.1	.400	484	2557	.454	624	3294
3–0	.40964	509	2687	.362	397.09	2096.6	.372	419	2212	.425	547	2887
2–0	.36480	403	2129	.331	332	1753	.348	367	1935	.380	437	2308
0	.32486	320	1688	.307	285.60	1507.9	.324	318	1678	.340	350	1847
1	.28930	253	1335	.283	242.69	1281.4	.300	272	1438	.300	272	1438
2	.25763	202	1064	.263	209.60	1106.7	.276	231	1217	.284	244	1280
3	.22942	159	838	.244	180.41	952.6	.252	192	1015	.259	203	1072
4	.20431	126	665	.225	153.39	809.9	.232	163	860	.238	171	905
5	.18194	100	529	.207	129.84	685.6	.212	136	718	.220	146	773
6	.16202	79	419	.192	111.71	589.8	.192	112	589	.203	125	659
7	.14428	63	331	.177	94.93	501.2	.176	94	495	.180	98	518
8	.12849	50	262	.162	79.52	419.9	.160	77	409	.165	82	435
9	.11443	39	208	.148	66.37	350.4	.144	63	331	.148	66	350
10	.10189	32	166	.135	55.22	291.6	.128	50	262	.134	54	287
11	.09074	25	132	.120	43.63	230.4	.116	41	215	.120	44	230
12	.08081	20	105	.105	33.41	176.4	.104	33	173	.109	36	190
13	.07196	15.7	83	.092	25.65	135.4	.092	25.6	135	.095	27.3	144
14	.06408	12.4	65	.080	19.39	102.4	.080	19.4	102	.083	20.8	110
15	.05706	9.8	52	.072	15.71	82.95	.072	15.7	83	.072	15.7	83
16	.05082	7.9	42	.063	12.03	63.52	.064	12.4	65	.065	12.8	68
17	.04525	6.1	32	.054	8.84	46.67	.056	9.5	50	.058	10.2	54
18	.04030	4.8	25.6	.047	6.69	35.32	.048	7	36.8	.049	7.3	38.4
19	.03589	3.9	20.7	.041	5.09	26.88	.040	4.8	25.6	.042	5.3	28.2
20	.03196	3.1	16.4	.035	3.71	19.59	.036	3.9	20.7	.035	3.7	19.6
21	.02846	2.5	13	.032	3.10	16.37	.032	3.1	16.4	.032	3.1	16.4
22	.02534	1.9	10.2	.028	2.38	12.57	.028	2.4	12.5	.028	2.4	12.5
23	.02257	1.5	8.2	.025	1.89	9.98	.024	1.7	9.2	.025	1.9	10
24	.02010	1.2	6.5	.023	1.60	8.45	.022	1.5	7.7	.022	1.5	7.7
25	.01790	.97	5.1	.020	1.21	6.39	.020	1.2	6.4	.020	1.2	6.4
26	.01594	.77	4	.018	.981	5.18	.018	.98	5.2	.018	.98	5.2
27	.01419	.61	3.2	.017	.876	4.62	.0164	.81	4.3	.016	.77	4.1
28	.01264	.48	2.5	.016	.776	4.09	.0148	.66	3.5	.014	.59	3.1
29	.01125	.39	2	.015	.682	3.60	.0136	.56	3	.013	.51	2.7
30	.01002	.30	1.6	.014	.594	3.13	.0124	.47	2.5	.012	.44	2.3
31	.00893	.24	1.27	.0135	.552	2.91	.0116	.41	2.15	.010	.30	1.6
32	.00795	.19	1.02	.0130	.512	2.70	.0108	.35	1.86	.009	.25	1.3
33	.00708	.15	.81	.0110	.366	1.93	.0100	.30	1.60	.008	.19	1.02
34	.00630	.12	.63	.0100	.303	1.60	.0092	.26	1.35	.007	.15	.78
35	.00561	.095	.50	.0095	.273	1.43	.0084	.21	1.13	.005	.075	.40
36	.00500	.076	.40	.0090	.245	1.27	.0076	.17	.92	.004	.048	.256

STEEL WIRE

Roebling, A. S. & W. Co., or Washburn & Moen Gauge

No. Gauge	Diam. Inches	Weight, Pounds Per 1000 Ft.	Weight, Pounds Per Mile	No. Gauge	Diam. Inches	Weight, Pounds Per 1000 Ft.	Weight, Pounds Per Mile	No. Gauge	Diam. Inches	Weight, Pounds Per 1000 Ft.	Weight, Pounds Per Mile
6–0	.460	558.4	2948	9	.148	57.8	305	23	.025	1.65	8.71
5–0	.430	487.9	2576	10	.135	48.1	254	24	.023	1.40	7.37
4–0	.393	407.6	2152	11	.120	38	201	25	.020	1.06	5.58
3–0	.362	345.8	1826	12	.105	29.1	154	26	.018	.855	4.51
2–0	.331	289.1	1527	13	.092	22.3	118	27	.017	.763	4.03
0	.307	248.7	1313	14	.080	16.9	89.2	28	.016	.676	3.57
1	.283	211.4	1116	15	.072	13.7	72.2	29	.015	.594	3.14
2	.263	182.5	964	16	.063	10.5	55.3	30	.014	.517	2.73
3	.244	157.1	830	17	.054	7.70	40.6	31	.0135	.481	2.54
4	.225	133.6	705	18	.047	5.83	30.8	32	.013	.446	2.36
5	.207	113.1	597	19	.041	4.44	23.4	33	.011	.319	1.69
6	.192	97.3	514	20	.035	3.23	17.1	34	.010	.264	1.39
7	.177	82.7	437	21	.032	2.70	14.3	35	.0095	.238	1.26
8	.162	69.3	366	22	.028	2.07	10.9	36	.009	.214	1.13

COMPARATIVE RESISTANCES

Comparative resistances of various materials taking copper as 1.
To find the resistance of any wire, first get the resistance of the same length and size of copper wire, then multiply this by figure below for the wire used.

Copper	1	Advance	28	Phosphor-Bronze	3
Norway Iron	7	S. B.	32	Platinum	5.5
Soft Steel	8	Climax	50	Iron Wire (E. B. B.)	5.5
18 Per Cent German Silver	18	Silver	.98	Iron Wire (BB)	6.4
30 Per Cent German Silver	28	Aluminum	1.8	Iron Wire (Special)	7.4

18 PER CENT GERMAN SILVER

Resistance per mil foot, 189 Ohms.
Temperature co-efficient .00017 per degree Fahr.

No. B. & S.	Ohms 1000 Ft.	No. B. & S.	Ohms 1000 Ft.	No. B. & S.	Ohms 1000 Ft.	No. B. & S.	Ohms 1000 Ft.	No. B. & S.	Ohms 1000 Ft.	No. B. & S.	Ohms 1000 Ft.
0	1.7	7	9.1	14	46.1	21	234	28	1192	35	6020
1	2.2	8	11.5	15	58.2	22	295	29	1480	36	7560
2	2.8	9	14.5	16	72.7	23	370	30	1890	37	9550
3	3.6	10	18.1	17	93.4	24	468	31	2386	38	12038
4	4.5	11	22.8	18	118	25	590	32	2950	39	15240
5	5.7	12	28.8	19	146	26	749	33	3740	40	19285
6	7.2	13	36.5	20	184	27	936	34	4760	..	.....

TENSILE STRENGTH OF COPPER WIRE

Size, Wire B. & S.	Breaking Wt., Lbs. Hard-Drawn	Annealed	Size, Wire B. & S.	Breaking Wt., Lbs. Hard-Drawn	Annealed	Size, Wire B. & S.	Breaking Wt., Lbs. Hard-Drawn	Annealed
0000	9971	5650	5	1559	883	13	244	138
000	7907	4480	6	1237	700	14	193	109
00	6271	3553	7	980	555	15	153	87
0	4973	2818	8	778	440	16	133	69
1	3943	2234	9	617	349	17	97	55
2	3127	1772	10	489	277	18	77	43
3	2480	1405	11	388	219	19	61	34
4	1967	1114	12	307	174	20	48	27

PROPERTIES OF CLIMAX RESISTANCE WIRE

Resistance per mil foot at 75° Fahr.—525 Ohms.
Temperature co-efficient .0004 per degree Fahr.
Specific gravity, 8.137.

No. B. & S.	Diam. In.	Area in Cir. Mils C.M.=D2	Resistance per 1000 Ft. at 75°F.	Wt., Lbs. per 1000 Ft. Bare	Ohms per Lb.	No. B. & S.	Diam. In.	Area in Cir. Mils C.M.=D2	Resistance per 1000 Ft. at 75° F.	Wt., Lbs. per 1000 Ft. Bare	Ohms per Pound
1	.289	83521	6.2	231	.026	21	.0285	812.3	646	2.24	284
2	.258	66564	7.9	184	.041	22	.0253	640.1	820	1.77	456
3	.229	52441	10	145	.066	23	.0226	510.8	1027	1.41	720
4	.204	41616	12.6	115	.105	24	.0201	404	1290	1.12	1142
5	.182	33124	15.8	92	.165	25	.0179	320.4	1640	.89	1810
6	.162	26244	20	73	.263	26	.0159	252.8	2080	.70	2920
7	.144	20736	25.3	57	.427	27	.0142	201.6	2580	.56	4570
8	.128	16384	32	45	.685	28	.0126	158.8	3300	.44	7400
9	.116	12996	40.4	36	1.08	29	.0113	127.7	4100	.35	11560
10	.102	10404	50.4	29	1.65	30	.010	100	5250	.276	18785
11	.091	8281	63.4	23	2.70	31	.0089	79.2	6620	.219	29800
12	.081	6561	80	18	4.27	32	.008	64	8200	.177	45265
13	.072	5184	101	14.3	6.85	33	.0071	50.4	10410	.139	73214
14	.064	4096	128	11.3	10.9	34	.0063	39.7	13220	.11	118300
15	.057	3249	161	9.2	16.9	35	.0056	31.4	16720	.087	189000
16	.051	2601	202	7.2	27	36	.005	25	21000	.069	300000
17	.045	2025	258	5.6	44.5	37	.0045	20.2	26000	.056	468000
18	.040	1600	328	4.42	71.3	38	.004	16	33000	.045	733000
19	.036	1296	404	3.58	108	39	.0035	12.2	43000	.034	1264000
20	.032	1024	510	2.83	174	40	.003	9	58000	.025	2320000

WIRING FOR D. C. MOTOR SERVICES

Size, B. & S.	14	12	10	8	6	4	3	2	1	0	00	000	0000
Diameter in inches	.064	.081	.102	.128	.162	.204	.229	.258	.289	.325	.365	.410	.460
Pounds bare copper per 1000 feet	12.4	19.7	31.4	49.9	79.4	126	159	201	253	319	402	507	640
Safe carrying capacity in amperes	15	20	24	33	46	65	76	90	107	127	150	177	210

Horse Power at 110V.	220V.	500V.	Load of Motor, Amps.	Distance in Feet that the Different "Horse Powers" can be Transmitted with 1 Volt Loss											
....	....	½	1	192	308	490	778	1232	1920	2433	3122	3940	4928	6271	8907	9971
....	....	1	2	96	154	245	389	616	960	1216	1561	1970	2464	3135	4453	4985
....	½	....	2.30	83	135	213	348	535	834	1057	1357	1713	2142	2726	3872	4335
....	....	2	4	48	77	122	194	308	480	608	780	985	1232	1567	2226	2492
½	1	....	4.50	43	68	108	173	273	426	540	700	875	1095	1395	1975	2215
....	....	3	6	32	51	81	127	205	320	405	520	656	821	1045	1484	1661
....	....	4	7.50	25	40	65	104	164	258	328	416	525	657	836	1187	1330
1	2	....	9	21	34	54	86	137	213	270	347	438	547	697	990	1108
....	....	....	9.30	20	33	53	84	132	206	261	335	423	530	674	947	1072
....	3	7½	12.50	15	24	40	61	100	153	194	250	315	394	501	712	798
....	....	10	16.50	....	18	29	47	76	118	147	189	239	298	380	539	604
2	4	....	18	....	....	27	43	68	106	135	173	219	273	348	495	524
....	5	....	21.10	....	....	23	37	58	91	115	146	186	233	297	422	472
3	....	15	25	....	....	20	30	50	76	97	125	157	197	250	356	399
....	7½	....	28.20	....	....	....	27	43	68	86	110	140	174	222	315	353
4	....	20	33.15	....	....	....	23	37	58	76	94	119	148	189	271	300
....	10	....	37.60	....	....	....	....	32	51	64	83	104	131	164	236	265
5	....	25	42	....	....	....	....	29	45	58	73	93	116	143	211	236
....	....	30	49.70	....	....	....	....	....	39	49	64	79	99	126	179	200
7½	15	....	56.50	....	....	....	....	....	34	43	55	70	87	111	157	176
....	....	40	66.30	....	....	....	....	....	....	36	47	60	79	95	135	150
10	20	....	75.30	....	....	....	....	....	....	32	41	52	65	82	118	132
....	....	50	82.80	....	....	....	....	....	....	....	37	47	59	75	107	120
....	25	....	94.10	....	....	....	....	....	....	....	....	41	52	66	94	106
....	....	60	99.40	....	....	....	....	....	....	....	....	39	49	63	89	100
15	30	....	113	....	....	....	....	....	....	....	....	....	43	55	78	88
....	....	70	116	....	....	....	....	....	....	....	....	....	42	54	76	85
....	....	80	132	....	....	....	....	....	....	....	....	....	....	47	67	74
20	40	90	150	....	....	....	....	....	....	....	....	....	....	41	59	66
....	....	100	165	....	....	....	....	....	....	....	....	....	....	....	54	60
25	50	....	188	....	....	....	....	....	....	....	....	....	....	....	47	53
....	....	120	198	....	....	....	....	....	....	....	....	....	....	....	....	50
30	60	....	226	....	....	....	....	....	....	....	....	....	....	....	....	44

FUSING EFFECTS OF CURRENTS

Table Showing the Amperes Required to Fuse Wires of Various Sizes and Materials

Nos. B. & S.	Diam. d	d 3/2	Copper a=10244	Aluminum a=7585	Platinum a=5172	German Silver a=5230	Platinoid a=4750	Iron a=13148	Tin a=643	Tin-Lead Alloy a=3318	Lead a=1379
14	.08	.022627	231.8	171.6	117.	118.3	107.5	71.22	37.15	29.82	31.2
16	.064	.016191	165.8	122.8	83.73	84.68	76.9	50.96	26.58	21.34	22.32
18	.048	.010516	107.7	79.75	54.37	54.99	49.95	33.1	17.27	13.86	14.5
20	.036	.006831	69.97	51.18	35.33	35.72	32.44	21.5	11.22	9.002	9.419
22	.028	.004685	48	35.53	24.23	24.5	22.25	14.75	7.692	6.175	6.461
24	.022	.003263	33.43	24.75	16.88	17.06	15.5	10.27	5.357	4.3	4.499
26	.018	.002415	24.74	18.32	12.49	12.63	11.47	7.602	3.965	3.183	3.33
28	.0148	.001801	18.44	13.66	9.311	9.416	8.552	5.667	2.956	2.373	2.483
30	.0124	.001381	14.15	10.47	7.142	7.222	6.559	4.347	2.267	1.82	1.904
32	.0108	.001122	11.5	8.512	5.805	5.87	5.33	3.533	1.843	1.479	1.548

Pure copper wire makes the best and most reliable cut-out or fuse, but should never be less than 1 inch in length between the terminals to which it is fixed, so as to prevent cooling effects of terminals.

HOW TO USE MOTOR TABLES

The table shown on previous page is compiled on a basis of 1 volt loss for convenience in using the table on other percentages of loss. It is usual to allow a loss of more than 1 volt for motor service. In such case, divide the distance by the loss allowed, which will give the number of feet in which a loss of 1 volt will occur. Find this number of feet on the table at the horse power and voltage required and you will have necessary size of wire.

Example—A 5 horse power 220-volt motor, 400 feet from service, at 8 volts loss.

Explanation—A loss of 8 volts for 400 feet would be equal to a loss of 1 volt for 50 feet (400 divided by 8 equals 50). By referring to table we find that to carry a 5 horse power, 220-volt motor, 50 feet with a volt loss, a 6 B. & S. wire is required, which means that the same wire would be required to do the work called for by the example.

Always take the nearest number above rather than below in the table to the number of feet actually required. Do not use a smaller wire than given in following table.

MINIMUM SIZE WIRE FOR MOTOR SERVICE

Horse Power	Size of Wire, B. & S. 110 Volts	220 Volts	500 Volts
½	14	14	14
1	14	14	14
2	10	14	14
3	8	12	14
4	6	10	14
5	5	8	14
7½	3	6	12

Horse Power	Size of Wire, B. & S. 110 Volts	220 Volts	500 Volts
10	2	5	10
15	00	3	8
20	000	2	6
25	0000	1	5
30	....	00	4
40	....	000	2
50	....	0000	1

AMPERES PER MOTOR

Horse Power	Per Cent of Efficiency	Watts	Operating Voltage 50	75	110	220	400	500	600	800	1000	1200
½	75	497	10	6.62	4.5	2.25	1.24	1	.83	.62	.497	.41
¾	75	746	14.9	9.94	6.78	3.38	1.86	1.48	1.24	.93	.746	.62
1	75	995	20	13.24	9	4.5	2.5	2	1.66	1.24	1	.82
1½	80	1492	29.8	19.8	13.56	6.78	3.73	2.98	2.48	1.86	1.492	1.24
2	80	1865	37.3	24.9	16.9	8.5	4.7	3.8	3.1	2.33	1.9	1.6
3	80	2797	55.9	37.2	25.4	12.7	6.99	5.59	4.66	3.49	2.797	2.33
4	80	3730	74.6	49.8	33.8	16.9	9.3	7.5	6.2	4.66	3.8	3.1
5	80	4662	93.2	62.1	42.3	21.1	11.65	9.32	7.77	5.82	4.662	3.88
7½	90	6217	124	82.9	56.5	82.2	15.34	12.43	10.36	7.77	6.217	5.18
10	90	8288	165	110	75.3	37.6	20.72	16.57	13.81	10.36	8.288	6.9
15	90	12433	248	165	113	56.5	31.08	24.86	20.72	15.54	12.43	10.36
20	90	16578	331	221	150	75.3	41.44	33.15	27.63	20.72	16.57	13.98
25	90	20722	414	276	188	94.1	51.8	41.6	34.5	25.9	20.7	17.2
30	90	24866	497	331	226	113	62	49.7	41.4	31	24.8	20.7
40	90	33155	663	442	301	150	82.8	66.3	55.2	41.4	33.1	27.6
50	90	41444	828	552	376	188	103	82.8	69	51.8	41.4	34.5
60	90	49733	994	663	452	226	124	99.4	82.8	60	49.7	41.4
70	90	58022	1160	773	527	263	145	116	96.7	72.5	58	48.3
80	90	66311	1326	884	602	301	165	132	110	82.9	66.3	55.2
90	90	74599	1491	994	678	339	186	149	124	93	74.5	62
100	90	82888	1657	1105	753	376	207	165	138	103	82.8	69
120	90	99459	1989	1326	904	452	248	198	165	124	99	82.8
150	90	24312	2486	1657	1131	565	310	248	207	155	124	103

AMPERES PER HORSE POWER IN D. C. MOTORS

Voltage	Efficiency of Motor 75 Per Cent	80 Per Cent	85 Per Cent	90 per Cent
110	9	8.4	7.9	7.5
220	4.5	4.2	3.95	3.75
500	1.98	1.86	1.75	1.66

WIRING TABLES

TWO PER CENT LOSS ON 50 VOLTS

DISTANCE IN FEET TO CENTER OF DISTRIBUTION

Capacity Amperes	20	25	30	35	40	45	50	60	70	80	90	100	120	140	160	180	200	250
1	..	..	..	..	..	..	..	..	..	..	..	16	16	15	14	14	13	12
1.5	..	..	..	..	..	..	..	..	..	16	15	15	14	13	13	12	12	11
2	..	..	..	..	..	..	16	16	15	14	14	13	13	12	11	11	10	9
3	..	..	..	16	16	15	15	14	13	13	12	12	11	10	10	9	9	8
4	..	16	15	15	14	14	13	13	12	11	11	10	10	9	8	8	7	6
5	16	16	15	14	13	13	12	12	11	10	10	9	9	8	7	7	6	5
6	16	15	14	13	13	12	12	11	10	10	9	9	8	7	7	6	6	5
7	15	14	13	12	12	11	11	10	10	9	8	8	7	7	6	5	5	4
8	14	13	13	12	11	11	10	10	9	8	8	7	7	6	5	5	4	3
9	14	13	12	11	11	10	10	9	8	8	7	7	6	5	5	4	4	3
10	13	12	12	11	10	10	9	9	8	7	7	6	6	5	4	4	3	2
12	13	12	11	10	10	9	9	8	7	7	6	6	5	4	4	3	3	2
14	12	11	10	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1
16	11	10	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1	0
18	11	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1	1	0
20	10	9	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0	00
25	9	8	8	7	6	6	5	5	4	3	3	2	2	1	0	0	00	00
30	9	8	7	6	6	5	5	4	3	3	2	2	1	0	0	00	00	000
35	8	7	6	6	5	4	4	3	2	2	1	1	0	0	00	00	000	000
40	7	6	6	5	4	4	3	3	2	1	1	0	0	00	000	000	0000	0000
45	7	6	5	4	4	3	3	2	1	1	0	0	00	00	000	0000	0000	....
50	6	5	5	4	3	3	2	2	1	0	0	00	00	000	0000	0000	....	....
55	6	5	4	4	3	3	2	1	0	0	00	00	000	000	0000	....	....	....
60	6	5	4	3	3	2	2	1	0	0	00	00	000	0000	....	....	....	....
65	5	4	4	3	2	2	1	1	0	00	00	000	000	0000	....	....	....	....
70	5	4	3	2	2	1	1	0	0	00	00	000	0000	....	....	....	....	....
75	5	4	3	2	2	1	1	0	00	00	000	000	0000	....	....	....	....	....
80	4	3	3	2	1	1	0	0	00	000	000	0000	0000	....	....	....	....	....
90	4	3	2	1	1	0	0	00	00	000	0000	0000	....	....	....	....	....	....
100	3	2	2	1	0	0	00	00	000	000	0000	....	....	....	....	....	....	....

TWO PER CENT LOSS ON 110 VOLTS

DISTANCE IN FEET TO CENTER OF DISTRIBUTION

Capacity Amperes	20	30	40	50	60	70	80	90	100	120	140	160	180	200	240	280	320	360	400
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	15	15	14	14
1.5	..	..	..	..	..	..	..	..	..	..	..	16	15	15	14	14	13	12	12
2	..	..	..	..	..	..	..	..	..	16	15	15	14	14	13	12	12	11	11
3	..	..	..	..	..	..	16	15	15	14	14	13	12	12	11	11	10	9	9
4	..	..	..	..	16	15	15	14	14	13	12	12	11	11	10	9	9	8	8
5	..	..	..	16	15	14	14	13	13	12	11	11	10	10	9	8	8	7	7
6	..	..	16	15	14	14	13	12	12	11	11	10	9	9	8	8	7	7	6
7	..	16	15	14	14	13	12	12	11	11	10	9	9	8	7	7	6	6	5
8	..	16	15	14	13	12	12	11	11	10	9	9	8	8	7	7	6	5	5
9	..	15	14	13	12	12	11	11	10	9	9	8	8	7	7	6	5	5	4
10	16	15	14	13	12	11	11	10	10	9	8	8	7	7	6	5	5	4	4
12	16	14	13	12	11	11	10	9	9	8	8	7	7	6	5	5	4	4	3
14	15	14	12	11	11	10	9	9	8	7	7	6	6	5	5	4	3	3	2
16	15	13	12	11	10	9	9	8	8	7	7	6	5	5	4	3	3	2	2
18	14	12	11	10	9	9	8	8	7	7	6	5	5	4	4	3	2	2	1
20	14	12	11	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1	1
25	13	11	10	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0	0
30	12	10	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0	0	00
35	11	10	8	7	7	6	5	5	4	4	3	2	2	1	1	0	00	00	000
40	11	9	8	7	6	5	5	4	4	3	2	2	1	1	0	00	00	000	000
45	10	9	7	6	6	5	4	4	3	3	2	1	1	0	00	00	000	000	0000
50	10	8	7	6	5	4	4	3	3	2	1	1	0	0	00	000	000	0000	0000
60	9	7	6	5	4	4	3	3	2	1	1	0	0	00	000	000	0000	0000	....
70	8	7	5	4	4	3	2	2	1	1	0	00	00	000	000	0000	0000	....	....
80	8	6	5	4	3	2	2	1	1	0	00	00	000	000	0000	0000	....	....	....
90	7	6	4	3	3	2	1	1	0	00	00	000	000	0000	0000	....	....	....	....
100	7	5	4	3	2	1	1	0	0	00	000	000	0000	0000	....	....	....	....	....
120	6	4	3	2	1	1	0	0	00	00	000	0000	0000	....	....	....	....	....	....

Wire sizes given are B. & S. gauge.

WIRING TABLES

2 PER CENT LOSS, 220 VOLTS

Cap. Amps.	Distance in Feet to Center of Distribution																	
	20	30	40	50	60	70	80	90	100	120	140	160	180	200	240	250	320	360	400
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
1.5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	15	15
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	15	15	14	14
3	..	..	..	..	..	..	..	..	..	..	..	16	15	15	14	14	13	12	12
4	..	..	..	..	..	..	..	..	..	16	15	15	14	14	13	12	12	11	11
5	..	..	..	..	..	..	..	..	16	15	14	14	13	13	12	11	11	10	10
6	..	..	..	..	..	..	16	15	15	14	14	13	12	12	11	11	10	9	9
7	..	..	..	..	..	16	15	14	14	14	13	12	12	11	11	10	9	9	8
8	..	..	..	..	16	15	15	14	14	13	12	12	11	11	10	9	9	8	8
9	..	..	..	..	15	15	14	14	13	12	12	11	11	10	9	9	8	8	7
10	..	..	..	16	15	14	14	13	13	12	11	11	10	10	9	8	8	7	7
12	..	..	16	15	14	14	13	12	12	11	11	10	9	9	8	8	7	7	6
14	..	16	15	14	14	13	12	12	11	11	10	9	9	8	7	7	6	6	5
16	..	16	15	14	13	12	12	11	11	10	9	9	8	8	7	7	6	6	5
18	..	15	14	13	12	12	11	11	10	9	9	8	8	7	7	6	5	5	4
20	16	15	14	13	12	11	11	10	10	9	8	8	7	7	6	5	5	4	4
25	16	14	13	12	11	10	10	9	9	8	7	7	6	6	5	4	4	3	3
30	15	13	12	11	10	10	9	9	8	7	7	6	6	5	4	4	3	3	2
35	14	13	11	10	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1
40	14	12	11	10	9	8	8	7	7	6	5	5	4	4	3	2	2	1	1
45	13	12	10	9	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0
50	13	11	10	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0	0
60	12	10	9	8	7	7	6	6	5	4	4	3	3	2	1	1	0	0	00
70	11	10	8	7	7	6	5	5	4	4	3	2	2	1	1	0	00	00	000
80	11	9	8	7	6	5	5	4	4	3	2	2	1	1	0	00	00	000	000
90	10	9	7	6	6	5	4	4	3	3	2	1	1	0	00	00	000	000	0000
100	10	8	7	6	5	4	4	3	3	2	1	1	0	0	00	000	000	0000	0000
120	9	7	6	5	4	4	3	3	2	1	1	0	0	00	000	000	0000	0000	....

Wire sizes given are B. & S.

MINIMUM SIZED WIRE FOR MOTOR SERVICES

When Concealed or Partly Concealed Wires are used

Horse Power	Size of Wire, B. & S.			Horse Power	Size of Wire, B. & S.		
	110 Volts	220 Volts	500 Volts		110 Volts	220 Volts	500 Volts
½	14	14	14	25	000	1	6
1	14	14	14	30	0000	0	5
2	12	14	14	40	....	00	3
3	10	14	14	50	....	000	2
4	8	12	14	60	....	0000	1
5	6	10	14	70	....	....	0
7½	4	8	14	80	....	....	00
10	3	6	12	90	....	....	00
15	0	5	10	100	....	....	000
20	00	3	8	120	....	....	0000

FORMULA FOR ALTERNATING CURRENT WIRING

Get distance in feet; watts delivered; volts at delivery end; per cent loss desired. Select "T" from the following.

"T" equals 2,150 for direct current, 2,400 for single-phase for lights only, 3,000 for single-phase for motor and lights, 3,380 for single-phase for motor only, 1,200 for three-wire three-phase, and four-wire two-phase for lights only, or 1,500 for three-wire three-phase, and four-wire two-phase for lights and motors, or 1,690 for three-wire three-phase, and four-wire two-phase for motors only.

$$\text{Circular Mils, each wire} = \left\{ \frac{\text{Feet x watts x T}}{\text{per cent loss x volts x volts.}} \right.$$

$$\text{For D. C. use C. M.} = \left\{ \frac{\text{Amps. x distance x 2200}}{\text{per cent loss x volts.}} \text{ or } \frac{\text{Feet x watts x 2200}}{\text{per cent loss x volts x volts.}} \right.$$

GENERAL WIRING FORMULA

FOR ALTERNATING AND DIRECT CURRENT CIRCUITS

The following general formula may be used to determine the size of copper conductors, volts loss in lines, current per conductor, and of copper per circuit for any system of electrical distribution.

$$\text{Area of conductor, circular mils} = \frac{D \times W \times C}{P \times E^2} \qquad \text{Volts loss in lines} = \frac{P \times E \times B}{100}$$

$$\text{Current in main conductors} = \frac{W \times T}{E} \qquad \text{Pounds copper} = \frac{D^2 \times W \times C \times A}{P \times E \times 1000000}$$

W = Total watts delivered.

D = Distance of transmission (1 way) in feet.

P = Loss in line in per cent of power delivered, that is of W.

E = Voltage between main conductors at receiving or consumer's end of circuit.

For continuous current C = 2160, T = 1, B = 1, and A = 6.04.

System	Value of A	Per Cent Power Factor — Value of C					Value of T				
		100	95	90	85	80	100	95	90	85	80
Single-phase	6.04	2160	2400	2660	3000	3380	1.00	1.05	1.11	1.17	1.25
Two-phase (4-wire)	12.08	1080	1200	1330	1500	1690	.50	.53	.55	.59	.62
Three-phase (3-wire)	9.06	1080	1200	1330	1500	1690	.58	.61	.64	.68	.72

APPLICATION OF FORMULA

The value of C for any particular power factor is obtained by dividing 2160, the value for continuous current, by the square of that power factor for single-phase, and by twice the square of that power factor for three-wire three-phase, or four-wire two-phase.

The value of B depends on the size of wire, frequency and power factor. It is equal to 1 for continuous current, and for alternating current with 100 per cent power factor and sizes of wire given in the preceding table of wiring constants.

The figures given are for wires 18 inches apart and are sufficiently accurate for all practical purposes provided the displacement in phase between current and E. M. F. at the receiving end is not very much greater than that at the generator; in other words, provided that the reactance of the line is not excessive, or the line loss unusually high. For example, the constants should not be applied at 125 cycles if the largest conductors are used and the loss 20 per cent or more of the power delivered. At lower frequencies, however, the constants are reasonably correct even under such extreme conditions. They represent about the true values at 10 per cent line loss, are close enough at all losses less than 10 per cent, and often, at least for frequencies up to 40 cycles, close enough for even much larger losses. Where the conductors of a circuit are nearer each other than 18 inches, the volts loss will be less than given by the formula, and if close together, as with multiple conductor cable, the loss will be only that due to resistance.

The value of T depends on the system and power factor. It is equal to 1 for continuous current and for single-phase current of 100 per cent power factor.

The value of A and the weights of the wires in the table are based on .00000302 pound as the weight of a foot of copper wire of 1 circular mil area.

In using the above formula and constants, it should be particularly observed that P stands for the per cent loss in the line of the delivered power, not for the per cent loss in the line of the power at the generator; and that E is the potential at the end of the line and not at the generator.

When the power factor cannot be more accurately determined, it may be assumed to be as follows for any alternating system operating under average conditions: Incandescent lighting and synchronous motors, 95 per cent; lighting and induction motors together, 85 per cent; induction motors alone, 80 per cent.

In continuous current three-wire systems, the neutral wire for feeders should be made of ½ the section obtained by the formula for either of the outside wires. In both continuous and alternating current systems, the neutral conductor for secondary mains and house wiring should be taken as large as the other conductors.

The three wires of a three-phase circuit and the four wires of a two-phase circuit should be made all the same size and each conductor should be of the cross section given by the first formula.

GENERAL WIRING FORMULA

FOR ALTERNATING AND DIRECT CURRENT CIRCUITS

Size of Wire B. & S.	Area Wire Cir. Mils	Wt., Lbs. Bare Wire per 1000 Ft.	Resistance Ohms per 1000 Ft. at 20° C.	Value of B — 25 Cycles — Per Cent Power Factor 95	90	85	80	40 Cycles — 95	90	85	80	Size of Wire B. & S.
0000	211600	640.73	.04879	1.23	1.29	1.33	1.34	1.52	1.53	1.61	1.67	0000
000	167805	508.12	.06154	1.18	1.22	1.24	1.24	1.40	1.41	1.48	1.51	000
00	133079	402.97	.07758	1.14	1.16	1.16	1.16	1.25	1.32	1.35	1.37	00
0	105560	319	.09775	1.10	1.11	1.10	1.09	1.19	1.24	1.26	1.26	0
1	83694	253.43	.1234	1.07	1.07	1.05	1.03	1.14	1.17	1.18	1.17	1
2	66373	200.98	.1556	1.05	1.04	1.02	1	1.11	1.12	1.12	1.10	2
3	52633	159.38	.1962	1.03	1.02	1	1	1.07	1.08	1.07	1.05	3
4	41742	126.40	.2473	1.02	1	1	1	1.05	1.06	1.03	1	4
5	33102	100.23	.3120	1	1	1	1	1.03	1.01	1	1	5
6	26250	79.49	.3934	1	1	1	1	1.02	1	1	1	6
7	20816	63.03	.4959	1	1	1	1	1.01	1	1	1	7
8	16509	49.99	.6250	1	1	1	1	1	1	1	1	8
9	13090	39.60	.7886	1	1	1	1	1	1	1	1	9
10	10382	31.40	.9940	1	1	1	1	1	1	1	1	10

Size of Wire B. & S.	Area Wire Cir. Mils	Wt., Lbs. Bare Wire per 1000 Ft.	Resistance Ohms per 1000 Ft. at 20° C.	Value of B — 60 Cycles — Per Cent Power Factor 95	90	85	80	125 Cycles — 95	90	85	80	Size of Wire B. & S.
0000	211600	640.73	.04879	1.62	1.84	1.99	2.09	2.35	2.86	3.24	3.49	0000
000	167805	508.12	.06154	1.49	1.66	1.77	1.95	2.08	2.48	2.77	2.94	000
00	133079	402.97	.07758	1.34	1.52	1.60	1.66	1.86	2.18	2.40	2.57	00
0	105560	319	.09775	1.31	1.40	1.46	1.49	1.71	1.96	2.13	2.25	0
1	83694	253.43	.1234	1.24	1.30	1.34	1.36	1.56	1.75	1.88	1.97	1
2	66373	200.98	.1556	1.18	1.23	1.25	1.26	1.45	1.60	1.70	1.77	2
3	52633	159.38	.1962	1.14	1.17	1.18	1.17	1.35	1.46	1.53	1.57	3
4	41742	126.40	.2473	1.11	1.12	1.11	1.10	1.27	1.35	1.40	1.43	4
5	33102	100.23	.3120	1.08	1.08	1.06	1.04	1.21	1.27	1.30	1.31	5
6	26250	79.49	.3934	1.05	1.04	1.02	1	1.16	1.20	1.21	1.21	6
7	20816	63.03	.4958	1.03	1.02	1	1	1.12	1.14	1.14	1.13	7
8	16509	49.99	.6250	1.02	1	1	1	1.09	1.10	1.09	1.07	8
9	13090	39.60	.7886	1	1	1	1	1.06	1.06	1.04	1.02	9
10	10382	31.40	.9940	1	1	1	1	1.04	1.03	1	1	10

WIRING DATA FOR THREE-PHASE MOTORS

Where two or more motors are installed on one circuit, wire used should be equivalent to that needed for running loads of all motors plus 50 per cent of running load of the largest motor on the circuit.

110 VOLTS

H. P. of Motor	Approx. Full Load Current Amperes	Amperes of Starting Fuses	Amperes of Running Fuses	Amperes of Switch	Size of Wire B. & S. Gauge
1	6	15	10	30	14
2	12	25	20	30	12
3	18	35	25	30	8
5	30	60	40	60	6
7½	42	80	60	100	4
10	56	100	75	100	2
15	84	150	125	200	0
20	104	200	150	200	00
30	156	250	200	200	300000 C.M.

220 VOLTS

1	3	10	6	30	14
2	6	15	10	30	14
3	9	20	15	30	12
5	15	30	20	30	10
7½	21	40	30	60	8
10	28	60	40	60	6
15	42	80	60	100	4
20	52	100	75	100	2
30	78	150	125	200	0
40	105	200	150	200	00
50	133	225	175	200	000
75	184	300	250	400	300000 C. M.
100	245	400	350	400	500000 C. M.

440 VOLTS

1	1.5	5	3	30	14
2	3	10	6	30	14
3	4.5	10	6	30	14
5	7.5	15	10	30	14
7½	10.5	25	15	30	12
10	14	30	20	30	10
15	21	40	30	60	8
20	26	60	40	60	6
30	39	80	60	100	4
40	52.5	100	75	100	2
50	66.5	125	100	100	1
75	92	150	125	200	00
100	122.5	225	175	200	000
150	184	300	250	400	300000 C. M.
200	236	400	350	400	500000 C. M.

AMPERES IN ALTERNATING CURRENT CIRCUITS

(By Permission of the Electrical World

The following tables give the amperes per lead wire per kilowatt for single-phase and three-phase balanced loads. The single-phase table can be used for two-phase balanced loads by using a current value corresponding to twice the stated potential of the circuit or by dividing the current value at the potential of the circuit by two. That is, each wire of a two-phase circuit carries one half of the current indicated at the load specified. These tables show the value of the current at power factors varying from unity to 70 per cent. The power of any circuit in kilowatts can, therefore, be computed by dividing the reading of the ammeter by the tabulated value corresponding to the measured power factor and voltage of the circuit. These values are correct only for a balanced load (and there is generally a slight unbalancing of the loads on the phases), but the table is useful in computing the sizes of wire required for transmission purposes.

This table was derived from the following formulas:

For single-phase circuits: Amperes per wire = watts ÷ (volts × power factor).

For three-phase circuits: Amperes per wire = total watts ÷ (volts between wires × power factor × $\sqrt{3}$).

For two-phase circuits: Amperes per wire = total watts ÷ (volts between wires of one phase × power factor × 2).

In making the computations the number of watts was assumed as 1000, and the amperes were computed for various values of e.m.f. to a sufficient number of decimal places to insure accuracy. The tables were then extended by multiplication and division. If desired, these tables can be further extended to cover voltages outside of their limits by using the tabular values corresponding to potentials of one tenth (or 10 times) the desired potential, care being used to shift the decimal point in the proper direction.

The values for intermediate power factors can be approximated from the tables. For lower power factors, the value of the current for unity power factor can be divided by actual power factor of the circuit or multiplied by the reciprocal of this power factor.

SINGLE-PHASE CIRCUITS

Amperes for One Kilowatt at Different Power Factors

Volts	Power Factor in Per Cent						
	100	95	90	85	80	75	70
100	10.0000	10.5263	11.1111	11.7647	12.5000	13.3333	14.2856
110	9.0909	9.5693	10.1010	10.6952	11.3636	12.1211	12.9870
115	8.6957	9.1533	9.6619	10.2302	10.8696	11.5942	12.4224
120	8.3333	8.7719	9.2592	9.8040	10.4166	11.1111	11.9049
125	8.0000	8.4211	8.8889	9.4118	10.0000	10.6667	11.4286
130	7.6923	8.0972	8.5470	9.0498	9.6154	10.2564	10.9890
140	7.1429	7.5188	7.9365	8.4034	8.9285	9.5238	10.2040
150	6.6667	7.0176	7.4074	7.8431	8.3333	8.8889	9.5239
160	6.2500	6.5790	6.9444	7.3529	7.8125	8.3333	8.9286
170	5.8824	6.1919	6.5360	6.9205	7.3530	7.8431	8.4034
180	5.5556	5.8480	6.1729	6.5359	6.9445	7.4074	7.9366
190	5.2632	5.5402	5.8480	6.1919	6.5790	7.0176	7.5189
200	5.0000	5.2632	5.5556	5.8824	6.2500	6.6667	7.1429
210	4.7619	5.0125	5.2910	5.6022	5.9524	6.3492	6.8027
220	4.5455	4.7847	5.0505	5.3476	5.6819	6.0606	6.4936
225	4.4444	4.6784	4.9382	5.2288	5.5556	5.9259	6.3492
230	4.3479	4.5766	4.8309	5.1151	5.4349	5.7971	6.2113
240	4.1667	4.3860	4.6296	4.9020	5.2084	5.5556	5.9524
250	4.0000	4.2105	4.4444	4.7059	5.0000	5.3333	5.7143
300	3.3333	3.5088	3.7037	3.9216	4.1666	4.4444	4.7614
330	3.0303	3.1897	3.3670	3.5651	3.7879	4.0404	4.3290
350	2.8572	3.0075	3.1746	3.3613	3.5715	3.8095	4.0817
400	2.5000	2.6316	2.7778	2.9412	3.1250	3.3333	3.5714
440	2.2727	2.3923	2.5252	2.6738	2.8409	3.0303	3.2467
450	2.2222	2.3392	2.4691	2.6144	2.7778	2.9630	3.1746
500	2.0000	2.1053	2.2222	2.3529	2.5000	2.6667	2.8571
550	1.8182	1.9139	2.0202	2.1390	2.2728	2.4242	2.5974
600	1.6667	1.7544	1.8519	1.9608	2.0834	2.2222	2.3810
700	1.4286	1.5037	1.5873	1.6807	1.7857	1.9048	2.0409
800	1.2500	1.3158	1.3889	1.4706	1.5625	1.6667	1.7857
900	1.1111	1.1696	1.2345	1.3072	1.3889	1.4815	1.5873
1000	1.0000	1.0527	1.1111	1.1765	1.2500	1.3333	1.4286
1100	0.9091	0.9569	1.0101	0.0695	1.1364	1.2121	1.2987

AMPERES IN ALTERNATING CURRENT CIRCUITS

(By Permission of The Electrical World)

SINGLE-PHASE CIRCUITS—(Continued)

Amperes for One Kilowatt at Different Power Factors

Power Factor in Per Cent

Volts	100	95	90	85	80	75	70
1200	0.8333	0.8772	0.9259	0.9804	1.0417	1.1111	1.1905
1300	0.7692	0.8097	0.8547	0.9050	0.9615	1.0256	1.0989
1400	0.7143	0.7519	0.7936	0.8403	0.8929	0.9524	1.0204
1500	0.6667	0.7018	0.7407	0.7843	0.8333	0.8889	0.9524
1600	0.6250	0.6579	0.6944	0.7353	0.7812	0.8333	0.8929
1700	0.5882	0.6192	0.6536	0.6921	0.7353	0.7843	0.8403
1800	0.5556	0.5848	0.6173	0.6536	0.6944	0.7407	0.7937
1900	0.5263	0.5540	0.5848	0.6192	0.6579	0.7018	0.7519
2000	0.5000	0.5263	0.5556	0.5882	0.6250	0.6667	0.7143
2100	0.4762	0.5013	0.5291	0.5602	0.5952	0.6349	0.6803
2200	0.4545	0.4785	0.5050	0.5348	0.5682	0.6061	0.6494
2300	0.4348	0.4577	0.4831	0.5115	0.5435	0.5797	0.6211
2400	0.4167	0.4386	0.4630	0.4902	0.5208	0.5556	0.5952
2500	0.4000	0.4210	0.4444	0.4706	0.5000	0.5333	0.5714
3000	0.3333	0.3509	0.3704	0.3922	0.4167	0.4444	0.4761
3300	0.3030	0.3190	0.3367	0.3565	0.3788	0.4040	0.4329
3500	0 2857	0.3007	0.3175	0.3361	0.3571	0.3809	0.4082
4000	0.2500	0.2632	0.2778	0.2941	0.3125	0.3333	0.3571
4500	0.2222	0.2339	0.2469	0.2614	0.2778	0.2963	0.3175
5000	0.2000	0.2105	0.2222	0.2353	0.2500	0.2667	0.2857
6000	0.1667	0.1754	0.1852	0.1961	0.2083	0.2222	0.2381
6600	0.1515	0.1595	0.1684	0.1783	0.1894	0.2020	0.2165
7000	0.1429	0.1504	0.1587	0.1681	0.1786	0.1905	0.2041
8000	0.1250	0.1316	0.1389	0.1471	0.1563	0.1667	0.1786
9000	0.1111	0.1170	0.1234	0.1307	0.1389	0.1481	0.1587
10000	0.1000	0.1053	0.1111	0.1177	0.1250	0.1333	0.1429
11000	0.0909	0.0957	0.1010	0.1070	0.1136	0.1212	0.1299
12000	0.0833	0.0877	0.0926	0.0980	0.1042	0.1111	0.1190
13000	0.0769	0.0810	0.0855	0.0905	0.0962	0.1026	0.1099
14000	0.0714	0.0752	0.0794	0.0840	0.0893	0.0952	0.1020
15000	0.0667	0.0702	0.0741	0.0784	0.0833	0.0889	0.0952
16000	0.0625	0.0658	0.0694	0.0735	0.0781	0.0833	0.0893
17000	0.0588	0.0619	0.0654	0.0692	0.0735	0.0784	0.0840
18000	0.0556	0.0585	0.0617	0.0654	0.0694	0.0741	0.0794
19000	0.0526	0.0554	0.0585	0.0619	0.0658	0.0702	0.0752
20000	0.0500	0.0526	0.0556	0.0588	0.0625	0.0667	0.0714
25000	0.0400	0.0421	0.0444	0.0471	0.0500	0.0533	0.0571
30000	0.0333	0.0351	0.0370	0.0392	0.0417	0.0444	0.0476
35000	0.0286	0.0301	0.0317	0.0336	0.0357	0.0381	0.0408
40000	0.0250	0.0263	0.0278	0.0294	0.0313	0.0333	0.0357
45000	0.0222	0.0234	0.0247	0.0261	0.0278	0.0296	0.0317
50000	0.0200	0.0211	0.0222	0.0235	0.0250	0.0267	0.0286
55000	0.0182	0.0191	0.0202	0.0214	0.0227	0.0242	0.0260
60000	0.0167	0.0175	0.0185	0.0196	0.0208	0.0222	0.0238

THREE-PHASE CIRCUITS

Amperes per Wire for One Kilowatt at Different Power Factors

Power Factor in Per Cent

Volts	100	95	90	85	80	75	70
100	5.7735	6.0774	6.4150	6.7924	7.2169	7.6980	8.2479
110	5.2486	5.5249	5.8319	6.1749	6.5608	6.9982	7.4980
115	5.0204	5.2847	5.5783	5.9064	6.2756	6.6939	7.1721
120	4.8112	5.0645	5.3458	5.6603	6.0141	6.4150	6.8732
125	4.6188	4.8619	5.1320	5.4339	5.7735	6.1584	6.5983
130	4.4411	4.6749	4.9346	5.2249	5.5514	5.9215	6.3445
140	4.1240	4.3410	4.5821	4.8517	5.1549	5.4986	5.8913
150	3.8490	4.0516	4.2767	4.5283	4.8112	5.1320	5.4986
160	3.6084	3.7984	4.0094	4.2453	4.5105	4.8112	5.1549
170	3.3962	3.5749	3.7735	3.9955	4.2453	4.5282	4.8517
180	3.2075	3.3763	3.5639	3.7735	4.0094	4.2767	4.5821
190	3.0387	3.1986	3.3763	3.5749	3.7984	4.0516	4.3410
200	2.8867	3.0387	3.2075	3.3962	3.6084	3.8490	4.1239
210	2.7493	2.8940	3.0548	3.2345	3.4366	3.6657	3.9276
220	2.6243	2.7624	2.9159	3.0874	3.2804	3.4992	3.7490

AMPERES IN ALTERNATING CURRENT CIRCUITS

(By Permission of the Electrical World)

THREE-PHASE CIRCUITS—(Continued)

Amperes per Wire for One Kilowatt at Different Power Factors

Volts	Power Factor in Per Cent						
	100	95	90	85	80	75	70
225	2.5660	2.7010	2.8511	3.0188	3.2075	3.4213	3.6657
230	2.5102	2.6423	2.7891	2.9532	3.1378	3.3470	3.5860
240	2.4056	2.5322	2.6729	2.8301	3.0070	3.2075	3.4366
250	2.3094	2.4310	2.5660	2.7170	2.8867	3.0792	3.2992
300	1.9245	2.0258	2.1384	2.2642	2.4056	2.5660	2.7493
330	1.7495	1.8416	1.9439	2.0583	2.1869	2.3327	2.4960
350	1.6496	1.7364	1.8328	1.9406	2.0620	2.1994	2.3566
400	1.4434	1.5194	1.6038	1.6981	1.8042	1.9245	2.0620
440	1.3122	1.3812	1.4579	1.5437	1.6402	1.7495	1.8745
450	1.2830	1.3505	1.4256	1.5094	1.6037	1.7107	1.8329
500	1.1547	1.2155	1.2830	1.3585	1.4434	1.5396	1.6496
550	1.0497	1.1050	1.1664	1.2350	1.3121	1.3996	1.4996
600	.9622	1.0129	1.0692	1.1321	1.2028	1.2830	1.3746
700	.8248	.8682	.9164	.9703	1.0310	1.0997	1.1783
800	.7217	.7597	.8019	.8491	.9021	.9623	1.0310
900	.6415	.6753	.7128	.7547	.8019	.8553	.9164
1000	.5774	.6077	.6415	.6792	.7217	.7698	.8248
1100	.5249	.5525	.5832	.6175	.6561	.6998	.7498
1200	.4811	.5064	.5346	.5660	.6014	.6413	.6873
1300	.4441	.4675	.4935	.5225	.5551	.5922	.6344
1400	.4124	.4341	.4582	.4852	.5155	.5499	.5891
1500	.3849	.4052	.4277	.4528	.4811	.5132	.5499
1600	.3608	.3798	.4009	.4245	.4511	.4811	.5155
1700	.3396	.3575	.3774	.3996	.4245	.4528	.4852
1800	.3207	.3376	.3564	.3773	.4009	.4277	.4582
1900	.3039	.3199	.3376	.3575	.3798	.4052	.4341
2000	.2887	.3039	.3207	.3396	.3608	.3849	.4124
2100	.2749	.2894	.3055	.3234	.3437	.3666	.3928
2200	.2624	.2762	.2916	.3087	.3280	.3499	.3749
2300	.2510	.2642	.2789	.2953	.3138	.3347	.3586
2400	.2406	.2532	.2673	.2830	.3007	.3208	.3437
2500	.2309	.2431	.2566	.2717	.2887	.3079	.3299
3000	.1924	.2026	.2138	.2264	.2406	.2566	.2749
3300	.1749	.1842	.1944	.2058	.2187	.2333	.2499
3500	.1650	.1736	.1833	.1941	.2062	.2199	.2357
4000	.1443	.1519	.1604	.1698	.1804	.1924	.2062
4500	.1283	.1350	.1426	.1509	.1604	.1711	.1833
5000	.1155	.1216	.1283	.1358	.1443	.1540	.1650
6000	.0962	.1013	.1069	.1132	.1203	.1283	.1375
6600	.0875	.0921	.0972	.1029	.1093	.1167	.1249
7000	.0825	.0868	.0916	.0970	.1031	.1100	.1178
8000	.0722	.0760	.0802	.0849	.0902	.0962	.1031
9000	.0641	.0675	.0713	.0755	.0802	.0855	.0916
10000	.0577	.0608	.0642	.0679	.0722	.0770	.0825
11000	.0525	.0552	.0583	.0617	.0656	.0700	.0750
12000	.0481	.0506	.0535	.0566	.0601	.0642	.0687
13000	.0444	.0467	.0493	.0522	.0555	.0592	.0634
14000	.0412	.0434	.0458	.0485	.0515	.0550	.0589
15000	.0385	.0405	.0428	.0453	.0481	.0513	.0550
16000	.0361	.0380	.0401	.0425	.0451	.0481	.0515
17000	.0340	.0357	.0377	.0399	.0425	.0453	.0485
18000	.0321	.0338	.0356	.0377	.0401	.0428	.0458
19000	.0304	.0320	.0338	.0357	.0380	.0405	.0434
20000	.0289	.0304	.0321	.0340	.0361	.0385	.0412
25000	.0231	.0243	.0257	.0272	.0289	.0308	.0330
30000	.0192	.0203	.0214	.0226	.0241	.0257	.0275
33000	.0175	.0184	.0194	.0206	.0219	.0233	.0250
35000	.0165	.0174	.0183	.0194	.0206	.0220	.0236
40000	.0144	.0152	.0160	.0170	.0180	.0192	.0206
45000	.0128	.0135	.0143	.0151	.0160	.0171	.0183
50000	.0115	.0122	.0128	.0136	.0144	.0154	.0165
55000	.0105	.0111	.0117	.0124	.0131	.0140	.0150
60000	.0096	.0101	.0107	.0113	.0120	.0128	.0137

INDEX TO TRADE NUMBERS

Many manufacturers use the same numbers to identify the various articles in their catalogues. To prevent duplication of these numbers we have assigned a special Trade Number to each article listed in this catalogue. For convenience in identifying articles which are familiarly known by the manufacturer's number, this number is also given in many pages in addition to the Trade Number.

The following index refers to our Trade Numbers only. There is no index to manufacturers' numbers. Therefore, always use our Trade Numbers in ordering material.

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